

European Advertising Academy



Martin Eisend / Tobias Langner
Shintaro Okazaki (Eds.)

Advances in Advertising Research (Vol. III)

Current Insights and Future Trends

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RESEARCH

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The objective of the European Advertising Academy (EAA) is to provide a professional association to academics and practitioners interested in advertising and its applications that will promote, disseminate and stimulate high quality research in the field.

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Editors

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Preface

We are pleased to present *Advances in Advertising Research Vol. III – Current Insights and Future Trends*, published by the European Advertising Academy (EAA). This volume consists of revised and extended versions of papers presented at the 10th ICORIA (International Conference on Research in Advertising) held in Berlin, Germany, in June 2011.

Advertising is faced with growing and multiple challenges. New media, fragmented target groups, saturated markets and advertising clutter make it increasingly difficult to reach the customer. High quality advertising research is needed more than ever. Scholars from around the globe have contributed to this book. Their papers provide current insights and examine future trends in advertising, branding and communication with the goal to address urgent problems in advertising management and advance systematic research in these fields.

The book has seven sections. Part I addresses issues related to advertising content, advertising appeals and execution; Part II explores topics of ever-growing importance in advertising research, corporate social responsibility and social issues; Part III focusses on social media, online and mobile advertising; Part IV looks into product placement; Part V explores advertising issues related to gender and children; Part VI addresses media- and agency-related topics and, finally, Part VII examines the relationship between consumers, companies and brands.

This book would never have been possible without the willingness of the contributors who participated in the 10th ICORIA and agreed to re-work and extend their conference papers. We thank all the authors for making this book possible. We especially want to express our gratitude to Silke Knoll who handled the formatting of the book and Philipp Brune who coordinated the final revisions. We are also indebted to all our colleagues for their superb job of making the Berlin conference a great success: Philipp Brune, Daniel Bruns, Ruziye Canbazoglu, Alexander Fischer, Sarah Hellebrandt, Silke Knoll, Jochen Kühn, Jessica Osebold and Susanne Schmidt.

We hope that academics, practitioners and students alike will find this volume helpful and enjoy reading.

Martin Eisend
Tobias Langner
Shintaro Okazaki
Frankfurt (Oder), Wuppertal and Madrid, May 2012

The European Advertising Academy (EAA)

The objective of the European Advertising Academy (EAA) is to provide a professional association to academics and practitioners interested in advertising and its applications that will promote, disseminate and stimulate high quality research in the field. The association particularly serves as a meeting and communication forum for its members. It offers a network for the exchange of knowledge on an international level and constitutes a framework allowing for a better dissemination of information on research and teaching.

The EAA is closely related to the yearly **International Conference on Research in Advertising (ICORIA)**. The purpose of this conference is to create a forum where people studying advertising in the academic world could exchange ideas and where they could meet with practitioners who have experience with advertising in the commercial world.

Every natural person that is professionally concerned with or interested in research or teaching in the field of advertising is, irrespective of nationality, eligible to become a full member of the organization.

The EAA was founded in 2005. The current board members are: Ralf Terlutter (president, University of Klagenfurt), Edith Smit (president elect, University of Amsterdam), Peter Neijens (past president, University of Amsterdam), Sandra Diehl (treasurer, University of Klagenfurt), Tobias Langner (information manager, Bergische University Wuppertal), Martin Eisend (European University Viadrina), Robert Heath (School of Management, Bath), Shintaro Okazaki (Universidad Autónoma de Madrid) and Patrick De Pelsmacker (University of Antwerp).

For further information please visit our website: www.icoria.org

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Part I

Advertising Content, Appeals and Execution

Response to Probability Markers in Advertising of Hedonic and Utilitarian Services in Belgium and Croatia

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1 Purpose of the study

Carlsberg's "Probably..." campaigns, whose slogan has been seen in more than 100 versions of commercials and advertisements world-wide (Creative & Commercial Communications Ltd., 1998), are probably the best known example of the use of probability markers in advertising. The term probability markers refers to specific words or phrases used to signal to which degree is it likely that a given claim or argument is true. Those markers that indicate probable, rather than absolute, truth of a claim are known as hedges (e.g., "probably", "might", etc.), whereas the markers that indicate complete commitment to the truthfulness of the claim are known as pledges (e.g., "definitely", "guarantee", etc.). Hedges weaken the impact of a claim by allowing for exceptions or avoiding total commitment (Wright and Hosman, 1983) and therefore, they are considered markers of powerless language. Pledges, on the other hand, are absolute in nature and signal total confidence in the truthfulness of the claim (Berney-Reddish and Areni, 2005). They are considered markers of powerful language.

Despite the fact that probability markers are frequently used in advertising (Geis, 1982; Areni, 2002), often with very effective results, as is implied by the success and longevity of the Carlsberg campaign mentioned above, they have been effectively ignored by the great majority of marketing researchers. The few empirical studies on the topic of probability markers, concentrated mainly in a study by Harris et al. (1993), and the works of Charles Areni and his associates (e.g., Berney-Reddish and Areni, 2005, 2006), have focused only on the advertising of products, without taking into account the recognized differences between products and services (Murray and Schlacter, 1990) and the specificities of service advertising (e.g., Stafford, 1996). For these reasons, the present study attempts to fill this gap by, on one hand, contributing to the general theory and body of research on the effects of the usage of probability markers in advertising, and, on the other, focusing on this usage in the advertising of services.

Since the importance of product/service type in advertising strategy and research has been well-established (e.g., Rossiter and Percy, 1987) we apply a contingency approach to the examination of the influence of the of probability markers on advertising effectiveness by introducing the hedonic vs. utilitarian and the low vs. high involvement dimensions into the equation.

2 Theory background and hypotheses development

Studies so far have mostly not been able to prove the existence of any significant positive effects of the usage of probability markers in advertising on claim acceptance. Harris et al. (1993) have tested the effect of hedges (but not pledges) in advertising claims, and have found that they lead, on one hand, to increased claim acceptance, but also, on the other hand, lower purchase intentions. Berney-Reddish and Areni (2005) conducted several studies on probability markers, in which they included pledges, as well as hedges. The results of one show no statistically significant effect of the interaction of the use of probability markers and type of argument in which they are used (inductive or deductive). They do, however, find some significance in the main effects, with pledges resulting in more negative thoughts about the claim in the case of an inductive argument, and hedges in lower levels of claim acceptance in the case of a deductive argument. Much along the same lines, in a later study, Berney-Reddish and Areni (2006) found that both pledges and hedges reduce claim acceptance, and that this assertion held true more for men than for women, but their results were only marginally, if at all, significant.

One of the possible explanations for the failure of the previous studies to find significant impact of the use of probability markers in advertising can be found in Petty, Cacioppo and Schumann's (1983) Elaboration Likelihood Model, which differentiates between the central and the peripheral routes to persuasion, and posits that the message recipients use the central route in situations of high involvement, while the peripheral route is more conducive to low-involvement situations. We can, therefore, conclude that those elements of an advertisement that act as peripheral cues will only contribute to higher persuasiveness of the ad if the product or service advertised in it is a low-involvement one since the ad will in that case be only peripherally processed. In advertisements of high-involvement products or services, which consumers process via the central route, on the other hand, such cues will not play a significant role. Since language power has been empirically proven to act as a peripheral cue (Areni and Sparks, 2005), we may expect that probability markers, as signals of language power (pledges) or powerlessness (hedges) influence advertising effectiveness only in low involvement situations.

The difference between the absolute quality of a pledge, as opposed to a more conditional, probabilistic quality of a hedge, we believe, may correspond to the categorization of services into hedonic and utilitarian, frequently used in service advertising research (e.g., Stafford et al., 2002). Hedonic services, often also referred to as experiential, are characterized by high levels of people orientation, employee contact and customization (Stafford and Day, 1995). The quality of and satisfaction with a hedonic service rely on the sensations derived from the consumption of the service (Voss et al., 2003), and are highly person-specific and hard to assess objectively. Placing a claim with a hedge into a hedonic service advertisement might reduce the tendency of the consumers to counter-argue the claim (Vestergaard and Schroder, 1985) and increase the perceived honesty/credibility of the advertiser (Areni, 2002). On the other hand, using pledges, markers of absolute certainty, and thus implying universal applicability of the advertising claims, in advertisements of hedonic services might attract the consumers' attention to the inappropriateness of such claims and cause them to question the absolute and categorical conclusion of the truth of the claim. We, therefore, posit:

H1a: Contrary to high involvement services, the use of hedges in advertisements of hedonic low-involvement services results in the highest purchase intentions compared to either ads with pledges or ads without probability markers.

H1b: Contrary to high involvement services, the use of pledges in advertisements of hedonic low-involvement services results in the lowest purchase intentions compared to either ads with hedges or ads without probability markers.

Utilitarian services are, however, much more pragmatic and practical than hedonic ones. They are characterized by low levels of employee-customer contact, moderate customization and higher product-orientation than hedonic services (Stafford and Day, 1995). All this makes them much less individualized and person-specific, enabling easier objective assessment of service quality and customer satisfaction, which depends mainly on the functionality of their consumption (Voss et al., 2003), based on an almost universal set of characteristics that ensure optimal functionality. Using pledges in advertisements of utilitarian services, therefore, signals the advertisers' full confidence in the truthfulness of the claim (Areni, 2002), thus enhancing its persuasive power. A hedge in an advertising copy for a utilitarian service, on the other hand, might create the impression that the advertiser is not willing to stand behind the claim 100%, weakening the claim itself, and undermining the advertiser's authority, credibility, and status (Berney-Reddish and Areni, 2006). This would result in decreased efficiency of the advertisement. We, therefore, posit:

H2a: Contrary to high involvement services, the use pledges in advertisements of utilitarian low-involvement services result in the highest purchase intentions compared to either ads with hedges or ads without probability markers.

H2b: Contrary to high involvement services, the use of hedges in advertisements of utilitarian low-involvement services result in the lowest purchase intentions compared to either ads without probability markers or those with pledges.

A number of studies from the fields of marketing, communications, and linguistics have proven that language power, which can be signaled by, among others, probability markers, has a strong impact on persuasion (e.g., Areni, 2003; Areni and Sparks, 2005). In addition to that, many advertising studies found a strong mediating role of the response towards the advertisement itself for advertising effectiveness in terms of brand effects (e.g., Mitchell and Olson, 1981). Hedges or pledges may lead to a smaller or greater persuasiveness of the message (see before). We expect that this persuasiveness of the advertisement intervenes between the stimulus (advertisement containing the probability marker) and the response (purchase intention). Probability markers affect consumers' purchase intentions because they influence persuasiveness of the advertising, making an ad either believable or not. In other words, persuasiveness of the advertising copy can mediate the relation between the use of probability markers in advertising and consumers' purchase intentions. We expect that:

H3: The effects of the use of probability markers in advertisements on consumers' purchase intentions are mediated by the persuasiveness of the message used in the advertisement.

The hypotheses are tested in two studies, one in Croatia and one in Belgium.

3 Study 1

3.1 Procedure

To eliminate possible confounds in the main experiment, two pretests were conducted on a small convenience sample of business students ($N_1 = 48$, $N_2 = 27$). The first pretest was designed to flesh out the appropriate services to include in the study. First, a list of services that college students regularly purchase and use was compiled by asking several students we came in contact with to state the services they had used recently. The final list included the following 16 services: airline, bank, bar, cable television provider, cinema, copy/print shop, credit card, fitness studio/gym, foreign language school, graduate school, hair salon, internet

service provider, mobile phone service provider, night club, sandwich shop, and travel agency.

Sixteen services were tested on a 7-point scale (1 = low, 7 = high) for the level of involvement (Zaichkowsky, 1994) and on a 5-point scale (1 = utilitarian, 5 = hedonic) for the degree to which each of the services was either hedonistic or utilitarian in nature (Voss, Spangenberg, and Grohmann, 2003). The results showed that a graduate school was the best option for a utilitarian ($M = 2.042$) high-involvement ($M = 6.369$) service, a copy/printing shop for a utilitarian ($M = 1.401$) low-involvement ($M = 3.448$) service, a bar for a hedonic ($M = 4.828$) high-involvement ($M = 5.588$) service, and a sandwich shop for a hedonic ($M = 3.641$) low-involvement ($M = 3.828$) service. The significant differences between the services for the two dimensions are verified by t-test ($p < .05$). These four were, therefore, chosen for this study.

Once the appropriate services were chosen, four advertisements were created first, one for each service, containing no probability markers. The advertisements were kept simple and as uniform across services as possible, to avoid any confounding bias. Each advertisement included one visual element (a photograph of a physical element of the service, e.g. a sandwich for the sandwich shop or a copy machine for a copy/print shop), the location of the service provider, and one verbal claim. Within a service, everything was kept constant, except for the verbal claim. Since ad likeability is a potential confound, the second pretest ($N = 27$) was conducted to confirm that there were no significant differences in ad liking (Madden, Allen and Twible, 1988) between the four ads ($F(3, 26) = 1.874$, $p = .141$). Next, two more versions (containing either a hedge or a pledge) of advertisements were created for each of the four conditions, resulting in twelve ads. Three very similar verbal claims were created. First the one without any probability markers was created, and then the other two versions were made by inserting either a hedge or a pledge into the original claim, thus keeping the differences between claims to the minimum. A 2 (service type: hedonic, utilitarian) \times 2 (involvement: high, low) \times 3 (probability marker: hedge, pledge, no marker) between-subjects experiment was carried out to test the aforementioned hypotheses.

Each version of the main questionnaire started with a welcome screen, on which the participants were greeted, quickly briefed about the study, and instructed on how to proceed with filling out the questionnaire. The participants were allowed to proceed through the questionnaire at their own pace, and not instructed to spend any more or less time on any one question, in order to simulate, as much as possible, natural advertisement processing, and not create a forced high-involvement situation. The welcome screen was followed by some warm-up personality and experience-with-the-service questions, after which the

participants were exposed to the image of an advertisement for an appropriate service (depending on the treatment group they were a part of). The surveys were designed in such a way that each time a new participant entered the questionnaire, one of three possible versions of the same advertisement appeared, chosen randomly by the survey software SurveyMaster. In this way each participant was randomly exposed to either the advertising copy containing a hedge, a pledge, or one with no probability markers. After being exposed to the advertisements, participants were asked whether the ad they had just seen reminded them of any particular brands. Those who answered positively were later eliminated from the analysis, since their answers could have been influenced by their attitude towards those brands.

Table 1: Probability marker manipulations by product

<i>Service</i>	<i>Marker</i>	<i>Advertising copy (English translation)</i>
Bar	no pm	Come... Relax... Have fun
Bar	Hedge	Come... Relax... You might have fun
Bar	Pledge	Come... Relax... You will definitely have fun
Copy/print shop	no pm	Best quality copies in town
Copy/print shop	Hedge	Probably the best quality copies in town
Copy/print shop	Pledge	Definitely the best quality copies in town
Graduate school	no pm	Reach your careers goals with an MBA from International Business School
Graduate school	Hedge	An MBA from International Business School might help you reach your career goals
Graduate school	Pledge	An MBA from International Business School guarantees you will reach your career goals
Sandwich shop	no pm	Come to Tace Tee's – your taste buds will thank you!
Sandwich shop	Hedge	Come to Tace Tee's – your taste buds might thank you!
Sandwich shop	Pledge	Come to Tace Tee's – we guarantee your taste buds will thank you!

A semantic scale, originally developed by Gurhan-Canli and Maheswaran (2000), was used to measure the persuasiveness of the verbal arguments presented in each advertisement. Several filler questions were inserted between this and the next scale in order to avoid common method variance. The answers to these filler questions were used as control variables in the analysis of the results

(age, gender). Finally, a Likert scale based on the one used by Dodds, Monroe, and Grewal (1991), as well as other researchers in the field, was used to measure purchase intention for the service advertised. The last screen of the questionnaire included a short message debriefing the participants and thanking them for their participation in the survey. The independent variables (high/low involvement, hedonic/utilitarian service, hedge/pledge/no probability marker in the ad manipulations) were treated as between-subjects factors. The hedges used in the advertisements were “might” and “probably”, and the pledges used were “definitely” and “guarantee”. These specific hedges and pledges were chosen as simple, archetypal examples of probability markers, which clearly qualify the claim made in the advertisement and sound realistic when inserted into the no-treatment copy (Berney-Reddish and Areni, 2006).

As stated previously, the advertisements were kept simple and every effort was made to maintain as much uniformity as possible between and within service type, involvement, and probability marker manipulations. Within each service type/involvement manipulation, the sole difference between advertisements was the actual probability marker used, which was inserted into the control condition claim containing no probability markers, to ensure the highest degree of certainty that the results are attributed to the actual effect of the probability markers, without the interference of the other elements of the advertisement. All the scales in the questionnaire, as well as the ones used in the pretests, were translated and back-translated prior to their inclusion. Cronbach Alpha's of above .70 for each of the translated scales ensures that internal consistency of the scales was maintained in the translated versions.

3.2 *Sample*

The participants in the study were college students from a number of public and private universities in Croatia. The mailing lists for the study were obtained from the university registrar's offices. The participants were randomly assigned to one of the four treatment groups and sent an e-mail with the appropriate online questionnaire. Out of approximately 1300 students who received an email inviting them to participate in the study by filling out the online questionnaire, 448 (just under 35%) eventually took part. Once the incomplete responses, as well as those with a positive answer to the question whether the advertisement in the questionnaire prompted associations with an existing brand (in total, 74 of them), were eliminated we were left with a sample size of 374 usable responses.

The analysis of the sample demographics shows that 41.6% of the participants were male and 58.4% were female. The majority of them (52.2%) were between the ages of 22 and 26. The remainder fell into the following age groups:

30.2% between the ages of 18 and 21, 11.5% between the ages of 27 and 30, 5.3% under 18, and 0.8% over 30. Thus, it can be concluded that the sample represents a natural distribution of age and gender for college students.

3.3 Results

A between subjects ANOVA was conducted to test H1 and H2. As expected, the three-way interaction effect is significant ($F(7, 352) = 24.078, p < .001$). As expected in H1 and H2, based on Bonferroni post-hoc tests, probability markers have no influence on PI in the case of high-involvement services ($F(2, 189) = .345, p = .709$, be it a hedonic ($p = .637$), or a utilitarian ($p = .476$) service. In the case of low-involvement services, the presence of probability markers in the advertisement was found to affect consumers' purchase intentions significantly for both hedonic ($F(2, 86) = 36.703, p < .001$) and utilitarian ($F(2, 89) = 48.208, p < .001$) services. For low-involvement hedonic services, Bonferroni post-hoc comparisons show that the use of a hedge in the ad generates significantly the highest PI ($M = 4.258$) compared to no probability markers ($M = 2.630, p < .001$) and the use of a pledge ($M = 2.181, p < .001$), which provides support for H1a. Although the use of pledges results in the lowest PI, as expected in H1b, Bonferroni post-hoc comparisons show that difference in PI scores is not statistically significant compared to no probability markers ($p = .090$). H1b is partially supported. In the case of low-involvement utilitarian services, the results show significantly higher purchase intentions for advertisements using pledges ($M = 3.958$) as opposed the ads with hedges ($M = 2.326, p < .001$) or those without probability markers ($M = 2.630, p < .001$), supporting H2a. Again, although the use of hedges results in the lowest PI, as expected in H2b, Bonferroni post-hoc comparisons show that the difference with those without probability markers fails to reach statistical significance ($p = .282$). H2b is partially supported.

To test H3, we conducted a mediation analysis following the steps suggested by Baron and Kenny (1986). The first step involves regressing probability markers, service types, and the level of involvement on purchase intention. This was done in the previous analysis, and revealed a significant three-way interaction effect. In the second step results showed that the interaction of the three independent variables also has a significant impact on the mediator, the persuasiveness of the arguments ($F(7, 373) = 25.893, p < .001$), and these results are similar to those of the analysis on PI. In the third step, in which message persuasiveness was added as a covariate in the PI ANCOVA, results demonstrated that the persuasiveness of the arguments has a significant impact on PI ($F(1, 352) = 266.767, p < .001$) and that effect of the three-way interaction of involvement/product type/probability markers on PI remains significant

($F(7, 352) = 6.261, p < .001$). However, the inclusion of the persuasiveness of the argument variable into the model leads to a substantial decrease of the size of the effect (from .331 to .114), showing evidence of partial mediation. The relevance of mediation was further confirmed with a Sobel test, which indicated that persuasiveness of the argument significantly mediated the impact of involvement/service type/probability marker on purchase intention ($p_{\text{Sobel}} < .001$). Therefore, it can be concluded that H3 is supported (see Figure 3).

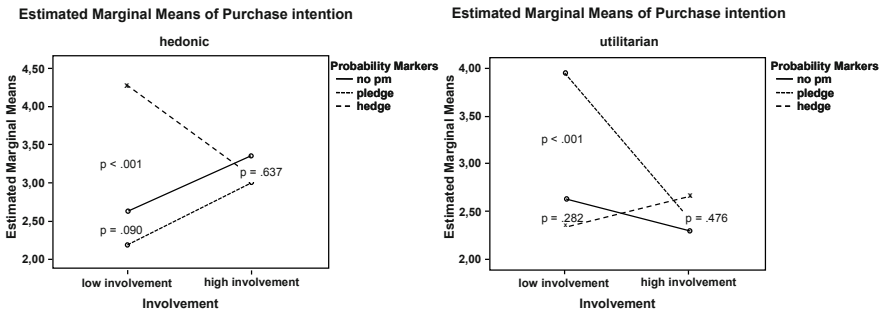


Figure 1: Study 1 interaction effect between type of service and type of probability marker in Croatia

4 Study 2

4.1 Procedure

To test the robustness of the results of Study 1, a second experiment was carried out. The same procedure and stimuli developed in the first experiment were used again, but in the context of a different culture, as the study was mirrored on Belgian (Flemish) consumers. Since the native language of the respondents was Dutch, the only changes that were made were those relating to language. All the stimuli and the questionnaires were translated and back-translated into Dutch. Once again, the Cronbach Alpha's of all the translated scales reached .70 or above.

4.2 Sample

In Belgium, the survey was e-mailed to 1800 students from three large state universities. The participants were, again, randomly assigned to one of the four treatment groups and sent an e-mail with the appropriate online questionnaire. Ultimately, 343 of them responded (19%), out of which 331 were usable ($N_{\text{Bel}} = 331$). The analysis of the sample demographics shows that 46.1% of the

participants were male. The majority of respondents were from the 22 to 26 (38.4%) and the 18 to 21 (36.5%) age groups. The remainder fell into the following age groups: 20.6% under 18, 3.2% over 30, and 1.3% between 27 and 30.

4.3 Results

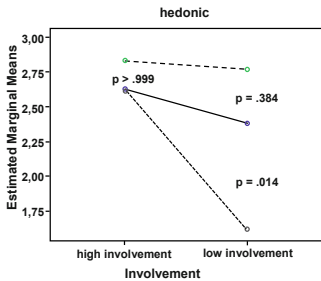
Mirroring Study 1, a between subjects ANOVA was conducted to test H1 and H2. The impact of the three-way interaction effect of involvement*service type*probability marker on PI was, again, significant ($F(7, 326) = 4.149$, $p < .001$). The Bonferroni post-hoc tests confirm that, as expected in H1 and H2 and evidenced by the results of Study 1, probability markers have no influence on PI in the case of high-involvement hedonic ($p = .554$) or utilitarian ($p = .814$) services. In the case of low-involvement services, Study 2 results also confirm the results of Study 1 - the presence of probability markers in the advertisement affects consumers' PI significantly for both hedonic ($F(2, 90) = 6.667$, $p = .002$) and utilitarian ($F(2, 88) = 9.362$, $p < .001$) services.

In the case of low-involvement hedonic services, Bonferroni post-hoc comparisons show that the use of a pledge in the advertisement generates significantly the lowest PI ($M = 2.1814$) compared to no probability markers ($M = 2.3824$, $p = .014$) and hedges ($M = 2.7442$, $p < .001$), which provides support for H1b. Although the use of hedges results in the highest PI, as expected in H1a, Bonferroni post-hoc comparisons show that difference in PI scores is not statistically significant compared to no probability markers ($p = .384$). H1a is partially confirmed. For advertisements featuring low-involvement utilitarian services, the results show significantly higher PI when pledges are used in the ad ($M = 3.0161$) as opposed to the ads with hedges ($M = 2.0093$, $p = .003$): However, the difference between the ads with pledges and those without probability markers is not significant ($M = 2.8286$, $p > .999$). H2a is partially confirmed. As expected in H2b, the use of hedges in low-involvement utilitarian service ads results in the lowest PI, compared to both ads with pledges ($p = .003$) and those without probability markers ($p = .015$).

To retest H3, we again conducted a mediation analysis following the steps suggested by Baron and Kenny (1986). As we have already shown a significant three-way interaction effect of probability markers, service type and the level of involvement on PI, the first step of the mediation analysis is satisfied. In the second step results showed that the interaction of the three independent variables also has a significant impact on the mediator, the persuasiveness of the arguments ($F(7, 326) = 7.373$, $p < .001$). In the third step, in which message persuasiveness was added as a covariate in the PI ANCOVA, results demonstrated that the persuasiveness of the arguments has a significant impact on PI

($F(1, 323) = 64.524, p < .001$) and that effect of the three-way interaction of involvement/product type/probability markers on PI remains significant ($F(7, 326) = 4.149, p < .001$). Additionally, unlike in the Study 1, the inclusion of the persuasiveness of the argument variable into the model did not lead to a substantial decrease of the size of the effect (from .084 to .080). These results show that H3 is not supported in Study 2.

Estimated Marginal Means of Purchase intention



Estimated Marginal Means of Purchase intention

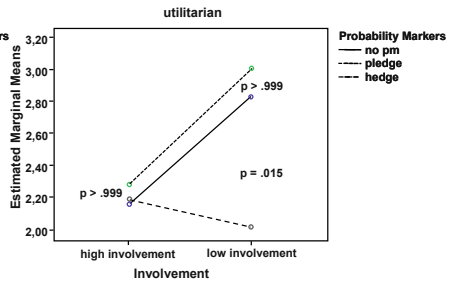


Figure 2: Study 2 Interaction effects between type of service and type of probability marker in Belgium

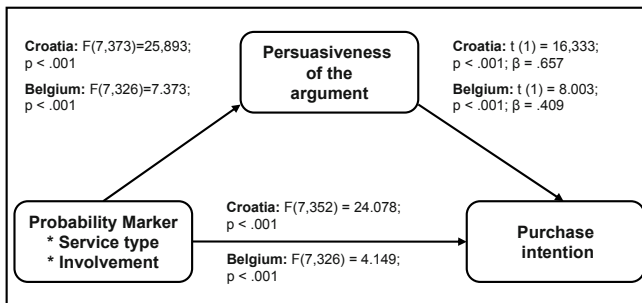


Figure 3: The mediating role of argument persuasiveness for the relation between service type and probability marker type on purchase intention in Croatia and Belgium

5 Conclusions and suggestions for further research

One of the major theoretical contributions of this study is the differentiation between high- and low-involvement services which provides an explanation for the failure of the previous studies to find significant impact of the use of probability markers in advertising. Following the postulates of the Elaboration Likelihood Model, probability markers have no impact on the effectiveness of adver-

tising of high-involvement services. Our study also contributes to the general theory and body of research on the impacts of the usage of probability markers in advertising, by focusing on this usage in the advertising of services and introducing the hedonic vs. utilitarian dimension into the equation. The interaction between involvement, service type (hedonic/utilitarian), and type of probability marker used in the advertising copy (hedge, pledge, no probability marker) on customers' purchase intentions became evident. Marketers should not only take the level of involvement into account when making an advertisement about a service, but also the type of service. For hedonic low-involvement services, which are experiential, subjective, and very person-specific in nature, advertising claims that include hedges have been found to be the most effective, resulting in the highest levels of purchase intentions. It seems that such claims may be inciting heightened perceptions of honesty/credibility and persuasiveness of the advertiser in the eyes of the consumer, whereas a claim containing an absolutistic pledge would not only be easy to counter-argue and dismiss, but would also have the opposite effect on purchase intentions. On the contrary, advertisements for utilitarian low-involvement services seem to work better when they include a claim containing a pledge. Pledges is this case, where the service is much less customized and person-specific, and considerably easier to evaluate objectively (making it also easier to compare its universal functional characteristics to other similar services with certainty), signal the strength of the advertisers' convictions in absolute truthfulness of the claims contained in the advertising copy. Persuasiveness functions as a partial mediator.

The robustness of most results across the two studies provides strong evidence of the effectiveness of probability markers in advertising of low-involvement hedonic and utilitarian service. Culture, however, seems also to play a role in the impact that probability markers have on purchase intentions, as well as on the function of persuasiveness as the mediator. Croatian consumers display a higher general preference for probability markers than Belgian consumers. Additionally, in Croatia, persuasiveness does act as a mediator of the probability marker*service type*involvement interaction effect on purchase intention, while for Belgian consumers no such mediation takes place. As these two studies do not provide an insight into the reasons and underlying mechanisms for the said differences, further research into the role of culture on the effectiveness of probability markers in advertising is called for.

This study also has limitations that provide other opportunities for further research. Each of the treatment conditions in this study was represented by one service only. In addition to that, the brand names used in the stimuli did not represent existing brands. Although these steps were taken to minimize the possibility of confounding variables influencing the results of the study and to maximize the internal validity of the study, future research should endeavor to test

the conclusions of this study using more than one service per type and existing brand names. It should also be noted that the results of the present study rely on a sample of undergraduate students. Although every effort was taken to ensure that the services used in the study were appropriate for a student sample, and such homogeneous samples have often been used in past studies to maximize statistical power (Berney-Reddish and Areni, 2005), this comes at the cost of external validity. Generalizations of the findings of the study should, therefore, be made with caution, and additional research might be needed to strengthen the validity of the above reported results for other population contexts. Finally, ad persuasiveness only partially mediates the effect of probability markers on purchase intention, and only in one culture (Croatia). There might be other variables that contribute to this relationship, such as personal or cultural characteristics of the respondents, attitude towards the ad, pro- and counter-argumentation, and message credibility, which were not examined by the present study. Future research should take into account the impact of these variables and test the effects of probability marker usage on them, as well.

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Emotional Responses to Nature in Advertising and Real Nature

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1 Introduction

Research stretching over several decades shows that contact with nature has inherently positive emotional, cognitive and physiological effects on human beings (e.g., Frumkin, 2003; Han, 2009; Hartig et al., 1991; Hartig et al., 2003; Korpela et al., 2001; Ulrich, 1984). Attention restoration theory (Kaplan, 1995) and Ulrich's (1981) psycho-physiological stress reduction framework proclaim that visual encounters with natural scenes, compared to most urban scenes lacking natural elements such as trees, reduce stress and enhance cognitive functioning.

Several research studies address the correspondence between behavioural responses to real nature and photographic representation of nature, focusing on aesthetic preference and beauty rating as components of positive affect, together with several other more cognitive features of landscape perception. With respect to the analysed dimensions, photos seem to simulate natural environments reasonably well (e.g., Coeterier, 1983; Hull IV and Stewart, 1992). Since beneficial effects of natural environments are seemingly not limited to interaction with genuine nature, but can as well be derived from exposure to nature in photographic images or multi-media recordings, the exposure to images of natural scenes is often employed as surrogate for interaction with nature (e.g., Kaplan and Kaplan, 1989; Ulrich, 1981; Ulrich et al., 1991).

Nature imagery is widely used in advertising, in part attributable to the increasing popularity of green advertising. Pictures of nature in advertising could potentially lead to the whole range of behavioural effects suggested for interaction with nature, in particular, positive affect, as well as favourable influences on cognitive processing. Previous research has not yet addressed the comparison of nature imagery with real nature in a wider range of emotional dimensions than the abovementioned studies on positive affect. Specific emotional responses to natural scenes in advertising so far have been analysed in only one study (Hartmann and Apaolaza-Ibáñez, 2010). The present study compares emotional responses to advertising featuring natural representations with those to actual nature. The confirmation of a significant degree of equivalence of the emotions by advertising displaying natural imagery with those derived from direct encounters

with real nature would imply that beneficial emotional, cognitive and physiological effects could also be expected from exposure to such advertising.

2 Theoretical framework

Ample research evidence from the fields of psychology and medicine proves that contact with nature has generally some inherently positive emotional effects (Frumkin, 2003). In particular, natural environments have been shown to exert more positive influences on emotions than urban environments (Hartig et al., 1991; Maller et al. 2006; Ulrich, 1981; Ulrich et al., 1983; Ulrich 1984). The positive emotional effects of nature are relevant for stress reduction (Ulrich et al., 1991) and psychological restoration (Kaplan, 1995, 2001). Steven and Rachel Kaplan's (1989, 1995) Attention Restoration Theory (ART) refers to the observation that contact with nature leads to recovery from mental fatigue, that is, the exhaustion of directed attention. ART highlights an important cognitive effect of visual encounters with nature suggesting that they restore human's capacity to pay attention. According to ART, interacting with nature improves performance on attention and memory related tasks. Since ART has been put forward, several studies have provided empirical evidence for the hypothesized effects (e.g., Berman et al., 2008; Berto, 2005; Hartig et al., 2003).

Advertising featuring natural scenes can potentially harvest beneficial behavioural effects of nature in several ways. Positive emotional responses to pictures in advertising have been shown to enhance attitude toward the advertisement and the brand (e.g., Batra and Ray 1986; Edell and Burke 1987). Pictures or video recordings of pleasant natural landscapes in an advertisement can evoke positive affect, which in turn exerts positive influences on attitude toward the brand (Hartmann and Apaolaza-Ibáñez, 2010). Further research shows that green advertising featuring pleasant natural scenes can condition a brand with specific emotional 'virtual' nature experiences. 'Virtual' nature experiences associated with a green brand deliver additional psychological brand benefits (Hartmann and Apaolaza-Ibáñez, 2009). While the discussed effects are principally emotional, positive cognitive influences on advertising effectiveness could be expected as well. ART postulates that exposure to nature improves attention and memory. Thus, nature imagery in advertising may lead to an increase in attention toward the advertisement and post-exposure recall. It can be speculated that natural scenes in advertising may enhance elaboration and memory of advertising messages and brand associations.

A fundamental prerequisite for the hypothesized effects of natural advertising imagery is the correspondence of behavioural responses to encounters with natural environments and visual representations of these environments. A number of studies have addressed the validity of photographs as surrogates for natural environments, suggesting that photographic pictures of landscapes, plants, animals, and water can have similar effects to the genuine objects (Bosselmann and Craik, 1989; Coeterier, 1983; Hull IV and Stewart, 1992; Nassauer, 1982; Penning-Rowsell, 1981; Shuttleworth, 1980; Zube et al., 1987). In fact, many of the cited studies on behavioural effects of nature are indeed based on photographic pictures of nature as surrogates for natural environments. Consequently, many of the observed beneficial outcomes are really responses to visual representations of nature instead of actual natural environments (e.g., Kaplan and Kaplan, 1989; Ulrich, 1981; Ulrich et al., 1991). Therefore it can be assumed that emotional responses similar to those evoked by “genuine” natural scenes can be set off using photographs or video recordings as used commonly in advertising. Exposure to natural advertising imagery may emulate the effects of interactions with nature.

Research Hypothesis:

Appropriate visual representations of natural scenes in advertising evoke emotional responses akin to those experienced in direct contact with natural environments.

3 Method

With the aim to test the proposed hypothesis, an experimental field study of the emotional responses to advertising with nature imagery as well as to actual nature was carried out. For this purpose, thirteen experimental advertisements were developed featuring an identical brand name and symbol, as well as identical advertising copy and formal structure. The advertisements featured a fictitious green energy product and varied only in the content of the picture displayed. Eleven of the advertisements showed pleasant natural landscapes with vegetation: a beech tree on a meadow, an eucalyptus tree in a low scrub setting, palm trees on a tropical beach, Mediterranean coastline, savannah with trees, a mountain lake with cattle, a savannah setting with elephants, a mountain stream, a landscape with lakes and forests, an oak forest and a pine forest. The remaining two advertisements displayed a vegetation-free rocky desert in the sunlight and a pleasant sunny cityscape with classical and modern buildings without any vegetation (Appendix). A total of 817 valid street interviews were carried out in six towns and villages. Subjects were selected by a combined quasi-random and quota sampling. 726 subjects were exposed randomly to one of the experimental advertisements and subsequently asked to rate six basic emotional responses to the advertisement on semantic differential scales. The emotional dimensions

were derived from the literature on basic and environmental emotions to assess in particular the emotions evoked by the different environments depicted in the advertisements: pleasant-unpleasant; happy-sad (Batra and Ray, 1986; Edell and Burke, 1987; Holbrook and O'Shaughnessy, 1984; Mehrabian and Russell, 1974); relaxed-aroused (Holbrook and O'Shaughnessy, 1984; Mehrabian and Russell, 1974; Watson et al., 1988;); free-oppressed (Frijda, 1969); secure-unsecure (Allen et al., 1992; Frijda, 1969). After being questioned on several additional items related to brand perceptions, as well as general activities and opinions, subjects had to rate on identical scales the emotions they experienced in contact with real nature. For this task they were instructed to visualize internally their past interactions with natural environments. 91 subjects were interviewed only on their emotional responses to nature, without prior exposure to any advertisement.

4 Results

The first row of Table 1 shows for subjects not exposed to experimental advertisements the mean values of emotional responses evoked by interaction with nature. The remaining rows represent for each experimental group the mean emotion rating of the experimental advertisement the subjects in this group were exposed to. To test which of these mean values within each experimental group for each emotional variable was different from the emotions evoked by nature depicted in row 1, pairwise comparisons between the experimental advertisement group means and the nature group means were carried out by a set of least significant differences t-tests (Table 2). Results indicate that mean differences are indeed significant for the groups exposed to experimental advertisements displaying urban scenery, desert, and the eucalyptus with low scrub landscape ($p < .001$). Also the savannah and pine forest advertisements rated significantly different from nature in most emotional variables at $p < .001$ to $p < .03$. However, with the sole exception of the variables pleasant-unpleasant and relaxed-aroused for subjects exposed to the mountain stream advertisement, which rated significantly higher ($p = .02$ and $p = .1$ respectively), all other emotional response means across all other experimental groups were not significantly different from mean ratings of real nature by the group not exposed to any advertisement.

Table 1: Mean values of emotional responses

<i>Experimental Group</i>		<i>pleasant - unpleasant</i>	<i>relaxed - aroused</i>	<i>happy - sad</i>	<i>free - oppressed</i>	<i>secure - insecure</i>
Interaction with nature	Mean	8.16	7.99	7.89	8.56	7.22
	N	91	91	91	91	91
	Std. Dev.	1.49	1.68	1.51	1.80	1.77
Savannah Advertisement	Mean	7.43	7.59	6.63	8.15	6.46
	N	54	54	54	54	54
	Std. Dev.	1.61	1.74	1.64	1.42	2.20
Mountain lake advertisement	Mean	8.14	8.09	7.66	8.46	7.32
	N	56	56	56	56	56
	Std. Dev.	1.54	1.64	1.76	1.53	1.96
Savannah elephants advertisement	Mean	7.44	7.15	6.93	7.71	5.76
	N	55	55	55	55	55
	Std. Dev.	1.64	1.88	1.82	1.62	2.34
Mountain stream advertisement	Mean	8.82	8.77	8.30	8.66	7.38
	N	56	56	56	56	56
	Std. Dev.	1.31	1.18	1.73	1.30	1.82
Rocky desert advertisement	Mean	4.33	6.18	3.22	5.04	3.91
	N	55	55	55	55	55
	Std. Dev.	2.57	2.55	2.17	2.86	2.31
Beech tree advertisement	Mean	8.21	8.19	7.54	8.40	7.07
	N	57	57	57	57	57
	Std. Dev.	1.35	1.51	1.69	1.44	1.76

<i>Experimental Group</i>		<i>pleasant - unpleasant</i>	<i>relaxed - aroused</i>	<i>happy - sad</i>	<i>free - oppressed</i>	<i>secure - insecure</i>
Eucalyptus advertisement	Mean	6.30	6.45	5.27	6.35	5.60
	N	60	60	60	60	60
	Std. Dev.	2.24	2.22	2.41	2.37	2.20
Palm beach advertisement	Mean	8.23	8.37	7.95	8.07	6.68
	N	57	57	57	57	57
	Std. Dev.	1.32	1.89	1.69	1.53	2
Mediterranean advertisement	Mean	8.65	8.05	8.11	8.61	7.05
	N	57	57	57	57	57
	Std. Dev.	1.34	1.95	1.60	1.32	2.13
Lakes & forests advertisement	Mean	8.44	8.37	7.89	9.77	7.70
	N	57	57	57	57	57
	Std. Dev.	1.63	1.51	1.67	7.73	1.61
Urban Advertisement	Mean	5.66	4.49	4.79	4.19	5.53
	N	53	53	53	53	53
	Std. Dev.	2.34	2.39	2.35	2.90	2.22
Oak forest advertisement	Mean	8.02	8.05	7.34	8	6.66
	N	56	56	56	56	56
	Std. Dev.	1.39	1.71	1.86	1.88	2.06
Pine forest advertisement	Mean	7.51	7.57	7.30	7.43	6.19
	N	53	53	53	53	53
	Std. Dev.	1.72	1.80	1.71	1.89	1.74

Table 2. Mean value differences of emotional responses to nature and emotional responses toward experimental advertisements

Landscape type	pleasant-unpleasant			relaxed-aroused			happy-sad			free-oppressed			secure-insecure		
	Mean Diff.	Std. Error	P	Mean Diff.	Std. Error	P	Mean Diff.	Std. Error	P	Mean Diff.	Std. Error	P	Mean Diff.	Std. Error	P
Mountain stream	.66	.29	.02	.78	.32	.01	.41	.31	.19	.10	.47	.83	.16	.34	.65
Mediterranean	.48	.29	.09	.06	.31	.84	.22	.31	.49	.05	.46	.91	-.17	.34	.62
Lakes & forests	.27	.29	.34	.38	.31	.23	.00	.31	.99	1.21	.46	.01	.48	.34	.16
Palm beach	.06	.29	.83	.38	.31	.23	.06	.31	.85	-.49	.46	.29	-.54	.34	.12
Beech tree	.05	.29	.87	.20	.31	.52	-.35	.31	.26	-.16	.46	.73	-.15	.34	.66
Mountain lake	-.02	.29	.94	.10	.32	.75	-.23	.31	.46	-.10	.47	.84	.10	.34	.77
Oak forest	-.15	.29	.61	.06	.32	.84	-.55	.31	.08	-.56	.47	.23	-.56	.34	.10
Pine forest	-.66	.30	.03	-.42	.32	.19	-.59	.32	.06	-1.13	.47	.02	-1.03	.35	(*)
Savannah elephants	-.73	.29	.01	-.84	.32	.01	-.96	.31	(*)	-.85	.47	.07	-1.46	.34	(*)
Savannah	-.74	.29	.01	-.40	.32	.21	-1.26	.32	(*)	-.41	.47	.38	-.76	.35	.03
Eucalyptus	-1.86	.28	(*)	-1.54	.31	(*)	-2.62	.31	(*)	-2.21	.46	(*)	-1.62	.33	(*)
Urban	-2.50	.30	(*)	-3.50	.32	(*)	-3.10	.32	(*)	-4.37	.47	(*)	-1.69	.35	(*)
Rocky desert	-3.84	.29	(*)	-1.81	.32	(*)	-4.67	.31	(*)	-3.52	.47	(*)	-3.31	.34	(*)

(*) p<.01

Table 3: Correlations of emotional responses to nature with emotional responses toward experimental advertisements depicting different landscapes

<i>Landscape type</i>	<i>N</i>	<i>Pearson correlation</i>	<i>Sig. (2-tailed)</i>
Oak forest	280	.51	(*)
Beech tree	285	.48	(*)
Savannah elephants	275	.47	(*)
Mountain lake	280	.45	(*)
Palm beach	285	.43	(*)
Mediterranean coast	285	.40	(*)
Eucalyptus	300	.40	(*)
Savannah	270	.34	(*)
Pine forest	265	.31	(*)
Mountain stream	280	.28	(*)
Lakes & forests	285	.19	(*)
Rocky desert	275	.08	.21
Urban city	265	-.14	.03

(*) $p < .001$

For the next step of the analysis, the mean ratings of emotions evoked by interaction with nature were compared across all experimental groups, including the group not exposed to any advertisement. Results prove the lack of significant differences ($p > .1$), confirming that ratings were equal for all groups, independent of the specific advertisement or the fact that subjects had been exposed to advertising previously or not. Subsequently, overall correlations of emotional responses to experimental advertisements and nature were computed together for all individual ratings of emotional variables within each experimental group exposed to advertisements (Table 3). Results indicate very significant correlations ($p < .001$) for all advertisements excluding the ones featuring the rocky

desert and the cityscape. Whereas for the former advertisement the correlation is non-significant, for the latter it is significantly negative ($p=.03$).

5 Discussion and implications

Results of the empirical study confirm the hypothesis that advertisements displaying appropriate pictures of pleasant natural scenes can evoke emotions that are very similar to those experienced in direct contact with natural environments. Indeed, ratings of identical scales for emotional responses to nature and to advertisements with nature imagery were not significantly different from each other for most of the displayed natural landscapes. Correlation analysis further strengthens these findings showing that responses to nature correlated very significantly with those to all advertisements featuring natural landscapes with vegetation. While for the advertisement showing the vegetation-free rocky desert this correlation was not significant, the emotions evoked by the urban environment correlated negatively with the subjects' ratings of emotions toward nature, indicating for the latter case not only dissimilar but indeed opposite emotional response patterns.

However, the empirical findings also reveal that not all visual representations of nature are equally appropriate to evoke emotions similar to actual nature. Some of the advertisements with natural landscapes and vegetation rated significantly lower on most emotional dimensions. This was the case of the eucalyptus, savannah elephants, savannah trees, and pine forest advertisements. The specific pictures in question probably did not match with the subjects' internalized conceptions of encounters with natural environments. All other natural landscape images seemed to resonate with the subjects' notion of nature.

The finding that natural advertising imagery can evoke similar feelings to nature has significant implications for advertising. Beneficial emotional as well as cognitive effects of nature discussed in the literature on environmental psychology may be harvested to enhance advertising effectiveness. Positive affective reactions to natural scenes in advertising contribute to increasing attitude toward the advertisement and the brand. With regard to cognitive effects, nature pictures in advertising potentially improve attention toward advertising messages and memory. Attention Restoration Theory predicts that interacting with natural environments invokes involuntary attention modestly, improving performance on tasks that depend on directed-attention abilities since the requirement for directed attention is minimized in such environments. Conversely, urban environments capture directed attention severely (Berman et al., 2008; Kaplan, 1995). Nature in advertising can evoke positive emotional responses and have beneficial cognitive effects, but should not attract a considerable amount of directed

attention. Nature imagery may instill a beneficial perceptual atmosphere without diverting the attention from advertising messages and the brand.

Finally, the fact that the mountain stream advertisement was perceived as significantly more pleasant and relaxing than real nature invites to speculate that exposure to idealized images of nature, that is representations of nature that are more appealing than subject's internalized notion of nature, can potentially induce stronger beneficial effects on behaviour than pictures that resonate perfectly with these internal concepts.

Regarding the limitations of this study, findings must be taken with some caution as this research has been experimentally in nature. Since subjects were not exposed to real nature but instead were instructed to visualize internally their past interactions with natural environments, ratings of emotions evoked by nature rather corresponded to memories or internalized conceptions of encounters with natural environments. Results should be confirmed in a broader real live setting, including direct interaction with natural environments and varying nature imagery and advertisements.

Acknowledgments

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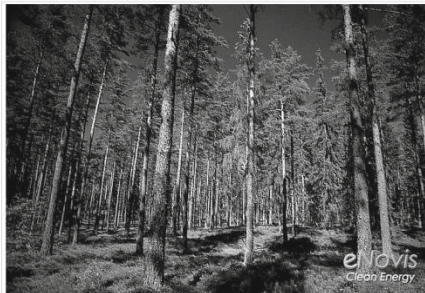
7 Appendix: Selection of experimental advertisements

Mountain stream



eNovis energy offers you clean energy from 100% renewable resources. eNovis energy is generated entirely from sun, wind, water and biofuels. By purchasing the eNovis energy product for a year, a typical household with average monthly usage of 1,000 kWh per month, could avoid contributing over 17,000 pounds of CO₂ into our air – as much as your car makes in almost 20,000 miles of driving.

Pine forest



eNovis energy offers you clean energy from 100% renewable resources. eNovis energy is generated entirely from sun, wind, water and biofuels. By purchasing the eNovis energy product for a year, a typical household with average monthly usage of 1,000 kWh per month, could avoid contributing over 17,000 pounds of CO₂ into our air – as much as your car makes in almost 20,000 miles of driving.

Rocky desert



eNovis le ofrece electricidad limpia de fuentes 100% renovables. La energía de eNovis se genera enteramente de sol, viento, agua y biomasa. Contratando electricidad eNovis durante un año, una vivienda unifamiliar típica con un consumo mensual de 1000 kWh puede evitar la emisión de 8000 kg de CO₂ a la atmósfera – la cantidad que un automóvil emite en 23,000 km de conducción.

Effects of Slim and Heavy Advertising Models on Appearance, Self-Esteem and Product Evaluations

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1 Introduction

There is no doubt that thinness is a determinant of physical attractiveness of individuals in Western societies. However, in the recent past, a debate existed about whether very slim models should be depicted in magazines and used in advertisements. Researchers articulated concerns about negative effects resulting from a slim-is-beautiful stereotype that could have been learnt if slim models are depicted in the context of beauty and life-style products. These negative effects exist if young average-sized females are dissatisfied with their figure and thus take unhealthy measures to approach to a very low body weight. Grove et al. (2003) even postulated that a slim figure is one aspect for women to define their value. Empirical literature provides support to the hypothesis that extremely slim advertising models reduce young females' appearance self-esteem. Moreover, this phenomenon is often associated with eating disorders. Despite these concerns, slim or very slim models are still prevalent in media and advertisements. Obviously, marketers strongly rely on the effectiveness of slim models regarding sales of products and magazines. However, there are some contrary tendencies. For instance, the Dove "real women" campaign and a campaign of Nike showed average-sized women and gained high attention (see Figure 1). The editors of *Brigitte*, a German magazine for women, decided not to depict professional fashion models any more. Thus, there are prominent examples of marketers that do not act according to the slim-is-beautiful stereotype.



Figure 1: Examples of average-sized and moderately heavy models in advertisements

We looked at the literature on the effects of thinness of models. Typical dependent variables of this stream of research are body-related variables such as appearance self-esteem and variables indicating advertising effectiveness such as product evaluations. Summarizing the findings, previous literature reports a negative effect of model thinness on young females' appearance self-esteem but no clear effect regarding advertisement and product evaluations. Therefore, we investigate the latter mentioned dependent variables in our empirical study. While focusing on young female adults, we aim at investigating the effect of model size on advertising effectiveness, i.e., on the attitude towards the advertisement and the advertised product and on the purchase intention. In our investigation, we consider how model size affects evaluations of attractiveness-enhancing products (i.e., beauty products) as well as products that are not related to the physical attractiveness of consumers. While focusing on variables related to product evaluations in our experiment, we also outline the results of previous research regarding appearance self-esteem. This is helpful for a thorough understanding of the issue, especially of the underlying processes of product evaluations.

This study contributes to the research on the effects of model size on consumer responses as the results regarding its impact on advertising effectiveness reported in previous studies are inconsistent. Moreover, this research also contributes to improve marketers practice. If slim models prove to be disadvantageous regarding product evaluations, recommendations regarding which size of models should be preferred can be given to marketers.

2 Theoretical background

Literature on the effects of model size mainly focuses on the recipients' perceptions of themselves, especially of their physical appearance. The predominating assumption is that contacts with slim models impair appearance self-esteem whereas contacts with heavy models improve appearance self-esteem.

This assumption is based on theories about social comparisons. Festinger (1954) stated that people tend to compare themselves, e.g. their abilities and opinions, to others. In addition to Festinger who deals with intended comparisons, Richins (1991) argues that comparisons may also occur if they are not intended by the person. Thus, it is assumed that comparisons of one's own figure to an advertisement model's figure take place even when the person does not seek this comparison deliberately. To predict the result of the comparison process, adaptation level theory (Helson, 1948) is consulted and applied to this issue. The contact with other persons can affect appearance self-esteem by causing a shift of the relevant reference point regarding people's weight. Individuals are supposed to have a pre-existing belief about how slim/heavy people are in gen-

eral resulting in an internal reference point ($R_{i,t-1}$) regarding people's weight. This reference point enables the individual i to evaluate other people regarding their weight. If other people's weight exceeds the reference point, they are evaluated as heavy; if other people's weight is below the reference point, they are evaluated as slim; and if other people's weight approximately equals the reference point, their weight is evaluated as average. Now suppose the individual comes in contact with slim (vs. heavy) people (e.g., models in ads). Then, this new stimulus S_t can change the reference point. According to adaptation level theory, the internal reference point is likely to be adjusted (i.e., $R_{i,t} = \alpha_i R_{i,t-1} + (1-\alpha_i) S_{i,t}$). If the individual comes in contact with slim others, the internal reference point decreases ($R_{i,t} < R_{i,t-1}$). On the other hand, if the individual has contact with heavy others, the internal reference point increases ($R_{i,t} > R_{i,t-1}$). Finally, assume that individuals judge their own weight with respect to the adjusted reference point $R_{i,t}$. A decreased (vs. increased) reference point is expected to cause the impression of higher (vs. lower) own weight. Assuming that low weight is evaluated favorably, contacts with slim (vs. heavy) models impair (vs. improve) appearance self-esteem.

Smeesters and Mandel (2006) argue that an assimilation effect could co-occur. If an individual has contact with models that are moderately slimmer than the individual herself/himself, she/he could perceive similarity between the figure of the model and the own figure resulting in increased appearance self-esteem. On the contrary, if the model is moderately heavier than the individual, a decrease of appearance self-esteem could be evoked since the individual is expected to assimilate her/his perceived weight to the heavier model's weight.

However, it is unclear whether and how model size affects product evaluations. Several processes could occur. (1) Probably, consumers could control for the effect on appearance self-esteem and do not transfer this mental state on product evaluations at all. (2) In the case of attractiveness-enhancing products such as clothing, cosmetics, or spas, models with an ideal-shaped figure (i.e., slim models) might be processed as a piece of information about the product or service itself. Users could assume to become more similar to the model – not regarding shape but due to the usage of the advertised product. (3) Moreover, people could use the size of the model as a piece of information about whether they belong to the marketer's target group. The similarity-attraction paradigm (Byrne 1971) could be consulted to derive assumptions on the effect of model size on product evaluations: If the model's figure equals the consumer's figure, the consumer could experience similarity to the model to a certain degree. Since people assign further positive attributes to similar others (e.g., credibility), similarity of the model's figure and the consumer's figure could influence product evaluations positively. To sum up, there are several divergent effects that could

be expected based on these theoretical considerations. Thus, we looked at the empirical results of previous research on these issues.

3 Previous research

A variety of studies has been conducted to investigate the effect of model size on numerous dependent variables. Based on meta-analyses covering several non-marketing fields (e.g., music videos, television movies, and magazines), Grabe et al. (2008) and Groesz et al. (2002) showed that female's contacts with slim female bodies affect their concerns regarding their own body shape.

3.1 *Model attractiveness vs. model size*

There are several streams of research on the effects of advertising models. Many researchers analyzed the role of attractiveness for consumer responses (e.g., Dion et al., 1972; Baker and Churchill, 1977; Chaiken, 1979; Kahle and Homer, 1985; Kamins, 1990; Ohanian, 1991). If the attractiveness of models of different sizes is not held constant, the effect of model size can not be isolated, since attractiveness and model size are correlated. Thin models are often perceived as being more attractive than heavy models (e.g., Häfner and Trampe, 2009; Westover and Randle, 2009; D'Alessandro and Chitty 2011). Unfortunately, the majority of researchers examining the effect of model size did not hold model attractiveness constant. For instance, in an early study, Richins (1991) examined the effect of the presence of a portrait of very slim and highly attractive models in comparison to the absence of portraits in a print advertisement on young females' appearance self-esteem. She found a negative effect of slim and attractive models. Thus, the source of the effect remains unclear. Some authors even explicitly manipulated model attractiveness by varying model size to prove the effect of model attractiveness on consumer appearance self-esteem (e.g., Bower, 2001; Peck and Loken, 2004; Loken and Peck, 2005) or to examine the effect on product evaluations (e.g., Bower, 2001; Trampe et al., 2010). Since these studies aim at analyzing the effect of model attractiveness or the composite effect of size and attractiveness, we do not consider these studies in more detail. We analyzed the studies contained in the published meta-analyses conducted by Groesz et al. (2002) and Grabe et al. (2008) and studies which were published recently. Thereby we tried to identify those experiments that could be used to separate the effect of size of models depicted in advertisements on appearance self-esteem and product evaluations.

3.2 *Effect of model size on appearance self-esteem*

To our knowledge, until now only Halliwell and Dittmar (2004), Smeesters and Mandel (2006), Martin et al. (2007), and Diedrichs and Lee (2011) analyzed the effect of size of models depicted in advertisements on self-assessed appearance self-esteem or similar body-related variables while holding model attractiveness constant.

Halliwell and Dittmar (2004, p. 115) included either slim or average-size models into print advertisements for a deodorant. Model size was manipulated by stretching the figure by the means of editing software. As dependent variable, the authors adopted the "Physical Appearance State and Trait Anxiety" scale developed by Reed et al. (1991), which is seemingly similar to the scales used by the other authors. To be more precise, they asked people to rate how anxious they are about numerous body parts such as hips, calves, thighs, and waist. Moreover, the authors considered to which extent people have internalized the importance society places on physical appearance and thinness as a moderating variable. For instance, high internalization was assessed by a strong agreement to the statement "In our society, fat people are regarded as unattractive." 143 non-student females were assigned to the resulting four test conditions.

Smeesters and Mandel (2006, p. 579) considered four types of models (extremely slim, slim, heavy, and extremely heavy models) who were depicted in leaflets containing ads for several products. In total, 62 female students were assigned to the four versions of the leaflet and asked to assess appearance self-esteem by agreeing to "I feel satisfied with the way my body looks right now," "I feel that others respect and admire me," "I am dissatisfied with my weight" (recoded), "I feel good about myself," "I am pleased with my appearance right now," and "I feel unattractive" (recoded) on five-point scales. This type of measure has been developed by Heatherton and Polivy (1991).

Martin et al. (2007, p. 206) focused only on two types of models (slim and heavy) and integrated portraits of these models in print advertisements for salads. Besides the manipulation of model size, the authors considered whether the consumers believed that they themselves could control their weight (internals) or whether they felt powerless about their weight (externals). Again, the scale developed by Heatherton and Polivy (1991) to assess appearance self-esteem was applied. In total, 87 female students were assigned to the resulting four experimental conditions.

Similar to the procedure of Halliwell and Dittmar (2004), Diedrichs and Lee (2011) integrated either slim or average-size female models in advertisements. Additionally, they included a control condition in which advertisements without

models were presented to respondents. In each condition, the participants had contact to four ads for clothing (e.g., dresses and underwear) and five ads for beauty products (e.g., perfume and skincare). As dependent variable, the authors used the ratings of the satisfaction of the respondents with their own physical appearance. They adopted the “Body Image State Scale” developed by Cash et al. (2002) which is very similar to the scales described above. The scale includes six items assessing aspects such as dissatisfaction/satisfaction with body shape and size or feelings of physical attractiveness/unattractiveness. In contrast to the other experiments described above, Diedrichs and Lee (2011) used both female and male samples. 171 female students and 120 male students were assigned to the resulting three conditions.

These studies showed that a contact to slim models in leaflets or print advertisements leads to a lower self-esteem and higher body-focused anxiety in young females compared to a contact to heavy or average-sized models. Moreover, the experiments of Martin et al. (2007) provided evidence that this effect only exists for people who believe that they can control their weight (i.e., internals). Halliwell and Dittmar (2004) and Diedrichs and Lee (2011) added the finding that this effect only exists when people believe that weight serves as an indicator of physical attractiveness in society and thus have internalized the slim-is-beautiful stereotype. Diedrichs and Lee (2011) observed this result for both female and male respondents.

Unfortunately, none of the authors provides pictorial information about the models used in their experiments. Thus, the effect observed by Smeesters and Mandel (2006), Martin et al. (2007), and Diedrichs and Lee (2011) could be the result of important further model characteristics such as age, type of clothes, or ethnicity. The effect observed by Halliwell and Dittmar (2004) could be the result of artificially looking portraits created by computer stretching.

It should be noted that there are more studies that investigated the effect of model size on appearance self-esteem. Smeesters and Mandel (2006) and Smeesters et al. (2010) asked females to perform a free-response task to measure appearance self-esteem. Their results were inconsistent with the previously reported findings and varied across sample groups. Since the authors did not provide information on the validity of this scale to assess appearance self-esteem at all, we do not go into their findings in more detail.

3.3 *Effects of model size on product evaluations*

Three of the studies mentioned above also provide information on the effect of advertising model size on product evaluations while holding model attractive-

ness constant. Martin et al. (2007, p. 203) asked the same 87 respondents who assessed appearance self-esteem when confronted to models in ads for salad to evaluate the advertised product as well. Additionally, 158 young females were asked to evaluate a hamburger that was advertised by using either a slim or a heavy model. Halliwell and Dittmar (2004) and Diedrichs and Lee (2011) used the same samples of people who assessed the body-related dependent variables to gain data on brand attitude. Unfortunately, the latter mentioned authors only provided results averaged across all nine test products. The findings are summarized in Figure 2.

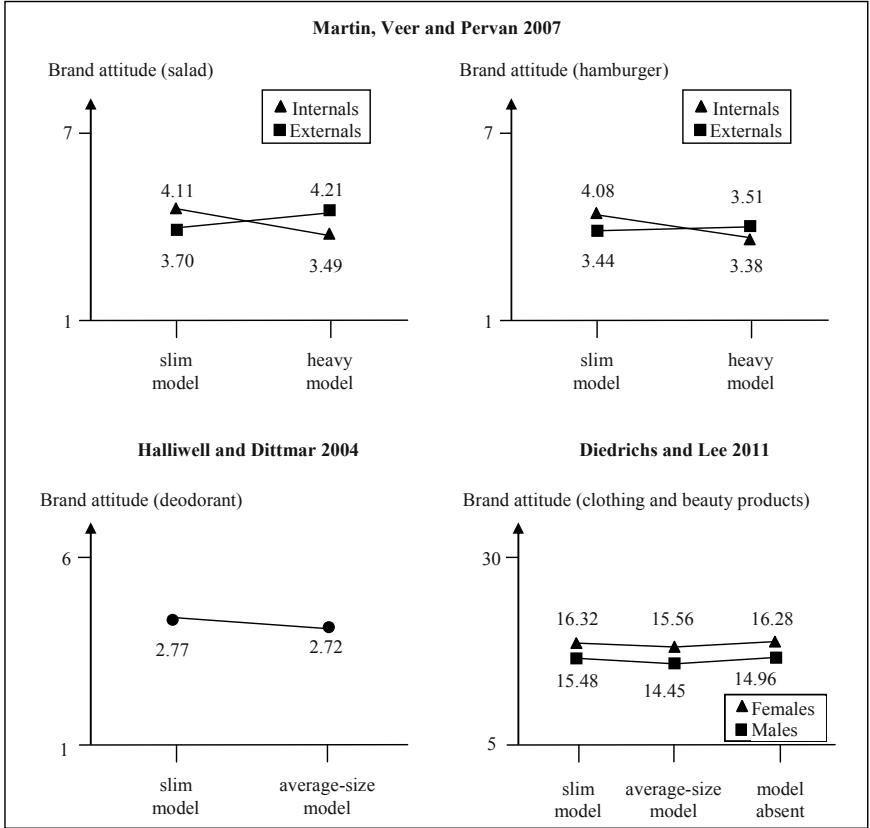


Figure 2: Effect of model size on brand attitude

Martin et al. (2007) found no effect of model size on brand attitude in both the internal and external group. There was only one exception. In the case of ads for a hamburger, internals preferred the product stronger when advertised with a slim instead of a heavy model. The other authors neither found an effect of

model size on brand attitude. Moreover, no differences could be found between the findings for females and males in the experiment of Diedrichs and Lee (2011). Based on this state of research, no clear answer can be given to the question of whether slim, average-sized, or heavy models are most effective in advertising or whether model size affects product evaluations at all.

To summarize existent research, thin models impair appearance self-esteem in young females especially when they assume that a woman's body shape is highly controllable and when they conform to a slim-is-beautiful stereotype. However, until now, no clear effect of model size on product evaluations has been identified in previous research when controlling for the effect of model attractiveness. This finding seems to be surprising and serves as a starting point of our empirical investigations on this issue.

4 Empirical study

4.1 *Experimental design*

We analyzed the effect of the model's size on the attitude towards the advertised product, on purchase intentions, and on the attitude towards the ad for two product categories. One of the categories is related to the consumer's attractiveness (perfume), the other one is not (mobile telephony). For these categories, we selected brands that are well known and perceived to possess high quality in the considered sample population (mobile telephony service: Vodafone, perfume: Diesel). We used a sample of female students with homogenous average-sized figures. The experiment is based on a 2 (level of model size: slim, heavy) \times 2 (concrete model portrayal) \times 2 (product category: perfume and mobile telephony) between subjects design. The first factor, model size, varied in two levels. In the first condition, we showed ads containing slim models. In the second condition, we included heavy models into the ads. The second factor varied portrayals of the selected models. For instance, for the slim model/perfume-condition, we used portrayals of two different models that are similar regarding size and thus created two ad versions. The same variation existed in the heavy model/perfume, slim model/telephony, and heavy model/telephony conditions to account for individual model differences. The third factor was varied to prove the effect of model size on beauty-related vs. non-beauty-related products.

4.2 *Pretest to develop test advertisements*

Intense pre-testing was necessary to identify advertising models that do not differ in attractiveness but differ regarding perceived body size. There are two

different techniques suggested in literature of how to manipulate size of models. Halliwell and Dittmar (2004), Häfner and Trampe (2009), Westover and Randle (2009), Trampe et al. (2010), and Roozen (2011) used imaging software to stretch the body of the same model. Stretching models has the advantage that further characteristics such as clothing, hair, and model gesture can be held constant. An example of stretched models can be seen in Roozen (2011). However, our pretest results lead to the decision not to include stretched models in ads since this kind of manipulation lead to stimuli that were regarded to look artificial. Otherwise, we would have mixed effects of model size and the degree of artificiality of portraits. We followed the suggestions of Martin, Veer, and Pervan (2007), Smeesters and Mandel (2006), and Smeesters et al. (2010) and conducted a pretest to select real models that differ in size but are equally evaluated with respect to attractiveness. We exposed 31 female students to 16 different pictures showing female models that were rather similar regarding age, clothing, and physical features and asked them to rate body size and physical attractiveness.

We used scales adopted from Smeesters and Mandel (2006) and Smeesters et al. (2010) ranging from -5 (has high overweight/is very unattractive) to +5 (is very slim/is very attractive) and selected pairs of models that differed regarding perceptions of size but were perceived to be equally attractive. Note, that we collapsed data across the conditions of the second experimental factor. The ratings of body size and attractiveness for the models are contained in Table 1.

Table 1: Ratings of models' body size and attractiveness (pretest results)

<i>Test product category and brand</i>	<i>Dependent variable</i>	<i>Mean values</i>		<i>t-test</i>
		<i>Slim model</i>	<i>Heavy model</i>	
Perfume (Diesel)	Body size*	1.52	-1.19	$t = 8.410, p < .001$
	Attractiveness**	2.45	2.65	$t = -.551, p = .584$
Mobile te- lephony (Vodafone)	Body size*	4.26	-3.39	$t = 27.234, p < .001$
	Attractiveness**	-.19	-.32	$t = .279, p = .781$

* Scale ranges from -5 = has high overweight to 5 = is very slim.

** Scale ranges from -5 = is very unattractive to 5 = is very attractive.

Based on the pretest results, we developed fictitious test advertisements for the two selected product categories perfume (of the Diesel brand) and mobile telephony (of the Vodafone brand). In the ads, the product and the model were depicted. Additionally, the ads contained basic information that is also contained in real ads of the brand such as the brand logo and the brand slogan. Examples of the ads used in the experiment are shown in Figure 3 and Figure 4.

4.3 *Dependent variables, sample, and procedure*

We asked the respondents to report their attitude towards the advertised product by agreeing or disagreeing to “appealing,” “interesting,” and “likeable” (Cronbach’s Alpha = .922). Additionally, we assessed purchase intentions on the basis of respondents’ agreement to “I can imagine buying this product” and attitude towards the advertisement with the same adjective items used to measure attitude towards the product (Cronbach’s Alpha = .915). In order to assure a constant level of product category involvement, respondents reported their interest in and their familiarity with the product categories by agreeing or disagreeing to “I am strongly interested in products of the category X” and “I am highly familiar with products of the category X” ($R=.741$). All variables were measured on seven-point scales ranging from 1=totally disagree to 7=totally agree.

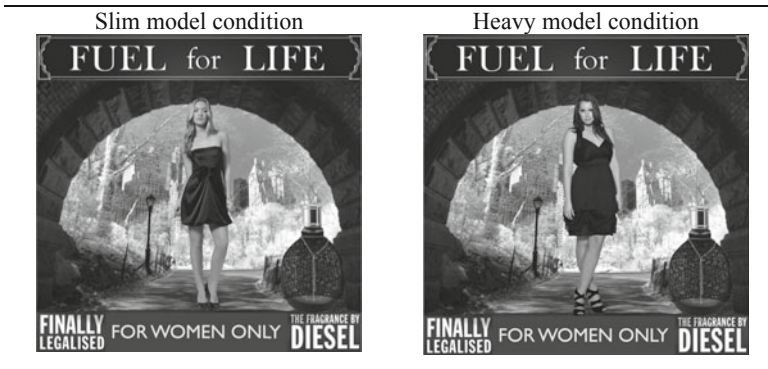


Figure 3: Test ads for the Diesel brand

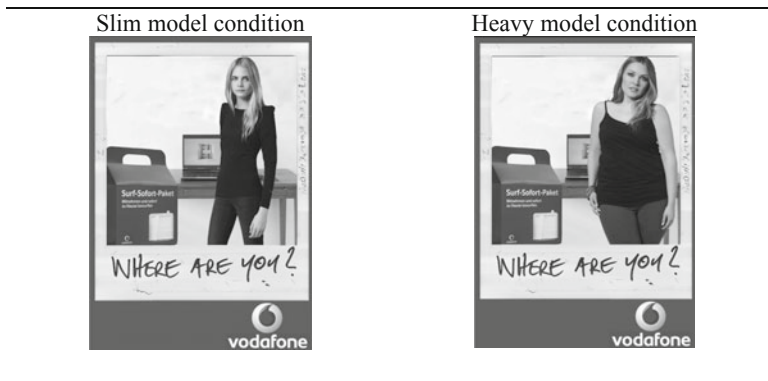


Figure 4: Test ads for the Vodafone brand

The sample consisted of 240 female students with average-sized figures. After elimination of 23 respondents who did not fully complete the questionnaire or reported a minimum of category involvement, 217 participants remained in the sample used for statistical analysis. The participants of the experiment were approached on the campus of a university in Southern Germany. Data collection took place in 2011.

The participants of the experiment were exposed to the target ad version and two filler ads that were constant across experimental conditions. For each ad, the respondents had to evaluate the advertisements and the advertised products as well as their category involvement on the scales described above. Finally, demographic data was assessed.

4.4 Results

The findings are summarized in Figure 5 for the Diesel brand and in Figure 6 for the Vodafone brand. The results show that for both product categories, ads depicting a slim model lead to a higher attitude towards the ad than ads containing a heavy model (perfume: $M=5.27$ vs. $M=4.57$, $t=2.745$, $p=.007$; mobile telephony: $M=3.29$ vs. $M=2.77$; $t=2.178$; $p=.032$). When considering the results on the attitude toward the advertised product we observed only a marginally higher attitude in the slim-model condition compared to the heavy-model condition for both categories (perfume: $M=4.67$ vs. $M=4.24$, $t=1.783$, $p=.077$; mobile telephony: $M=3.49$ vs. $M=3.04$, $t=1.958$, $p=.053$). The results regarding purchase intentions differ across the considered categories. In the perfume category, the slim model caused a higher purchase intention than the heavy model ($M=4.70$ vs. $M=4.09$, $t=2.104$, $p=.038$). In the mobile telephony category, no significant differences of the purchase intention ratings could be observed for the two model-size conditions ($M=3.30$ vs. $M=3.17$, $t=.417$, $p=.667$). As described above, we controlled for category involvement. The results showed a constant level of category involvement in the slim and heavy model conditions for both product categories (perfume: $M=4.95$ vs. $M=4.80$; $t=.657$; $p=.512$); mobile telephony: $M=3.76$ vs. $M=3.62$, $t=.592$, $p=.555$).

5 Conclusions

In this paper, we examined the effect of the size of models depicted in ads on self-assessed appearance self-esteem by investigating previous research and analyzed its effect on evaluations of ads, products, and purchase intentions by considering previous research and conducting an additional experiment.

We did not analyze the effect on appearance self-esteem in our experiment since literature consistently reported a negative effect of (slim) model size. Instead, we focused on the effect of model size on product evaluations.

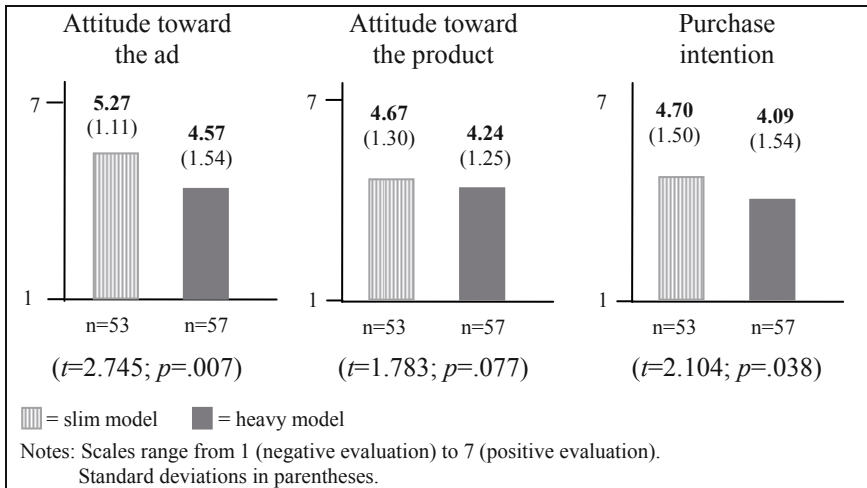


Figure 5: Results for the Diesel brand

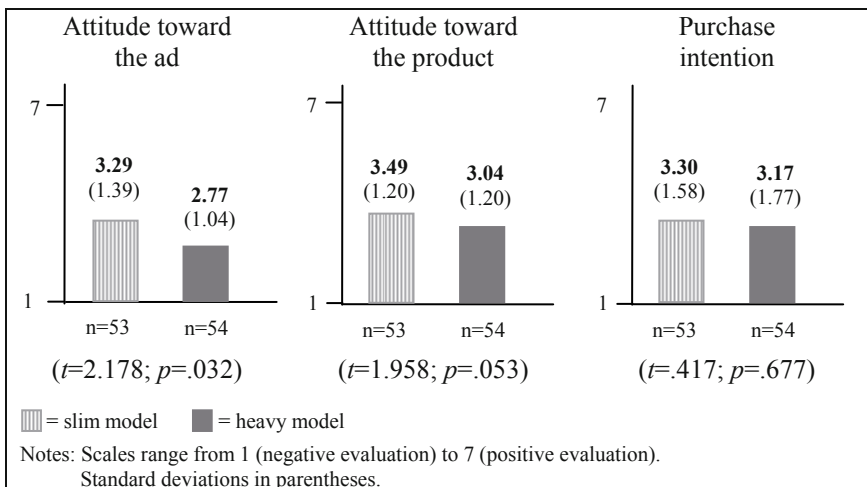


Figure 6: Results for the Vodafone brand

Our results indicate that the negative effect of model size on appearance self-esteem is not transferred to the ad and to the product. Instead, attitude toward the ad and product evaluations are higher when slim instead of heavy models are

depicted. This effect exists for both beauty-related products and non-beauty-related products.

This finding contributes to theory on the effect of model size: Obviously, there are two different mental processes affecting appearance self-esteem on the one hand and influencing evaluations of the ad and the advertised product on the other hand. Slim models are liked better – and this affect is transferred to the product. Our findings contradict previous research which found that product evaluations are not affected by model size (with one exception regarding hamburgers as test product). In Section 3.2, we pointed to the fact that Halliwell and Dittmar (2004), Martin et al. (2007), and Diedrichs and Lee (2011) did not show the portrayals of the models used in their experiments. Thus, further differences such as age, clothing, or hair color could have existed and might have compensated the effect of model size in these experiments.

For practitioners, we recommend using portraits of slim models and not to use portraits of heavy models when average-sized young females are targeted.

However, there are several limitations of our experiment. First, we only focused on young average-sized females as consumers. Second, we solely compared two levels of model size. Moreover, we only used one product category to represent beauty-related products and one other category to represent products that are not beauty-related. Aiming to overcome these limitations can serve as a fruitful starting point for future research.

6 References

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Reducing Choice Conflict for Complex Products through Categorization

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1 Introduction: The downside of product variety

Today, consumers face a huge diversity of products and services. An ordinary American supermarket sells about 285 types of cookies, 120 types of pasta sauces, 175 types of salad dressings and an incredible amount of 275 types of cereal (Schwartz, 2005). Online stores like Amazon offer 10.000 different hand bags and 180.000 products for gardening (Hielscher, 2009). A typical electronic store like the European electronics store Media Markt offers a total of 100.000 stock keeping units (Berke et al., 2012). At Media Markt, customers can choose among 80 different mobile phones, 100 fridges, 32 dishwashers, 146 coffee machines, 81 printers, 54 computer screens, 285 notebooks, and 271 digital cameras (Mediamarkt.de).

Having the possibility to choose among many different products and lifestyles is a key characteristic of modern saturated markets (Schwartz, 2000; 2005). Our brains, however, still have a limited processing capacity. Cognitive psychologists like Miller (1956) or Cowan (2001) have suggested that short term memory capacity can only hold four to seven “chunks” of information at a given time. As a consequence, comparing many products and alternatives becomes an arduous task. Consumers often escape mental overload by using choice strategies that simplify decision making. However, such simplifying strategies can lead to suboptimal decision outcomes (Payne, 1976). Consumers also tend to postpone or stop purchase processes, which is clearly not in the interest of retailers and manufacturers (Tversky and Shafir, 1992; Dhar, 1997).

A key question is therefore, how extensive choice sets can be offered to consumers without overtaxing them. This is an important question for retailers and manufacturers that want to display their products in stores, catalogs, websites, and other communication devices. The necessity to develop effective means to structure diverse offers seems obvious. As a consequence, many manufactures have started to provide some form of classification to their product lines. These, however, vary in their degree of meaningfulness: Samsung for example, distinguishes its flat screens by numbers such as C24A650X, S24A450BW, or

S27A850DW. Obviously, it is difficult to infer meaning from such a classification system. Nokia just recently developed a categorization system that distinguishes three product lines: Nokia Lumia, Smartphones, and Nokia Belle. Although being less technical, these categories have to be explained, as well. In contrast, the classification that SonyEricsson introduced in 2011 was more comprehensive. It consisted of four categories such as Xperia (smartphones), Cyber-shot (camera phones), Walkman (music phones) and GreenHeart (environmentally-friendly phones). Remarkably, after Sony's final takeover of SonyEricsson in spring 2012 the whole classification system was dismissed after only a few months. Retailers and manufacturers seem to have recognized the need for more effective categorization systems but apparently still search for the right solution.

These examples trigger two important questions: Firstly, how do classification systems affect consumer decision making? Secondly, how meaningful has a classification system to be in order to facilitate the choice making process? To address these questions we conducted an experiment and investigated the effectiveness of different types of categorizations.

In the next section, we will review the choice overload literature to better understand the consequences of (too) large choice sets. This review will show that the variable "choice conflict" is an important consequence of choice overload that frequently results in decision deferral. Secondly, we will explain why consumers, who are unfamiliar with a product category, have problems to differentiate between choice options and to distinguish relevant from irrelevant information. Thirdly, we will argue that providing (meaningful) category labels will help novices to determine their preference. However, recent research found that irrespective of the meaningfulness of these labels, mere categorization is sufficient to support the choice making process. We argue that this "mere categorization effect" does not hold true for complex products.

2 Theoretical background: Choice overload, choice conflicts and product categorizations

2.1 Empirical findings concerning choice overload and choice conflicts

In the last decade, researches have become more and more interested in the effects of large assortments on consumers' decision making. Iyengar and Lepper (2000) systematically investigated the impact of assortment size on buying behavior. They offered either 24 or 6 different kinds of jam in a supermarket. Whereas only 3% of customers who stopped to sample the jam finally bought one jar in the 24 option condition, 30% did so in the limited choice set condition. Iyengar and Lepper (2000) reasoned that the larger assortment caused overload

effects which in turn led customers to postpone or exit their buying decisions. In a second experiment, Iyengar and Lepper (2000) observed that participants are more satisfied with their choice when choosing out of 6 alternatives compared to choosing out of 30 different types of chocolates. A third study showed that students being offered to write essays from a choice of 6 (instead of 30) topics were more likely to write an essay and the essays were of higher quality. Hence, too much choice can lead to negative effects such as reduced purchase frequencies and a decrease in choice satisfaction.

The finding that too much choice can have detrimental effects is also supported by Iyengar et al. (2004). They analyzed a data set consisting of approximately 800,000 employees from 657 US companies that offered 401(k) retirement-plans. Each company differed in the number of investment options they offered (2 to 59 options). Although the participation would offer clear monetary gains, the analysis revealed that the predicted individual participation probability declined by 2% for every ten-option increase. When a company offered two options, the participation rate was 75%, in contrast to companies with 59 investment options, of whom only 61% employees participated in the plans. This investigation shows that people confronted with too many options make choices that lead to a smaller financial return in the long run.

A widely accepted explanation for this effect is that the amount of choice options is correlated with the amount of information that has to be processed in order to come to a decision. A large amount of information cannot be fully processed as short term processing resources are limited (Miller, 1956; Cowan, 2001). However, it is not only the amount of options that matters, but also the amount of provoked choice conflicts in a decision making process. These, in turn, are a function of the choice set and the distribution of attribute levels (Tversky and Shafir, 1992; Dhar, 1997; Lurie, 2004).

Dhar (1997) demonstrated, that the willingness to buy electronic consumer products (e.g., notebooks, electronic shavers) declined on average by 11% when consumers were able to choose between two equally attractive options instead of only one option. According to Dhar, the two equally attractive options increased choice conflicts and raised the difficulty to determine one's preferences when no dominant option was present. To prove this, he also offered subjects two options of which one was clearly inferior. In comparison to the control group with only one option, now the number of consumers who were willing to buy increased by 14%. Thus, the distribution of attribute levels influences purchase decisions (see also Hoch et al., 1999; Herpen and Pieters, 2002; Lurie, 2004).

2.2 *The importance of assortment structure*

The importance of assortment structure for consumer choice processes was stressed by Kahn and Wansink (2004). They offered children and adults either 6 or 24 different Jelly Bellies either unorganized or sorted by color. In case of the unstructured offer, there was no difference in the consumption of Jelly Bellies between the low and high variety condition. However, when sorted by color, in the 24-color-set significantly more sweets were eaten compared to the 6-color-set condition. Furthermore, Kahn and Wansink (2004) observed that an asymmetric distribution of attribute levels can alter the perception of an assortment's variety. They offered M&M's either in an equal distribution of colors (10% each) or in a 30% brown color dominated choice set. The choice set was perceived as having a higher variety when it was dominated by one attribute level. According to Kahn and Wansink (2004) it is cognitively easier to perceive the variety of an assortment when only a few attribute levels dominate the choice set since this produces a perceptual hierarchy: The dominant products are perceived at first sight, followed by all the other items.

Similarly, Broniarczyk et al. (1998) showed that even a reduction of a choice set can lead to the perception of a higher variety. They tested an assortment consisting of microwave popcorn and found that the availability of the individual favorite product acted as a variety cue to judge the offer. In fact, a 25% reduction of the choice set increased perceived variety by 36% when shelf space remained constant and the most popular items were easily detectable.

2.3 *The mere categorization effect*

As the previous section demonstrated, a consumer's perception of the variety of an assortment is highly subjective and influenced by different contextual cues. Mogilner et al. (2008) argue that the mere presence of categories in an assortment (independently whether the categorization makes sense or not) can act as such a cue. They observed that an increase in the number of categories can lead to a higher perceived variety and a higher satisfaction for consumers being unfamiliar with a product category. In their first experiment, novice consumers had to choose a magazine from a magazine rack categorized by either 6 or 18 categories. Perceived variety was judged higher in the 18 categories condition. Thus, the amount of categories serves as a cue that signals variety. In a second experiment, Mogilner et al. (2008) analyzed the effect of categories and the information contained in the category labels on consumers' decision making. They manipulated the content of the category labels of a coffee menu. An assortment consisting of 50 coffee flavors was presented either uncategorized or classified into 10 categories. The category names were either entirely uninformative (e.g., Category A, Category B), to some extent uninformative (e.g., Java Joe's, Coffee

Time), or informative (e.g., Spicy, Mild). Thus, only the category labels of the informative condition conveyed clear and meaningful information about the coffee taste. Mogilner et al. (2008) found that the mere presence of categories leads to increased choice satisfaction of consumers unfamiliar with a product category. This so called mere categorization effect has been observed irrespectively of the information conveyed by the category labels. Mogilner et al. (2008) assume that the mere categorization effect is mainly driven by an increase in the perceived variety of the offer, which also increases the consumers' feeling of self-determination and, therefore, positively affects satisfaction.

2.4 *The moderating role of familiarity*

Bettman et al. (1998) take a constructionist view of consumer preferences. They assume that preference construction is an ongoing process that occurs during the choice making process. Instead of having fixed preferences, consumers build their preferences while they make their decisions. This is assumed to be in particular true for novice consumers. They have little experience with the product category and, therefore, rely more on information conveyed by the choice context to determine their preferences. As a result, cues like category labels are highly persuasive for novice consumers (Mogilner et al., 2008). In contrast, experts who are familiar with a product category are more likely to possess established preferences. Thus, they find the process of choosing less cognitively demanding (Chernev, 2003a; 2003b), are less cognitively overloaded and can judge the variety of a choice set independent of the choice set's categorization (Mogilner et al., 2008). As a consequence, Mogilner et al. (2008) found that assortment categorization just had an effect on the choice making of novice consumers but not on experts.

Table 1 provides an overview of recent findings on the effects of choice set structures on choice making.

Table 1: Literature overview

<i>Authors</i>	<i>Findings</i>
Tversky and Shafir (1992)	Higher choice deferral is observed when two options instead of one (e.g., CD-player) are offered.
Redelmeier and Shafir (1995)	Doctors are more likely to stick to the status quo option when confronted with two instead of one alternative treatment forms.
Dhar (1997)	Consumers' willingness to buy decreases when two equally attractive options (e.g., notebooks) are offered instead of offering either a single option or two differently attractive choice options.

<i>Authors</i>	<i>Findings</i>
Broniarczyk et al. (1998)	A reduction of the choice set leads to an increase of perceived variety when shelf space remains constant and the favorite product is present.
Iyengar and Lepper (2000)	Bigger choice sets lead to a smaller number of purchases, a decrease in satisfaction, and a reduced motivation.
Iyengar et al. (2004)	The higher the options of retirement funds for individual savings, the less likely employees participate in investment plans.
Kahn and Wansink (2004)	In structured and asymmetric choice sets, perceived variety is accentuated and leads to an increase in the consumption of simple products (Jelly Bellies, M&M's).
Mogilner et al. (2008)	An increase in the number of category labels leads to an increase in perceived variety (study 1). The mere presence of an assortment categorization (irrespective of the information provided by the category labels) leads to an increase in perceived variety and choice satisfaction for simple products (study 2).

3 Hypothesis: Meaningful categories reduce choice conflict for complex products

If we regard the “cost of thinking” of a choice process as a binary model where each option is compared to each other option, one can estimate the mental effort that is necessary to make a choice (Shugan, 1980). When one alternative is compared to another and if the inferior alternative is dismissed in each round, a choice set of 24 different options would need 23 comparisons ($24-1=23$). Categories can facilitate this choice process, since consumers firstly have to make the decision for a certain category and then can choose a product within that particular category. For example, an assortment consisting of 24 options is divided into 6 categories. Firstly, a consumer can choose a category that is mostly applicable ($6-1=5$ comparisons) and then the consumer has to make a choice among the 4 products within a certain category ($4-1=3$ comparisons). Through the implementation of categories, the choice process is divided into two steps. Thus, a total amount of only 8 instead of 23 comparisons is necessary. Already Miller (1956) reasoned that the mind’s limited processing resources can be expanded through chunking – the integration of information into mental patterns. Categorization triggers such an integrative processing as it reduces mental load during decision making and thereby simplifies choice making.

In contrast to this, Mogilner et al. (2008, p. 210) consider the effect of mere categorization primarily as a perceptual process “in which consumers infer differences in the available options through the mere presence of categories“. Con-

ceptual processes are assumed to be of secondary relevance for the choice process of novices. The conclusions about the mere categorization effect are solely based on the examination of the choice making for a simple product (coffee). This low-involvement process is primarily based on feelings; sensory attributes such as taste, look, or smell determine the decision (Vaughn, 1986; Rossiter and Percy, 1998). Functional aspects of the offer are not relevant since an extensive reasoning does not take place. This leads to our research question whether the mere categorization effect does apply for complex products that require more thinking? To the best of our knowledge this research question has not been addressed so far.

For complex products, we assume that the mere presence of categories in an assortment is not sufficient to positively affect the choice making of novices. Products like cell phones, digital cameras, notebooks, or insurances are usually complex, defined by several attributes, and have long-term consequences for buyers. Here, categorization is likely to draw a different picture since consumers are likely to apply a more thoughtful and highly involving choice process (Evans et al., 1997). During decision making, consumers have to evaluate many different products and their attributes to find the product that suits them best. This process is much more complex and deliberate than the purchase of sensory or simple products. Thus, deciding between complex products should be accompanied by conceptual rather than perceptual processes. Therefore, we expect that only meaningful category labels can help novices to distinguish between different options and, thereby, reduce mental load. As choice conflicts are one of the most important determinants of perceived difficulty of the choice process (Tversky and Shafir, 1992; Redelmeier and Shafir, 1995; Dhar, 1997), we analyze the ability of different category labels to reduce choice conflict. We assume that categorization will only have a positive impact on the choice making for complex products when the categories provide meaningful information that help to distinguish between the various options. Hence, we test the following hypothesis:

H: For complex products, choice conflicts of novices are reduced solely by meaningful informative category labels.

4 Experiment: The impact of assortment categorization on choice conflicts in the choice making for complex products

To test our hypothesis, we conducted an experiment in which the structure of a choice set was manipulated. An assortment consisting of 24 cell phones was presented either unstructured or structured. In the structured conditions, we exposed consumers to informative or uninformative category labels.

4.1 *Experimental design and participants*

Prior research has shown that novice consumers are especially prone to choice overload effects, whereas experts can more easily distinguish between various options and shield themselves from mental overload (Alba and Hutchinson, 1987; Chernev, 2003a; 2003b; Mogilner et al., 2008). Thus, we only consider consumers who are unfamiliar with the choice domain. As a result, the experiment took the form of a 3 (category: no categories vs. 6 uninformative categories vs. 6 informative categories) \times 1 (chooser type: novices) between-subjects design. Familiarity with the product category was measured on a 7-point Likert scale (1 = I fully disagree; 7 = I totally agree) by asking „Compared to most people, I believe that I know more about cell phones“, „I feel familiar with the product category of cell phones“, and „I am well able to distinguish between different types of cell phones“. These three items were averaged to form an index of product familiarity ($\alpha = .92$). Participants with a mean score below 4 were selected for further analysis. Out of 127 participants, 77 undergraduate and graduate students from two German universities (21 male/56 female, average age 24 years) were classified as being unfamiliar with the choice domain. The average familiarity score across the selected participants was 2.26.

4.2 *Pretest and stimuli*

We conducted a pretest to generate the stimuli for the main study. 20 participants were asked with open-ended questions to list 10 product attributes that are important when buying a cell phone. Then, participants were asked to rank the attributes according to their relevance. The product attributes with the highest ratings were used to design the categories of the choice menus.

We designed three different menus for the three treatment groups (see figure 1). Each menu consisted of an A4 paper sheet listing 24 cell phones with corresponding attributes for each phone. The cell phones were listed in the same order across the three conditions. The cell phones and their properties (e.g., MP3-Player: yes/no; camera: 3 megapixel) were similar to existing products offered by Amazon. To control for product aesthetics and brand influences, no product pictures and brand information were given. The 24 cell phones were each specified by 8 attributes (display size, weight, battery power, camera, MP3-Player, organizer, special features, and price). The cell phones were either uncategorized or divided into 6 categories with labels that were uninformative (alphabet-based labels) or informative (attribute-based labels). In the uncategorized condition, no category labels were used. The labels in the uninformative category condition provided no information about the options listed in the categories. The labels in the uninformative condition were simply based on letters from the alphabet (see Mogilner et al., 2008): “Category A”, “Category B” etc. The informative cate-

gory labels specified important attributes of cell phones, as determined by the pretest (e.g., “Cell phones with an extra-large display”, “Cell phones with a very light weight”).

The figure displays three different ways to organize a list of 24 mobile phone models. Each model entry includes its name, screen size, camera resolution, and price.

- Left Menu (No categories):** A simple list of 24 models (Model 1 to Model 24) arranged in a grid. Each entry lists the model name, screen size (e.g., 3.5", 4.3", 4.7"), camera resolution (e.g., 1.3 Megapixel, 2.0 Megapixel), and price (e.g., 100 Euro, 120 Euro).
- Middle Menu (Alphabet-based categories):** Models are grouped into 7 categories (A-G) based on their camera quality. Category A includes models 1-4, B includes 5-8, C includes 9-12, D includes 13-16, E includes 17-20, F includes 21-24, and G includes 25-28. Each category has a header and a list of models with their specifications.
- Right Menu (Attribute-based categories):** Models are grouped into 7 categories based on specific attributes. Category 1 includes models 1-4, 2 includes 5-8, 3 includes 9-12, 4 includes 13-16, 5 includes 17-20, 6 includes 21-24, and 7 includes 25-28. Each category has a header and a list of models with their specifications.

Figure 1: The three camera menus: no categories (left), alphabet-based categories (middle) and attribute-based categories (right)

4.3 Procedure

We randomly assigned participants to one of the three treatment groups. Participants were given 5 minutes to peruse the menu and to determine a cell phone that they would like to buy. Participants were not allowed to talk or to make notes. After their decision was made, they completed the questionnaire.

4.4 Results

Choice conflict was measured on a 7-point scale (1 = I fully disagree, 7 = I totally agree) with the items „I could not make up my mind between two or more options“ and „It was difficult for me to determine a definite favorite.“ These two items were averaged to create an index of choice conflict ($\alpha = .82$).

We ran a one-way ANOVA with LSD post-hoc tests. Table 1 shows the means and standard deviations for all three categorization conditions. We observed a significant main effect of categorization ($F(2, 74) = 6.36$; $p < .05$). The results in the informative condition ($M_{\text{INFORMATIVE}} = 3.29$) differed significantly from the results in the no-categorization condition ($M_{\text{NO CATEGORY}} = 4.75$; $p < .01$) and the uninformative condition ($M_{\text{UNINFORMATIVE}} = 4.76$; $p < .01$). The means in

the uninformative and in the no-categorization condition did not differ significantly ($p > .1$). Hence, our hypothesis was confirmed.

Table 2: Results

	<i>No categories</i>	<i>Uninformative category labels (alphabet-based categories)</i>	<i>Informative category labels (attribute-based categories)</i>
Choice conflict	4.75 ^A (1.56)	4.76 ^A (1.73)	3.29 ^B (1.88)

Note: Numbers in parentheses represent standard deviations. Means with matching letters are not significantly different, $p > .1$; means with different superscripts differ significantly at $p < .05$.

5 Conclusion: Towards a theory of classification

Our experiment showed that categories can reduce choice conflicts when novice consumers are buying complex products. However, only meaningful categories with informative labels evoked this effect. Thus, the mere presence of categories within an assortment is not sufficient to positively affect the choice making process of novices for complex products. Rather, it is necessary to partition large assortments by creating meaningful categories with informative labels. In contrast to the mere categorization effect, uninformative category labels did not positively affect the choice making process. Thus, the mere categorization effect seems to be limited to simple products where perceptual rather than conceptual processes appear to rule the choice making process.

Our findings have important implications for marketing practice: Choice displays in stores, websites, and catalogs can profit significantly from meaningful categorization. If provided with meaningful labels, the categorization of an assortment can help novice consumers to perceive the differences in a choice set and therefore decrease overload effects. This is especially important for stores and websites that offer an extensive set of complex products. However, retailers and manufactures cannot go wrong employing meaningful categorizations for complex, as well as, for simple products since we observed positive effects for the former and Mogilner et al. (2008) observed no negative effects for the latter.

Future studies should investigate which types of meaningful category labels are most effective. For example, Gourville and Soman (2005) found that product lines that are differentiated by alignable (comparable) product features are preferred by consumers because they reduce information overload. Whether this finding can be transferred to the design of category labels remains unanswered and should be tested in subsequent studies. After having identified product ex-

pertise and product complexity as important moderators of a categorization's effectiveness, further potential factors (e.g., affect) should be tested.

Last but not least, we have to point to the limitations of our study. Firstly, most retailers offer far more than 24 models which possess more than 8 distinguishing attributes and also differ by brand and design. This should make the choice process even more demanding and even raises the need for orientation. Another limitation is that our participants did not really make a committing choice, since they did not actually pay for the chosen cell phone. Also, we only tested one product category of complex products. Hence, a replication of this study in another product domain (e.g., insurances) that does not involve physical products is recommended.

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Immediate and Delayed Effects of Message Sidedness

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1 Introduction

While advertisers usually aim at throwing a positive light on their products, persuasion literature suggests that presenting some drawbacks in a two-sided message can increase persuasion. A two-sided message provides not only positive information, but also some negative information, while in a one-sided message, only positive information is given. However, the effects of two-sided messages are ambiguous (e.g., Anderson and Golden, 1984; Crowley and Hoyer, 1994; Eisend, 2006). While the source of a two-sided message is perceived as more credible than the source of a one-sided message, attitudes towards two-sided messages tend to be less favorable. Inasmuch as positive credibility effects of message sidedness have been explained by attribution processes (e.g., Eisend, 2007; Gotlieb and Sarel, 1991; Kamins and Marks, 1987), an explanation for the negative effect of sidedness on message attitudes has still not been addressed in the literature.

From a marketing practitioner's point of view, the ambiguous results suggest that two-sided messages are too challenging to be meaningfully applied. However, under some circumstances advertisers may feel the need to include some negative information in messages, for instance, when they have to react to negative publicity about their products and brands or when they need to respond to negative comparative advertising by competitors (Crowley and Hoyer, 1994; Pechmann, 1990). Sometimes, they are even forced by law to include negative information, such as it is the case when they have to mention health risk warnings on cigarette packages or to provide information on side effects of medical treatments. Understanding the negative attitudinal effects of message sidedness is therefore not only of theoretical relevance, but also meaningful for practitioners as it helps them understand how message sidedness can be more efficiently dealt with.

In this study, we suggest and show that mediating processes of balance and valence explain the negative effect of message sidedness on attitudes more thoroughly. These processes further help us explain the long-term effects of message sidedness that have not been investigated so far. By this, the study contributes to the sidedness literature by providing a thorough explanation for the processes underlying the negative effects of sidedness on message attitudes, and by show-

ing that effects of such negative information compared to that of positive information develop differently over time.

2 Theoretical background

In the following, we derive the hypotheses that explain the effects of message sidedness on message attitudes. First, we explain how valence and balance of a message mediate the relationship between sidedness and attitudes. After that, we introduce delay as a moderator and explain how the attitudinal effects of sidedness differ in the immediate versus delayed condition.

2.1 *The trade-off between valence and balance*

Two-sided messages are perceived as more balanced than one-sided messages that only mention the positive aspects of the advertised product. A balanced view has many positive connotations such as fairness or sophistication (Walton, 1999). The more balanced the point of view in a message, the more positive are attitudes towards the message. However, adding negative information to a set of positive information reduces the valence of the message, which in turn reduces message favorability and attitudes towards the message.

The overall effect of message sidedness on attitudes is mediated by both valence and balance of the message that have opposite effects on attitudes. The trade-off between these paths makes up for the total effect of two-sided messages on message attitudes; balance leads to positive effects, while valence leads to negative effects. Whether the overall effect is positive or negative depends on which of both mediating paths has a stronger effect. Following the mobilization-minimization hypothesis (Taylor, 1991), which states that negative information and cues are able to mobilize human resources to a greater extent than positive or neutral ones, we suggest that valence has a stronger effect than balance, because valence of two-sided messages compared to that of one-sided message is a negative cue, while balance is positive. The negativity effect can be more thoroughly explained by the fact that negative cues are more salient and diagnostic than positive ones and therefore have a stronger influence on an overall evaluation (Baumeister et al., 2001; Rozin and Royzman, 2001). As for two-sided messages, valence is a negative cue that evokes stronger responses than balance as a positive cue, which makes up for the dominance of the negative effect of valence over the positive effect of balance. Our first hypothesis describes both mediating effects and their relationship.

Hypothesis 1: The effect of message sidedness on attitude towards the message is mediated by (a) valence and (b) balance, with (c) the mediating effect of valence being stronger than that of balance.

2.2 Immediate and delayed effects of sidedness

Although negative cues are more salient, more diagnostic, and therefore more influential than positive cues, the negativity effect influences primarily immediate processing. Findings related to delayed processing for positive and negative information indicate a positivity bias – a persistent recall advantage of positive over negative information. Matlin and Stang (1978) have reviewed numerous studies and found compelling evidence for a positivity bias for delayed processing related to a variety of information processing variables and outcomes (e.g., perceptions, word associations, learning and memory, evaluations, etc).

The positivity bias changes the effect of valence of two-sided messages over time such that the valence of two-sided messages becomes more positive, because in a delayed condition positive information is more likely to be processed than negative information. At the same time, less information (i.e., a lower number of pieces of information) is processed in a delayed compared to an immediate condition. As for a one-sided message, delayed processing therefore reduces the valence of the message since less positive information (i.e., a lower number of pieces of positive information) is processed.

The same effect applies to balance, although with opposite signs: when less negative information in relation to all information is processed in a delayed condition, the two-sided message is perceived as less balanced, while the one-sided message should be perceived as more balanced, because less one-sided positive information is processed.

As a result, valence, balance, and attitudes towards one-sided and two-sided messages align over time. We therefore expect that the overall effect of messages sidedness on valence, balance, and on attitudes towards the message is moderated by delay.

Hypothesis 2: The effects of two-sided messages on (a) valence, (b) balance, and (c) attitudes towards the message are higher in the immediate condition compared to the delayed condition.

Valence and balance are mediators for attitudes towards the message as suggested in hypothesis 1. If delay moderates the effect of message sidedness on valence, balance, and on attitudes towards the message as suggested in hypothe-

sis 2, the mediating effect of valence and balance should be moderated as well. That is, the mediating effect in the immediate condition is stronger than in the delayed condition.

Hypothesis 3: The effect of (a) valence and (b) balance as mediators for the influence of message sidedness on attitudes towards a message is stronger in the immediate condition than in the delayed condition.

Figure 1 provides an overview of the variable relationships described in the above hypotheses.

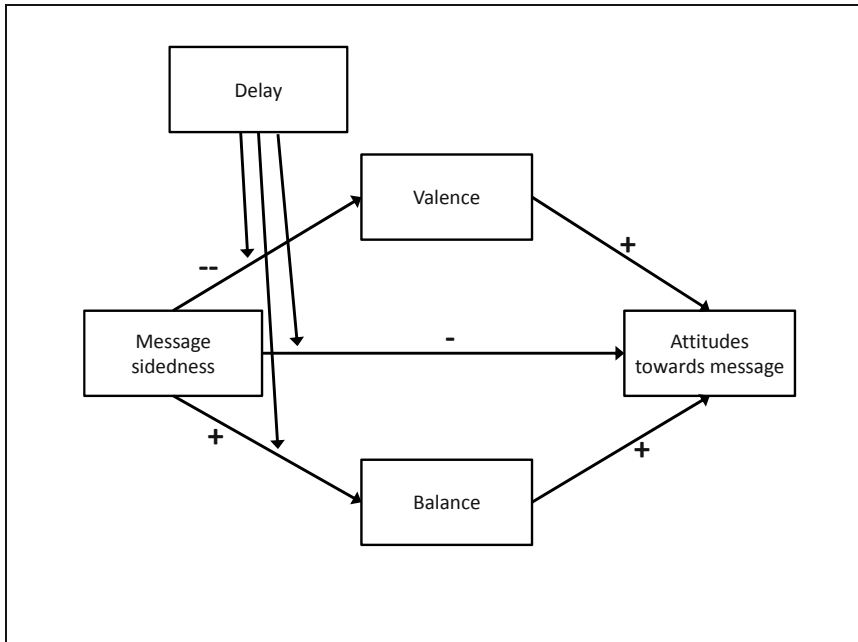


Figure 1: Relationship between variables as tested in the hypotheses

3 Method

We ran an experiment with a 2 (one-sided vs. two-sided) by 2 (immediate vs. delayed) between subjects design. Hundred-twenty students at a German University (62.5% female, average age 22.7 years) volunteered to participate in the experiment. They were randomly assigned to four experimental conditions.

The experiment took place in the classroom, with two separate groups in two rooms for the immediate and delayed condition. All participants received a booklet that included the stimulus material and the questionnaire. The stimulus text contains a product description of a new fictitious notebook. A notebook was chosen because student participants show at least a minimum level of product involvement and familiarity related to notebooks that guarantees sufficient elaboration when processing the message. To exclude possible contaminations of the results through prior brand experience, we used a fictitious brand. The two-sided message includes nine positive product attributes and two negative attributes. The negative attributes are: (1) an onboard graphic card that is not appropriate for the newest and most advanced 3D computer games; (2) moderate weight of notebook, so that the notebook is not considered a lightweight amongst modern notebooks. The choice of negative attributes was guided by recommendations in the message sidedness literature that suggests using experience attributes of low to moderate importance that are correlated with positive characteristics and that are placed in the second half of the message (Eisend, 2006; Pechmann, 1992). The stimulus and the experimental manipulation were successfully pretested. Thirty-six participants were asked to rate the valence of every single attribute on a seven-point scale ranging from -3 (negative) to +3 (positive). Both negative attributes were rated as negative, i.e. below zero (-1.22 and -.78) while all positive arguments were rated as positive, i.e. above zero (> .78).

The questionnaire contains filler questions, the dependent variables, manipulation check measures, and demographic variables. Half of the participants answered all questions immediately, whereas the other half of the participants only answered filler questions. After two weeks, participants in the second group were contacted again in order to answer the second part of the questions. Both parts of the questionnaire that were answered by the second group of participants could be matched by the help of an anonymous identification code. Participants in the second group were not forewarned; that is, they did not know that they had to fill out a second questionnaire.

Participants report on their attitude towards the message on three seven-point scales (bad/good, not appealing/appealing, negative/positive; $\alpha = .85$). Valence and balance of the message was measured by a single item seven-point scale each (negative/positive and unbalanced/balanced, respectively), following recommendations on the appropriate use of single items scales for concrete objects and attributes (Bergkvist and Rossiter, 2007).

4 Results

Table 1 shows means and standard deviations of the main dependent variables.

Table 1: Means and standard deviations of dependent variables

<i>Dependent variable</i>		<i>Immediate</i>	<i>Delay</i>
Attitude towards message	One-sided	5.00 (1.02)	4.51 (.89)
	Two-sided	4.60 (1.06)	4.85 (.91)
Valence of message	One-sided	6.38 (.96)	5.35 (1.03)
	Two-sided	5.35 (1.03)	5.90 (.85)
Balance of message	One-sided	2.82 (1.67)	3.29 (1.19)
	Two-sided	3.80 (1.83)	3.50 (1.40)

The measures range from 1 to 7.

4.1 Hypothesis 1: Multiple mediation

Hypothesis 1 suggests that both valence and balance mediate the relationship between message sidedness and attitude towards the message. In order to test for these indirect effects, we run a multiple mediation model (Preacher and Hayes, 2008). That is, we have sidedness as independent variable, message attitude as dependent variable, and valence and balance as mediators which are tested simultaneously. The results, presented in Table 2, reveal a significant indirect effect of valence as a mediator on the relationship between sidedness and message attitudes ($Z = 2.36$, $p < .02$) and a marginally significant indirect effect of balance as a mediator ($Z = 1.73$, $p < .09$). A contrast analysis shows that the mediating effect of valence is stronger than the effect of balance ($Z = 2.49$, $p < .02$), supporting hypothesis 1.

The size of the indirect effects of both paths can be computed from the results in Table 2. The size of the path with valence as mediator is $-.073$ ($-.26 \times .28$), while the size of the mediating path with balance as mediator is $.013$ ($.22 \times .06$). In other words, the indirect effect via valence is more than five times as strong as the indirect effect via balance, providing additional support that the trade-off between both mediators favors the negative valence effect.

4.2 Hypothesis 2: Interaction effects

Hypothesis 2 suggests interaction effects of sidedness and delay on valence, balance and message attitudes. As expected, we find a significant interaction effect of sidedness and delay on attitude towards the message that only slightly misses the 5-percent threshold ($F(1, 116) = 3.71, p = .055$): in the immediate condition, attitudes towards a one-sided message tend to be more positive than towards a two-sided message ($M = 4.89$ vs. $4.17; F(1, 77) = 2.91, p < .09$), whereas the difference is no longer significant in the delayed condition ($M = 4.21$ vs. $4.32; F(1, 39) = 1.49, p = .23$). The results support H2c.

We also found an interaction effect that reveals the same pattern for valence ($F(1, 116) = 12.40, p < .01$): in the immediate condition, valence of a one-sided message is more positive than for a two-sided message ($M = 6.38$ vs. $5.35; F(1, 77) = 21.32, p < .01$), whereas the difference is no longer significant in the delayed condition ($M = 5.35$ vs. $5.90; F(1, 39) = 1.05, p = .31$). The results support H2a.

The interaction effect of balance and delay is not significant ($F(1, 116) = 1.52, p = .22$), rejecting H2b.

*Table 2: Results of mediation models
(standardized regression coefficients and z-test for mediation)*

Relationship	Moderator	(c)	(a)	(b)	(c')	z
Hypothesis 1: Multiple mediation						
Sidedness → valence → attitude		-.07	-.26 ***	.28 ***	.01	2.36 **
Sidedness → balance → attitude		-.07	.22 **	.06	-.09	1.73 *
Hypothesis 3: Moderated mediation						
Sidedness → valence → attitude	Immediate	-.19 *	-.47 ***	.31 ***	-.06	2.19 **
Sidedness → valence → attitude	Delay	.19	.16	.22	.16	.91

c is the path from the independent variable to the dependent variable.

a is the path from the independent variable to the mediator.

b is the path from the mediator to the dependent variable.

c' is the path from the independent variable to the dependent variable after controlling for the mediator effect.

* $p < .10$, ** $p < .05$, *** $p < .01$

4.3 Hypotheses 3: Moderated mediation

Since the interaction effect of balance and delay is not significant, the mediating effect of balance on attitudes is not moderated by delay, rejecting H3b. In order to test hypothesis 3a that suggests a mediating effect of valence that is moderated

by delay, we ran a moderated mediation (Preacher et al., 2007) with sidedness as independent variable, message attitude as dependent variable, valence as mediator, and delay as moderator that moderates the path between the independent variable and the mediator. The results in Table 2 show that hypothesis 3a is supported: valence mediates the effect of sidedness on attitudes in the immediate condition ($Z = 2.19$, $p < .03$), but not in the delayed condition ($Z = .91$, $p = .36$).

5 Discussion

The findings of this study show that the overall effect of two-sided messages on message attitudes is mediated by two separate processes; namely the valence of the message and the balance of the message. While valence exerts a negative influence on message attitudes, the influence of balance is positive. This trade-off between both effects is dominated by valence. The influence of valence is stronger than that of balance, and the total effect of two-sided advertising on message attitude leads to a negative result in line with meta-analytic findings on the effects of two-sided advertising (Eisend, 2006). The negative effect on message attitudes is about a fourth of the positive effect of source credibility that contributes to an overall positive effect of sidedness on brand attitudes or purchase intentions. However, while the source effect does not depend on the proportion of negative information included in the message, the message effect does.

In more general communication situations, the overall effect of message sidedness on message attitudes is close to zero as suggested by the findings of a meta-analysis on two-sided persuasion (O'Keefe, 1999). Hence, the trade-off between valence and balance in an advertising context seems to differ from other communication contexts maybe because the use of two-sided messages is quite atypical and contrary to consumer expectations in advertising compared to other communication contexts, lending more weight to valence than to balance of advertising messages.

When looking at the delayed effect of message sidedness, the findings demonstrate that the negative influence of sidedness on message attitude is not stable over time. The interaction effect of message sidedness and delay shows that, in the short run, message attitudes are higher for one-sided messages than for two-sided messages; while the difference declines with the passage of time, eventually aligning attitudes for one-sided and two-sided messages. This alignment can be traced back to the declining difference of valence perceptions: valence is higher for one-sided messages than for two-sided messages and mediates the effect of message sidedness on message attitudes in the immediate condition, but this mediating effect disappears in the delayed condition. The dominance of the negative effect of valence compared to the positive effect of balance and the

subsequent decay of this negative influence can both be explained by mobilization-minimization hypothesis (Taylor, 1991). The hypothesis states that there is a double asymmetry in the effect of negativity insofar as negative information (compared to positive or neutral information) elicit stronger responses immediately, but are followed by processes that reduce their influence later on. As the effects of balance are weaker than that of valence, the changing effects of messages sidedness over time are not influenced by balance.

Our findings have some theoretical and practical implications as well. First, the findings contribute to the message sidedness literature by providing an explanation for the negative effect of message sidedness on message attitudes that has been found in previous advertising research but has not been explained so far: this effect is due to two separate evaluative processes with contradictory signs that only partly suppress each other. Since the negative process outweighs the positive one, the overall effect is a negative one. Second, we extend existing research on message sidedness by investigating its delayed effect, showing that the effect of message sidedness is not stable over time. Instead, effects of one-sided versus two-sided messages align as time goes by.

As for managerial implications, the study helps to understand the processes underlying the impact of message sidedness. In situations where negative information has to be provided by an advertiser who wants to achieve positive attitudes, the results show that two-sided messages are inferior in the short run but not in the long run as has been demonstrated in this study for message attitudes as an outcome variable.

By investigating long term effects of message sidedness, our study somewhat relates to the sleeper effect literature. The sleeper effect suggests that the persuasiveness of two messages with different credibility aligns over time. The high-credibility message is more persuasive than the low-credibility message immediately after exposure, but the difference disappears with increasing delay (Hovland and Weiss, 1951; Greenwald et al., 1986; Gruder et al., 1978; Kumkale and Albarracin, 2004). However, in sleeper effect research, credibility is triggered by source characteristics, not by the message itself. The sleeper effect occurs because source characteristics and message content act as separate, interfering cues that influence attitude, but that are not fully integrated during information processing (Pratkanis et al., 1988). As this is not the case for message sidedness, the underlying processes are different. Nevertheless, it might be an interesting topic for further research to identify similarities and differences in more detail. For instance, while the results of this study show that the negative effect on message attitudes diminishes, the positive effect of source credibility might become weaker due to the sleeper effect of the source, and the overall effect might depend on how fast either of both processes leads to diminishing effects.

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Part II

Corporate Responsibility, Social Issues and Advertising

The Impact of Message Sidedness on Adolescents' Binge Drinking Intentions after Peer Pressure: The Moderating Role of Issue Involvement

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1 Introduction

Ample studies demonstrate the dire effects of binge drinking, which is the episodic or irregular consumption of excessive amounts of alcohol, especially among adolescents (Oei and Morawska, 2004; Vik et al., 2003). Hence, there is a strong need for prevention programs to reduce alcohol use among adolescents (Swahn et al., 2004).

Previously, academic health prevention research mainly focused on the negative side of certain unhealthy behavior by emphasizing how unhealthy, dangerous or damaging the behavior is (Reynolds and Seeger, 2005). As many health prevention organizations apply such one-sided (i.e., negative) messages, individuals get used to this type of persuasive appeal, possibly leading to a saturation effect (Devlin et al., 2007) or even a boomerang effect (i.e., aversive reactions such as denial and defensive avoidance) (Quick and Bates, 2010). Consequently, the effectiveness of these traditional, uniquely negative health campaigns declines (Devlin et al., 2007).

This study assesses an alternative way of communicating health risks, namely two-sided messages “*in which the communicator takes into account both sides of an issue, but actually still favors one side*” (Hovland, 1954). A variety of commercial advertising studies suggests that messages can include some negative information along with the positive product information, and still be more effective than when only positive information is provided (e.g., Crowley and Hoyer, 1994). However, the use and study of two-sided messages has been limited to commercial product advertising (e.g., Bohner et al., 2003; Eisend, 2006). A few notable studies applied two-sided messages to health communication (e.g., Belch, 1981 selling toothpaste; Ford and Smith, 1991 promoting organ donation; Ley et al., 1977 promoting weight loss), but – to our knowledge – this principle was never tested in a reversed way (i.e., to discourage unhealthy behavior). Eisend’s meta-analysis (2006) underscores the need for empirical research assessing the effectiveness of two-sided messages for issues other than promoting com-

mercial products. Two-sided messages have – to our knowledge – not yet been applied in the context of health risk prevention before. Most unhealthy behavior is not only negative, but often also entails some perceived benefits for the individual (e.g., smoking to feel more relaxed, binge drinking to have fun) making behavioral change more difficult. A two-sided health risk prevention message starts from a (conventional) negative message and adds some minor positive elements of the unhealthy behavior (instead of adding some minor negative points to a generally positive message, which is the case for commercial two-sided marketing).

The results of previous studies concerning the superiority of two-sided messages over one-sided messages are quite consistent, but only few studies investigate two-sided messages more deeply by comparing two specific subtypes of two-sided messages which are based on the inoculation theory (McGuire, 1961), that is, non-refutational and refutational appeals. In two-sided non-refutational messages, advertisers simply present positive and negative information. In refutational two-sided (commercial) messages, they subsequently refute or discount the negative information in an attempt to ‘inoculate’ the audience against possible counterclaims or opposing messages by competitors afterwards (Eisend, 2007). So far, only a few commercial studies in two-sided persuasion research incorporate refutational appeals (e.g., Kamins and Assael, 1987, Etgar and Goodwin, 1982). Those few studies delivered mixed results on which subtype of two-sided message is most effective, indicating the need of further research assessing the role of possible moderating variables (Crowley and Hoyer, 1994). Specifically, Eisend (2006, 2007) stresses the potential moderating impact of issue involvement on the effectiveness of message sidedness.

Thus, the present anti binge drinking study aims to investigate the moderating role of issue involvement on the effectiveness of message sidedness (i.e., one-sided vs. two-sided) and the presence or absence of refutation (i.e., two-sided non-refutational vs. two-sided refutational), on adolescents’ intentions to binge drink. To test the inoculating effect of the messages, the adolescents’ binge drinking intentions are measured after exposure to peer pressure.

2 Theoretical framework and hypothesis development

Most commercial advertising studies have found that – in comparison to one-sided messages – two-sided messages are a more effective persuasive communication strategy, especially in difficult communication situations. For instance, when consumers are exposed to counterarguments against an advertising message afterwards, two-sided messages lead to better defense mechanisms than

one-sided messages (e.g., Crowley and Hoyer, 1994). Based on McGuire's inoculation theory (1961), empirical findings support that two-sided messages can generate resistance to counterarguments (e.g., Kamins and Assael, 1987; Crowley and Hoyer, 1994). Although some studies did not find an effect of message sidedness on persuasion (Stayman et al., 1987; Hastak and Park, 1990), most studies in a commercial context indeed show that two-sided messages are more effective against attack than one-sided ones (Eisend, 2006, 2007).

Using a physiological analogy, inoculation theory (McGuire, 1961) states that offering mild counterarguments and afterwards refuting them strengthens cognitions, reduces counter argumentation, and consequently enhances attitudes in the preferred direction (Eisend, 2007). In immunology, to build resistance to a disease, people are often injected with a solution that contains a mild form of the disease itself (Etgar and Goodwin, 1982). In other words, by pre-exposing subjects to weakened counterarguments, their defense mechanism is heightened. Contrary to non-refutational two-sided messages, in refutational appeals advertisers present positive and negative information, but then refute or discount the negative information, attempting to inoculate the audience against possible counterclaims (Eisend, 2007). One of the main tenets of inoculation theory is the need for including a refutation of the two-sided argument(s) within the message itself (Crowley and Hoyer, 1994). Therefore, on the basis of the inoculation theory, it could be expected that refutational two-sided messages are more effective against attack than non-refutational ones. However, many researchers have also obtained beneficial effects for two-sided advertising without refutation (Crowley and Hoyer, 1994). In a commercial advertising context, several studies (e.g., Golden and Alpert, 1987; Kamins and Assael, 1987; Smith and Hunt, 1978) demonstrate beneficial effects of two-sided messages without refutation of the negative claims, indicating that the presence or absence of refutation has little impact. For instance, Kamins and Assael (1987) found that a one-sided ad is less effective than either type of two-sided ad, but similar results were obtained for both subtypes (refutational and non-refutational) of two-sided ads. These mixed empirical results suggest that, in some cases, refutation within the message is not necessary (Crowley and Hoyer, 1994).

In his meta-analysis, Eisend (2006) included the impact of moderating variables. However, the moderators studied to date have not been able to explain some of the inconsistent effects of message sidedness and the (non)refutational character of two-sided messages. In the context of (commercial) two-sided messages, issue (or product) involvement has been suggested as a potentially important moderating variable (e.g., Eisend, 2006; Hastak and Park, 1990; Stayman, et al., 1987; Chebat and Picard, 1985). For instance, Chebat and Picard (1985) found a significant interaction effect between issue involvement and message sidedness. Two-sided messages were more effective for strongly involved indi-

viduals, but not for weakly involved individuals. When issue involvement (and thus personal relevance) is weak, message processing is rather limited. Individuals who are weakly involved with the issue will be less motivated to process the message, resulting in little or no impact of different messages. Hastak and Park (1990) state that, for uninvolved individuals to be influenced by a two-sided message, they must first recognize the two-sided nature of the message, and then perceive this cue as being relevant for evaluation. However, uninvolved audiences may not even recognize the two-sided nature of the communication, making it likely that they do not attend to the message at all. Therefore, in line with previous studies, we only expect to find an effect of message sidedness when issue involvement is sufficiently strong.

When individuals' involvement is strong, the two-sided nature of the message is more likely to be noticed (Hastak and Park, 1990). Strong involvement is necessary to motivate an individual to evaluate different message arguments (Gotlieb and Sarel, 1991). Also, strong involvement enhances the importance of message content in persuasion (Chebat and Picard, 1985). For instance, Leippe and Elkin (1987) found that strong issue involvement encourages sensitivity to how well message arguments concur with personal standpoint. We therefore expect that, for strongly involved individuals, two-sided messages will be more effective in generating resistance than one-sided ones, since two-sided messages offer a more nuanced view that might better represent their knowledge about the positive and negative aspects of the issue.

The positive impact of two-sided messages will be the case regardless whether the argument in the message is refuted or not, since both subtypes of two-sided messages offer pro- and contra-arguments about the issue. For strongly involved individuals, refuting the opposing argument will be relatively easy to do themselves, since it can be expected that they have elaborated on the pros and cons of the issue prior to the exposure to the message. Hence, to the strongly involved, refutation within the message itself might be unnecessary and is expected not to make a difference in terms of inoculating them. We therefore expect no different effect on strongly involved subjects' binge drinking intentions after peer pressure for a two-sided non-refutational and a two-sided refutational messages.

H1a: For weakly issue involved adolescents, message sidedness does not affect binge drinking intentions.

H1b: Strongly issue involved individuals show lower binge drinking intentions following exposure to a two-sided non-refutational or refutational message compared to a one-sided message.

H1c: For strongly issue involved individuals, there is no difference in the effect of non-refutational and refutational two-sided messages on binge drinking intentions.

3 Method

3.1 Design and stimuli

A 3 (one-sided vs. two-sided non-refutational vs. two-sided refutational) x 2 (weak vs. strong involvement with binge drinking) between-subjects factorial experimental design was used to test the hypotheses. Message sidedness and (non-)refutational appeal were manipulated. Respondents' involvement with the issue of binge drinking was measured prior to the exposure to the experimental stimuli and completing the questionnaire. Message sidedness was manipulated as follows: (1) the one-sided message contained solely one argument against binge drinking, i.e., *"Because of binge drinking, Thomas, 16 years old, got alcohol poisoning"*, (2) the two-sided non-refutational message used the same anti- binge drinking argument, but added an argument in favor of binge drinking, i.e., *"Thanks to the alcohol, he was very popular that night"*, (3) the two-sided refutational message contained the same contra- and pro- arguments, but refuted the pro-binge drinking argument with a refutational statement, i.e., *"But how important is popularity in the end?"*. The peer pressure message was conceptualized as a printed online chat conversation between two peers, slightly older than the participants in the experiment, who explicitly promoted the unhealthy behavior (i.e., binge drinking) in a very informal way (e.g., *"Last night was awesome!! So much booze! Binge drinking is so cool, you gotta do it!"*). Specifically, the anti-binge drinking messages used in the current study contain emotional, social arguments, as previous studies have shown that adolescents consume alcohol chiefly for social motives (e.g., Wicki et al., 2010).

The stimuli were pretested among 60 respondents. The same measurement scales as in the main study were used (see hereafter). The results show that the respondents rated the two-sided messages ($M = 5.97$) as more two-sided than the one-sided message on a seven-point scale ($M = 1.30$, $t(58) = 17.19$, $p < .001$). The two-sided refutational message ($M = 5.95$) scored significantly higher on the seven-point refutation scale than the two-sided non-refutational message ($M = 2.45$, $t(38) = 7.73$, $p < .001$).

3.2 *Participants and procedures*

Data were collected from 185 participants by means of a printed questionnaire. The sample consisted of 67.6 % females, and the age range was 15 - 19 years ($M_{age} = 16.49$, $SD = .82$). The study focuses specifically on adolescents because they are a very relevant target group for the issue of binge drinking. First, each participant's involvement with the issue of binge drinking was measured. Next, the participants were randomly assigned to one of the three experimental conditions. Subsequently, they were exposed to peer pressure, promoting binge drinking. Finally, they completed the questionnaire containing measures for behavioral intention. They were debriefed and thanked for their cooperation.

3.3 *Measures*

3.3.1 *Independent variables*

In line with previous studies (e.g., Eisend, 2006), message sidedness was measured by means of one single item on a seven-point semantic differential scale ("*This message only gives an argument against binge-drinking*" vs. "*This message gives an argument against binge-drinking, but also considers an argument in favor of binge-drinking*"). Refutation of the message arguments was measured by one single item on a seven point likert scale ("*The argument in favor of binge drinking was subsequently refuted in the message*"). Involvement with binge drinking was measured by five items on a seven-point likert scale (Beatty and Talpade, 1994) (e.g., "*The issue of binge drinking is very important to me.*") ($\alpha = .82$).

3.3.2 *Dependent variable*

Behavioral intentions were assessed by three bipolar items on a seven-point scale (Zhang and Buda, 1999) (e.g., "*The chances that I will binge drink are improbable vs. probable*") ($\alpha = .96$).

4 **Results**

4.1 *Manipulation check*

The manipulation check revealed that the two-sided messages ($M = 4.56$) were perceived as significantly more two-sided than the one-sided message ($M = 1.95$, $t(183) = 10.29$, $p < .001$). The two-sided refutational message ($M = 4.76$)

was considered significantly more refutational than the two-sided non-refutational message ($M = 3.68$, $t(119) = 3.09$, $p < .001$).

4.2 Test of the hypotheses

The hypotheses were tested by means of a one-way analysis of variance (ANOVA). The results show a significant interaction effect between message sidedness and involvement with binge drinking on binge drinking intentions ($F(2,178) = 5.99$, $p = .003$) (see figure 1). Simple effect tests showed that, when adolescents' involvement with binge drinking is weak, their binge drinking intentions were not significantly different for a one-sided ($M = 1.59$), a two-sided non-refutational ($M = 1.72$) and a two-sided refutational ($M = 1.84$) message, ($t(72) = .41$, $p = .69$), ($t(70) = .49$, $p = .63$) and ($t(74) = 1.19$, $p = .24$). These results support H1a. When adolescents' involvement with binge drinking is strong, a two-sided non-refutational message ($M = 2.58$) and a two-sided refutational message ($M = 2.76$) both resulted in significantly lower binge drinking intentions than a one-sided message ($M = 4.12$), ($t(49) = 2.67$, $p = .01$) and ($t(46) = 2.35$, $p = .02$). This confirms H1b. As expected, for high issue involved individuals, the difference between binge drinking intentions following exposure to refutational ($M = 2.76$) and non-refutational ($M = 2.59$) messages is not significant ($t(45) = .32$, $p = .75$), supporting H1c.

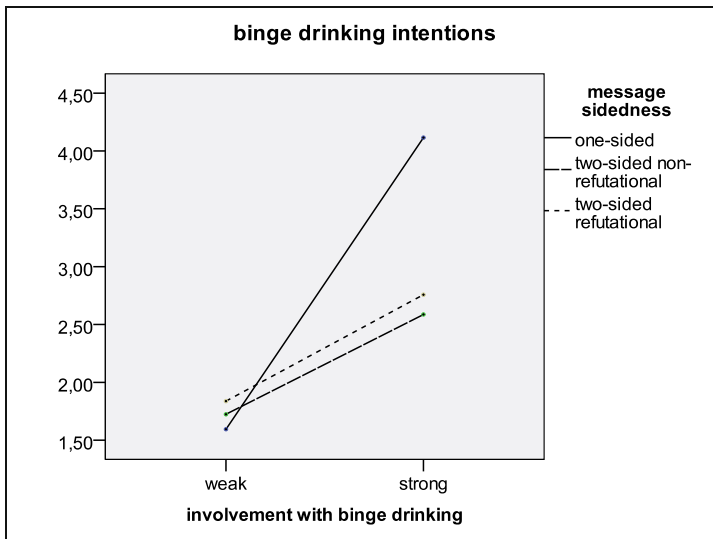


Figure 1: Interaction effect between message sidedness and involvement with binge drinking on binge drinking intentions.

5 Discussion

In a commercial context, empirical studies have produced mixed results regarding the impact of two-sided messages on purchase intentions or behavioral intentions in general (Eisend, 2006; Crowley and Hoyer, 1994). In the present health risk prevention context we found that behavioral intentions to indulge in binge drinking are significantly influenced by message sidedness, but only when subjects' issue involvement is sufficiently strong. More specifically, adolescents who are strongly involved with binge drinking express lower intentions to binge drink after peer pressure, when they were previously exposed to a two-sided (refutational or non-refutational) anti-binge drinking message compared to a one-sided anti-binge drinking message. Following inoculation theory (McGuire, 1961), one would expect a two-sided refutational message to be most effective against peer pressure, as the refutation statement in the message itself serves as a bolstering mechanism. On the other hand, many empirical studies show that refutation is not always necessary (e.g., Golden and Alpert, 1987; Kamins and Assael, 1987; Smith and Hunt, 1978). Two-sidedness as such can be effective, regardless whether the two-sided argument was subsequently refuted in the message or not. The present study shows that, in the case of strongly involved individuals, refutation in the message has no impact, as long as the message is two-sided instead of one-sided. Two-sided messages offer a more nuanced view on the issue, which is likely to be more appreciated by strongly issue involved individuals, as involvement encourages sensitivity to how well message arguments concur with personal standards and opinions (Leippe and Elkin, 1987). Since strongly issue involved individuals are expected to have elaborated on the pros and cons of binge drinking before, refutation does not add any relevant argument they did not consider before.

6 Implications for practitioners

The present study provides useful insights for health practitioners for the development of campaigns to prevent binge drinking or other health risk behavior, among adolescents. First of all, this study has broadened the spectrum of communication strategies available for social marketing and health communication. By applying a communication strategy previously exclusively associated with commercial product marketing (i.e., two-sided messages) new possibilities are created for the social marketing domain.

In summary, the results of this study recommend the use of two-sided messages in campaigns aimed at preventing binge drinking among adolescents, especially strongly issue involved ones. Strong issue involved adolescents are actually the main target group for substance abuse prevention programs, as greater involvement with one substance (e.g., alcohol) is generally associated

with greater involvement in another substance (e.g., smoking) (Johnson et al., 2000). Compared to the traditional one-sided anti binge drinking messages, two-sided anti binge drinking messages significantly decrease binge drinking intentions among this target group after exposure to peer pressure, regardless whether the two-sided (positive) argument was refuted in the message or not. These results can be helpful for practitioners' actual message design in order to maximize message effectiveness.

7 Further research

In line with previous studies assessing both refutational and non-refutational two-sided messages (e.g., Kamins and Assael, 1987), this study did not find a different effect of both types of two-sided messages when including issue involvement as a moderator. Perhaps, when including different moderating variables (e.g., prior knowledge of the issue) and/or different situational contexts (e.g., induced central vs. peripheral processing) different results might be found between both types of two-sided messages.

Further studies could also consider different topics when investigating the effect of two-sided non-refutational versus two-sided refutational messages. Binge drinking is not a very controversial issue in that most people would consider it as undesirable behavior. Consequently, the topic of binge drinking, has very weak pro arguments ("cool, popular") compared to the contra arguments ("alcohol poisoning"). When the opposing argument (i.e., the pro binge drinking argument) is considerably weak, it might be more easily mentally refuted. For a more controversial topic (e.g., the use of antibiotics or other prescription drugs) – which is inherently more 'dual' because it is characterized by stronger pro and contra arguments – a difference between the two-sided non-refutational and the two-sided refutational message could be expected, as it might be more difficult for subjects to mentally refute the message themselves, making the presence of a refutational statement within the message necessary.

One of the limitations of this study is that subjects' cognitions and counter-argumentations after exposure to a two-sided message were not measured. McGuire's inoculation theory (1961) states that two-sided refutational messages reduce the amount of counter arguments and strengthen cognitions. Future research could also measure these cognitions and counter arguments to study the cognitive processing of different types of one- and two-sided messages in more depth.

8 End conclusion

In sum, this study found the beneficiary impact of two-sided messages over one-sided messages for health risk issues. This effect was only found for strongly issue involved adolescents, as weakly issue involved adolescents are not likely to attend to different argumentation in messages. For strongly involved adolescents, two-sided messages lead to significantly lower binge drinking intentions after exposure to peer pressure, compared to one-sided messages. No different effect was found due to refutation of the message argument. Hence, both subtypes of two-sided messages were equally effective in reducing binge drinking intentions among strongly involved adolescents who are exposed to peer pressure.

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Effects of Green Seals of Approval on Brand Perceptions

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1 Introduction

There is a fair amount of research on green consumption and some research specifically focused on green seals of approval (hereafter referred to as green seals). For example, there are studies on the general communication effects of green seals (D'Souza et al., 2006; D'Souza et al., 2007), their appropriateness for specific product categories (Montoro-Rios et al., 2006; Montoro-Rios et al., 2008) and their origin, standards and classification (Horne, 2009).

However, to date there appears to be no study on the type of brands that are most likely to benefit from green seals. For example, are the effects of green seals different for functional and symbolic brands (Park et al., 1986)?

The importance of distinguishing between functional and symbolic brands has been demonstrated in a number of areas within marketing (e.g., Ligas, 2000; Midgley, 1983; Olshavsky and Granbois, 1979; Park et al., 1991). Thus, the issue of whether green seals are more effective when used for either of these two types of brands appears to be worthy of investigation. An investigation of this is important since the costs for using green seals are high and managers need to know whether this is an appropriate way to spend marketing funds.

In this study, we seek to extend the research on the effects of green seals by investigating what type of brand, functional or symbolic, will benefit most from a green seal. The study investigates the impact of a green seal on symbolic versus functional brands in three product categories: ice cream, orange juice, and mobile phones, in a Swedish context.

2 Theoretical background and hypotheses

2.1 *Green seals of approval*

Many studies show that a large and increasing number of consumers care about ecological and ethical production (e.g., Jansson et al., 2010; Leonidou et al., 2010; Prothero et al., 2010). But with increased environmental concern comes

increased environmental wariness. The concept of greenwashing has come to describe the use of misleading and vague claims such as earth-friendly, eco or 100 % natural. One way to avoid suspicions of greenwashing is to qualify for the use of a third party certification, which is often represented by a green seal issued by a public authority or non-governmental organisation with strict requirements (D'Souza et al., 2006; 2007; Hartmann and Apaolaza-Ibáñez, 2009; Ottman, 1992;). Using a well-known third party label increases brand credibility (D'Souza et al., 2006) and leads to more favourable perceptions of product attributes (Montoro-Rios et al., 2006; Parkinson, 1975). The two most commonly used green seals of approval in Sweden are both government-issued; the KRAV label is used for foods and the Nordic Swan label is used for a wider range of products (see experimental stimuli in appendix 1).

Despite the hype around green products and brands, sales seem slow. For example, ecological foods only accounted for 3.4 % of total food sales in Sweden according to recent estimates (KRAV, 2010). Thus, it seems that even though many consumers express environmental concerns, they do not always act accordingly when it comes to actual purchase. This contradiction has been noted in several studies, suggesting various explanations, such as not being willing to pay a premium price for functionally equivalent, though ecological products (Alwitt and Pitts, 1996; D'Souza et al., 2007; KRAV, 2010), functional performance of eco-products being inferior (Kinnear and Taylor, 1973), or social desirability when participating in surveys (De Pelsmacker et al., 2005). Moreover, it has been claimed that most of green advertising is unpersuasive and fails to present a connection between what the company is doing for the environment and how this would benefit the consumer (Keller et al., 2008).

However, to the best knowledge of the authors, there are no studies focusing on the type of brand, rather than the type of consumer or product category, as explanation for green brands' lack of success.

2.2 *Symbolic versus functional brand concepts*

Park et al. (1986) developed a typology of three different types of brand concepts: (1) functional, (2) symbolic, and (3) experiential. Following Bhat and Reddy (1998), the experiential brand concept is excluded from this study because the experiment involves print ads which are not as influential when it comes to experiential brands for which sensory evaluation is more important (Park et al., 1986). It should be noted, however, that experiential brands are more similar to functional than symbolic brands in the sense that sensory evaluation can be considered more of a functional benefit (i.e., good taste in food products) than symbolic (i.e., expressing your personal identity and/or social status).

The brand concept can be defined as a firm-selected brand meaning derived from basic consumer needs (Park et al., 1986). It is a broader term than brand image, which is unique to the individual brand. Even though a symbolic brand concept will imply a symbolic brand image (the so called image-concept link), there can be several symbolic brand images in a product category based on the same, underlying symbolic brand concept. Before fine-tuning its brand image, the company must choose which of the three basic types of consumer needs – functional, symbolic or experiential – the brand aims to satisfy (Park et al., 1986). For example, Bic and Montblanc are both pen brands, but Bic has a functional concept with the image of being simple yet reliable (bicworld.com, 2011), whereas Montblanc has a symbolic concept with the image of being traditional but timeless, reflecting beauty and cultural refinement (montblanc.com, 2011).

Whereas all brands must fulfil their basic functions (i.e., you have to be able to write both with a Bic and a Montblanc pen), a symbolic brand moreover helps consumers fit into desired reference groups (social-adjustive benefits) and express their personal identity (value-expressive benefits) (e.g., Grewal et al.; 2004; Wilcox et al., 2009).

2.3 *What type of brand concept will benefit most from a green seal?*

It is usually assumed that a cohesive brand image has stronger influence on consumers than a brand image which is scattered and vague (Park et al., 1986). Thus, the brand image should be in line with its underlying brand concept.

It is argued here that the value of a green seal is more symbolic than functional, as it does not immediately enhance the product's instrumental utility or function (even if consequences of environmental consumption such as less damage to the environment can be considered functional in the sense of solving/avoiding problems [Montoro-Rios et al., 2006], they are not experienced directly by the individual buyer). In a study of a related area, fair trade coffee, it was found that consumers concerned with ethical/environmental issues were driven more by a desire to identify themselves as ethical (a symbolic, self-expressive value) than with functional factors such as price or taste (Shaw et al., 2000). Griskevicius et al. (2010) claim that green products offer important, status-enhancing reputational benefits as they make people appear generous and pro-social. In their research, they found that status-driven consumers preferred less luxurious green products to more luxurious non-green products, were more likely to choose green products when shopping in public than in private (i.e., in a store as opposed to online), and preferred more expensive green products to less expensive non-green products.

In sum, it seems likely that a green seal, being more symbolic than functional in nature, will strengthen a symbolic brand concept by making it more cohesive, but weaken a functional brand concept by diluting it. Based on the above, it is argued that:

H_{1a}: A green seal of approval will add to the social-adjustive and value-expressive (i.e. symbolic) benefit beliefs about a brand.

H_{1b}: These effects will be stronger for symbolic than for functional brands.

H_{2a}: A green seal of approval will not influence the functional benefit beliefs about a symbolic brand.

H_{2b}: A green seal of approval will lower the functional benefit beliefs about a functional brand.

Moreover, given that most consumers have nevertheless been found to be environmentally concerned in previous research (even if it is not always coming through in their actual purchase behaviour), we suggest that:

H_{3a}: A green seal of approval will improve brand attitude and brand purchase intention.

H_{3b}: These effects will be stronger for symbolic brands than for functional brands.

3 Method

3.1 Study design and data collection

The study was an experiment with a 3x2x2 factorial design involving ads for three product categories, with one symbolic and one functional brand concept in each category, and the absence or presence of a well-known green seal (see table 1 and appendix 1).

Whether the brands were really considered symbolic or functional was established through a pre-test including 143 respondents who answered questions about their functional and symbolic benefit beliefs about three different brands in each of five different product categories (orange juice, ice cream, mobile phones, jeans and shampoo). The stimuli described in table 1 below were selected as they were significantly different in terms of functional/symbolic brand benefit beliefs.

Data were obtained through self-administered questionnaires distributed electronically to a snowball sample of Swedish consumers. A total of 312 usable

responses were obtained (average age 24, 39 % female, 61 % male). The experimental stimuli and questions were rotated to avoid order effects.

Table 1: Overview of experimental design.

<i>Product category</i>	<i>Brand concept</i>	<i>Green seal</i>
Ice cream	Ben & Jerry's (symbolic) GB Glace Big Pack (functional)	Absent or present
Orange juice	Tropicana (symbolic) Bravo (functional)	Absent or present
Mobile phone	iPhone (symbolic) Samsung (functional)	Absent or present

3.2 Measures

Symbolic brand benefit beliefs were measured as social-adjustive and value-expressive beliefs adapted from Grewal et al. (2004) and Wilcox et al. (2009). Social-adjustive benefits were measured with three items: "I (do not) like to be seen with brand X", "Brand X (does not) help/s me to fit into important social situations" and "I (do not) want my friends to know the brand of [product] I use" ($\alpha=.73$). Value-expressive benefits were also measured with three items: "Brand X (does not) reflect/s the kind of person I see myself to be", "Brand X (does not) communicate/s my identity" and "Brand X (does not) help/s define myself" ($\alpha=.61$).

Functional brand benefit beliefs were measured with three items taken from the study by Voss et al. (2003): functional/not functional, necessary/unnecessary and practical/impractical ($\alpha=.81$). Responses to all symbolic and functional items were captured on 7-point scales.

Following Bergkvist and Rossiter (2009), brand attitude was measured on a 7-point scale ranging from "extremely bad" to "extremely good" and brand purchase intention was measured on a 7-point scale ranging from "no chance or absolutely no chance" to "certain or practically certain".

4 Results

The first hypothesis was that the presence of a green seal of approval would increase the social-adjustive (fit in) and value-expressive (express personal identity) benefit beliefs about a brand, especially if it was symbolic rather than functional. The analysis (independent-samples *T* test, see table 2) showed that there were no significant ($p>.10$) differences between the two experimental conditions

for all brands taken together or for symbolic and functional brands analysed separately. Thus, the results did not support H_1 .

Table 2: No support for H_1 ; that a green seal of approval would increase the social adjustive and value-expressive benefit beliefs of a brand.

Brand concept	Social-adjustive benefit beliefs				Value-expressive benefit beliefs			
	Seal	No seal	Diff.	Sig.	Seal	No seal	Diff.	Sig.
All brands	3.16 (1.52)	3.15 (1.46)	.01	n.s.	3.77 (1.27)	3.84 (1.21)	-.07	n.s.
Symbolic	3.43 (1.71)	3.61 (1.46)	-.18	n.s.	3.91 (1.23)	4.13 (1.27)	-.22	n.s.
Functional	2.89 (1.26)	2.67 (1.27)	-.22	n.s.	3.64 (1.29)	3.52 (1.06)	-.12	n.s.

Mean (standard deviation)

When looking at the results for individual brands, we notice one significant effect in the expected direction. The certification of the functional ice cream brand GB Glace Big Pack with the KRAV label actually significantly increases social-adjustive brand benefit beliefs ($\text{Big Pack}_{\text{Seal}} = 2.94[1.24]$, $\text{Big Pack}_{\text{No seal}} = 2.17 [1.25]$, $p < .10$). Otherwise, there are no significant results on the individual brand level.

Table 3: No support for H_2 ; that the functional benefit beliefs about a symbolic brand would not be influenced by the presence of a green seal, whereas the functional benefit beliefs about a functional brand would become lower.

Brand concept	Functional benefit beliefs			
	Seal	No seal	Diff.	Sig.
All brands	4.31 (1.45)	4.39 (1.42)	-.08	n.s.
Symbolic	4.41 (1.49)	4.58 (1.36)	-.17	n.s.
Functional	4.21 (1.40)	4.19 (1.45)	.02	n.s.

Mean (standard deviation)

The second hypothesis was that the functional benefit beliefs about a symbolic brand would not be influenced by the presence of a green seal of approval, whereas the functional benefit beliefs about a functional brand would be negatively influenced by such a label, as a green seal, being symbolic in nature,

would dilute a functional brand. Again, there were no significant differences between the experimental conditions and H_2 was not supported. For H_2 , there were no significant results for individual brands.

The third hypothesis stated that a green seal would improve brand attitude and purchase intention regardless of brand concept, but more for symbolic than for functional brands. H_3 was not supported either (see table 4).

Table 4: No support for H_3 ; that a green seal would improve brand attitude and purchase intention.

<i>Brand concept</i>	<i>Brand attitude</i>				<i>Purchase intention</i>			
	<i>Seal</i>	<i>No seal</i>	<i>Diff.</i>	<i>Sig.</i>	<i>Seal</i>	<i>No seal</i>	<i>Diff.</i>	<i>Sig.</i>
<i>Symbolic</i>	5.29 (1.19)	5.31 (1.28)	-.02	n.s.	4.30 (1.76)	4.40 (1.79)	-.10	n.s.
<i>Functional</i>	3.89 (1.17)	4.08 (1.30)	-.19	n.s.	2.79 (1.35)	2.95 (1.35)	-.19	n.s.
<i>All brands</i>	4.58 (1.38)	4.71 (1.43)	-.13	n.s.	3.54 (1.73)	3.70 (1.74)	-.16	n.s.

Mean (standard deviation)

For H_3 , there was one significant result on the individual brand level, but in the opposite direction from what was expected. For the functional orange juice brand Bravo, the presence of a green seal actually lowered brand attitude ($Bravo_{Seal} = 3.91[1.15]$, $Bravo_{No\ seal} = 4.64[1.25]$, $p < .10$).

5 Conclusion and discussion

In contrast to what was expected from the theoretical background, in this study, the presence of a green seal in print ads for familiar brands did not increase the social-adjustive or value-expressive (i.e., symbolic) benefit beliefs, brand attitudes and purchase intentions, regardless of whether they were based on symbolic or functional brand concepts. In fact, the green seal did little at all to change consumers' perceptions of a familiar brand of ice cream, orange juice or mobile phones.

Of the two significant differences that were found on the individual brand level, one was that the presence of a well-known green seal on the functional ice-cream brand GB Glace Big Pack increased its social-adjustive (fit in) brand benefit beliefs. The other was that the presence of this seal *lowered* the brand

attitude to the functional orange juice brand Bravo. These results point to two aspects that distinguish products and brands apart from their brand concepts and may also be of importance when it comes to environmental certifications.

One is the credibility of the certification. It is easy to believe that a Swedish ice cream brand like GB Glace is able to produce its ice cream for the national market using environmentally friendly methods, such as only using milk and cream from cows in nearby farms that graze outdoors and are not given any harmful antibiotics. It is not as easy to believe that cheap orange juice made from oranges that have been shipped from unknown destinations in all corners of the world is produced in an environmental manner. Even if the seals used in this study have strict requirements for their certifications, customers might not be aware of this and thus believe one certification to be more credible than the other. Thus, the credibility of the green seal in relation to the product or brand at hand should also be considered when examining effects of green seals of approval.

The other aspect is the nature of consumption. In the Swedish context, it is common to eat ice cream from a pack together with friends, for a snack or for dessert, with the pack clearly visible on the table. Everyone will be able to see the green seal and the host is likely to believe that this will influence how the guests see him or her. On the contrary, orange juice is more often drunk at the breakfast table, with only your own family present. They are not as easily impressed by green seals and not as important to impress either. And the likelihood of anyone seeing that your mobile phone has a green seal is very slight. Not to mention their imagination of what this could actually mean in terms of production. Thus, whether the product is publicly or privately consumed, along with family and/or friends, should also be considered, as well as the visibility of the green seal during use.

If the results of this study are taken at face value, a certification by a well-known green seal has almost no positive effects on brand benefit beliefs, brand attitude and purchase intention. The type of brand concept, functional or symbolic, is of no importance. On the other hand, neither were there any significant negative effects of using a green seal. Even if the presence of a green seal did no good, neither did it do any harm. This means that if producers and/or sellers of ice cream, orange juice or mobile phones on the Swedish market want to introduce greener practices, they must be driven by other factors than consumer demand, such as their own environmental concern. They should also consider other aspects of this than type of brand concept, such as seal credibility and visibility.

However, the results could also be explained by the study design. It only examined print ads for familiar brands. Previous studies have sometimes found that

it is difficult to influence the perceptions of familiar brands (e.g., Machleit et al., 1993; Simonin and Ruth, 1998). It cannot be ruled out that green seals could be influential for new, unfamiliar brands and/or other kinds of marketing communications (e.g., packages, leaflets).

Moreover, the study was based on a convenience sample of Swedish consumers. It could also be that a green seal is not as symbolic for Swedes as it is for the peoples (Australians, Spaniards) in the studies this argument was based on. According to another Swedish study, consumers primarily chose organic foods because they preferred the taste (because they take longer time to grow, they contain less water and thus taste more), an experiential benefit, not because of environmental concerns or symbolic brand benefit beliefs (Hjalmarson et al., 2009).

Lastly, consumers' level of ecological concern or brand knowledge could also influence the results, but controlling for these factors did not change the outcome here.

Future research should examine the influence of green seals for new brands, including both symbolic and functional products (as it would be difficult to establish a symbolic or functional brand concept for a brand that consumers have never heard of before, from just a single ad exposure). Also, research should be extended to other product categories and other types of marketing communications. As the meaning of a green seal of approval might differ between cultures or seals, this should also be studied.¹

Most important, the lack of effect of a green seal in the sample of consumers in this study should not discourage researchers from pursuing more research on green seals, or manufacturers and retailers from greening their products, as a change in overall supply might in itself alter consumer brand perceptions by acting as a primer, something which should also be studied.

6 References

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¹ Since the writing of this study, the effects of more seals on new, unfamiliar brands has been studied by some of our students, with similar, that is no, results of using the green seals studied here. However, using the Fair Trade seal or EU Ecolabel did have some positive effects, implying the importance of the meaning of the seal.

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7 Appendix: Experimental stimuli

Functional brand concepts with and without green seals



Symbolic brand concepts with and without green seals



The Impact of Health Warnings on Children's Consumption Decisions

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1 Introduction

Children are a key target group for retailers and manufacturers (Effertz, 2008; Schor, 2004). Consequently, children are exposed to many marketing messages (Cross, 2002; Kunkel et al., 2004), which is evident in an increasing amount of advertising directly aimed at and targeted towards them (Kunkel, et al., 2004) and a large number of products specifically geared towards children as buyers (Cook, 2009; Honeyman, 2010; Lawlor, 2000; Wilson and Wood, 2004).

Despite the enormous relevance of children as a target group, astonishingly little research has been devoted to children's purchasing decisions (Seiders and Petty, 2007). The research currently focuses on children's loyalty to brands (Bakir and Palan, 2010; van Reijmersdal et al., 2010), the persuasive effect of advertising (Buijzen et al., 2010; van Reijmersdal et al., 2010) and the influence of children on their parents' purchasing decisions (Cross, 2002; Wilson and Wood, 2004). This has revealed that children evidently lack the cognitive development and social experience to process marketing communications with the sophistication of adults (Seiders and Petty, 2007). However, how children take purchasing decisions, what criteria they take their cue from and how they behave in purchase-relevant situations has barely been explored up to now.

This insight is particularly important in the food sector, where children and adolescents are the target of intense and specialized food marketing and advertising efforts (Story and French, 2004). On the other hand, children often do not (are unable to) recognize which foods are good or bad for them. To solve this problem, including warnings about the hazards of the products directly on the packaging or near the product has frequently been proposed (Seiders and Petty, 2007). Just how far children process this information, however, and what influence it has on their purchasing decision has – to our knowledge – largely been ignored up to now. Particularly, if and how health related information compete with brand related information during the decision process is of special interest for management and research.

Our study aims to enhance the state of research in this regard. In our empirical study, we test the influence a verbal warning about the health risks of a beverage has on the choice of drink of school children aged between nine and eleven in an experimental design. As previous research projects were able to demonstrate that the relationship to the brand plays a prominent role in children's consumption decisions (Chaplin and Lowrey, 2010; Ji, 2002), we studied the impact of the warning on a popular and an unpopular brand.

2 Impact of warnings on children

2.1 Children as a target group

Children are a key target group for traders and manufacturers for three main reasons nowadays (Effertz, 2008; Schor, 2004): (1) Firstly, they can greatly influence the purchasing decisions of their parents and grandparents depending on the type of product (Clarke and McAuley, 2010). (2) Secondly, children often have a considerable budget at their disposal, which they can control themselves. The financial resources directly available to children in the form of pocket money or gifts, for instance, have grown steadily in recent years (Effertz and Teichert, 2010). On the whole, the value of the purchasing decisions that directly or indirectly have a sizeable influence on children was estimated at a staggering USD 320 million in 2004 (Shoham et al., 2004). (3) Finally, companies strive to tie children to their brands at a young age (McDougall and Chantrey, 2004) with a view to establishing especially strong, long-term bonds between the brand and consumers (Effertz and Teichert, 2010).

2.2 Children and their relationships with brands

Children already develop close relationships with brands at a very early stage (Chaplin and Lowrey, 2010; McNeal, 1979). In doing so, children prefer particular brands and specifically look for them in shops or ask their parents to buy them (Achenreiner and John, 2003). By the same token, unpopular brands are spurned or avoided. Brands also appear to take on a different importance in different age groups: Achenreiner and John (2003) demonstrate that very young children use brand names to distinguish familiar products from new ones. According to Achenreiner and John (2003), conceptual brand meanings, which specify the non-observable abstract features of the product, first develop in

most children at the age of eight. As with adults, brands perform certain functions for children and play a key role in their everyday lives (Ji, 2002). For instance, brands are used to express an affiliation to a social group or identify others (Chaplin and Lowrey, 2010), or distance yourself from earlier developmental stages (Ji, 2002).

2.3 *Impact of warnings about the health risks of products*

The research on this subject mostly focuses on how adults perceive and remember warnings (Argo and Main, 2004; Zuckerman and Chaiken, 1998). Moreover, while Rousseau et al. (1998) address the aspect of age difference in the processing and impact of warnings, their theoretical overview focuses on the requirements of older people. Indeed, very little is known about how children respond to warnings.

The research on adult consumers particularly displays a heterogeneous picture when it comes to the impact of warnings on product packaging: Some studies suggest that these warnings only have a minimal impact – if at all – on the behavior of the consumers (Argo and Main, 2004; Engs, 1989; MacKinnon and Lapin, 1998; McCarthy et al., 1984) while others identify positive effects of warnings under certain conditions (Lehto and Miller, 1986). Principally, many results show that warnings are remembered by adults and can lead to increased perceived risk and reduced advertising effects on perceived benefits (MacKinnon and Lapin, 1998).

However, some warnings and other public health interventions have been found to produce the opposite effects to those intended (Ringold, 2002; Snyder and Blood, 1992). At least with regard to alcohol warnings, Snyder and Blood (1992) report a boomerang effect, according to which drinkers perceive alcohol as having more benefits when the warning is present. The theory of psychological reactance, roughly defined as the state of being aroused in opposition to perceived threats to personal choice, offers a possible explanation for the boomerang effect.

Irrespective of these results, as yet there are no studies on how children react to warnings. However, we can basically assume that warnings also induce children to perceive the risk associated with the product as greater and that this risk perception is also reflected in the children's behavior. Consequently, our study is based upon the following hypotheses:

H1: A warning about the health risks associated with a product results in the product being regarded as unhealthier by the children.

H2: A warning about the health risks associated with a product results in an increased likelihood of a (supposedly) healthier alternative being chosen.

As shown above, brands play a big role for children. Consequently, we can assume that the relationship with the brand affects the impact of the warning, which gives rise to the study's final hypothesis:

H3: The effect of the warning about the health risks of a product is stronger (weaker) for an unpopular (popular) brand.

3 Method

3.1 Study design

The study was arranged in a between-subject design with the two factors *brand* (popular vs. unpopular) and *warning* (warning vs. no warning). The experiment was conducted at the beginning of 2011 in a total of four fourth-grade classes in two elementary schools in a German city. The teachers, school principles and parents had been informed beforehand that children's consumption decisions were to be studied. All those involved consented to the study.

In the experiment, school children aged between nine and eleven were approached individually by the study supervisor in the breaks between lessons and asked to take part in a brief survey. If they agreed, they were randomly assigned to one of the four test conditions and accompanied the test supervisor to a room in the school library. Immediately upon entering the room, before they sat down, the children were offered a drink. The drinks were set up on a table on one side of the room. Every test person had to choose between several bottles of a brand of apple spritzer (apple juice mixed with sparkling mineral water) the pupils were unfamiliar with and, depending on the factor level, several bottles of a popular or unpopular brand of orangeade. The test supervisor offered the drinks with the words: "You can choose a drink. We've got apple spritzer or orangeade". The brand of orangeade was then named. Under the "with warning" condition, the test supervisor added the warning: "But remember; orangeade isn't good for your teeth!" In all the conditions of the experiment, the test supervisor always stood in the same place in the room when she announced the standardized texts. After the children had selected a drink, they joined the test supervisor at the table and were interviewed on various topics. After a few distractor questions on their activity in social networks, the test supervisor asked questions on what drinks they preferred ("What do you like better: apple spritzer or orangeade?"), how they found the popular or unpopular brand ("How good or bad is the brand?"), the taste of the drink ("Do you like the taste of the drink?") and the

importance of brands for the school children ("Is it important for you to use brands?"). After the interview, the children were informed about the test set-up and asked to keep it a secret.

3.2 Establishing the popular and unpopular brand

In order to select the popular and unpopular brands, about two months prior to the main study a survey was conducted in one of the two schools with the same school children who would later take part in the experiment ($n = 34$). The class teacher handed out a questionnaire in which the children were supposed to answer these three questions: (1) "There must be brands or characters on TV you really like. Write all the brands or names you think are great in this box!" (2) "Are there also any brands or characters on TV you really don't like? If so, write them here." (3) "Imagine you've invented a new lemonade or cola. Now you can choose a name for it. Which names or brands would you take from Question 1?" The children also entered their age and gender. In the result, *Adidas* was established as a popular brand and *Barbie* as an unpopular brand. Interestingly, gender did not have a bearing on these results.

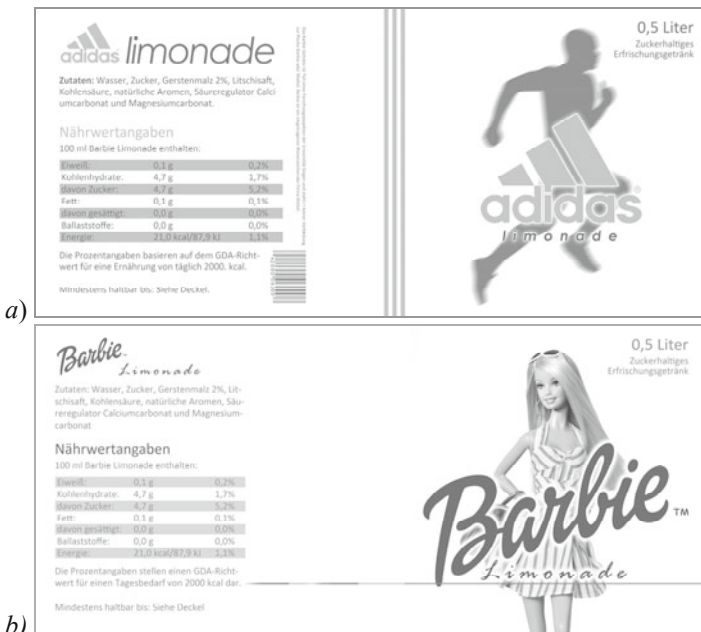


Figure 1: The labels of the a) popular and b) unpopular brand

3.3 *Label pre-test*

In order to make the children's selection decision as realistic as possible, we developed two labels (see Figure 1a and b) and stuck them onto commercially available bottles of orangeade. Neither Adidas nor Barbie sodas are sold in Germany. The bottles we used were not available in the children's region to make sure the children did not recognize the shape of the bottle and associate it with well-known brands. Another pre-test was conducted about a month before the main study in the second school with the same children who would also take part in the experiment later ($n = 39$). One of the two labels was placed in front of each child and the following questions asked: (1) "How pretty or ugly do you think the label is?" (2) "Would you like to try a soda with a label like that on the bottle?" (3) "How good or bad do you think the brand is?" Once again, in all questions the "Adidas soda" we'd developed was rated significant more favorably than the "Barbie soda".

3.4 *Sample of the main study*

In all, 111 test people participated in the study. Three pupils did not want to choose a drink and were excluded from the following analyses. Thus, $N = 108$ test people remained in the sample ($n = 27$ in each condition). The test people were aged between nine and eleven (42% nine, 39% ten and 19% eleven); 52% were female.

4 Results

4.1 *Health-related convictions and the influence of a warning*

We initially expected a warning about the health risks associated with a product to result in the product being judged unhealthier by the children. Indeed, the results show that orangeade is perceived as unhealthier by the children in the "with warning" condition than by those without a warning (cf. Table 1): Whilst 37% of the children without a warning are convinced that orangeade is unhealthy and 20% actually believe it is healthy, the verbal warning that orangeade is bad for the teeth resulted in 68% of the children believing orangeade is unhealthy. In the condition "with warning", only 8% of the children believe soda is healthy. A χ^2 test reveals that this influence is significant ($\chi^2 (df = 2) = 10.11$; $p = .006$).

Interestingly, an influence of the warning about the risks the soda carries for the teeth is also evident for apple spritzer (Table 2): With approximately 10% of the children believing the spritzer was unhealthy, the proportion remained almost

the same in both conditions (with vs. without warning about the risks of the soda). The proportion of children who believe spritzer is healthy in the group that was warned about the risks of the soda is only half as big (40.7% vs. 20%).

Table 1: The influence of the warning on the conviction that orangeade is healthy

	<i>Orangeade is healthy</i>	<i>Orangeade is neither healthy nor unhealthy</i>	<i>Orangeade is unhealthy</i>	<i>Basis (100%)</i>
<i>without warning</i>	n = 10 (19.6%)	n = 22 (43.1%)	n = 19 (37.3%)	n = 41
<i>with warning</i>	n = 4 (7.8%)	n = 12 (23.5%)	n = 35 (68.6%)	n = 51

A χ^2 test shows that the effect of the warning on the convictions regarding the spritzer is statistically significant (χ^2 ($df = 2$) = 6.15; $p = .046$). Here, it is fair to assume that only the warning about the health risks of a drink could have led the children to become generally more skeptical about the health-related properties of sugary drinks. All in all, the results support our suppositions in H1.

Table 2: The influence of the warning on the conviction that apple spritzer is healthy

	<i>Apple spritzer is healthy</i>	<i>Apple spritzer is neither healthy nor unhealthy</i>	<i>Apple spritzer is unhealthy</i>	<i>Basis (100%)</i>
<i>without warning</i>	n = 22 (40.7%)	n = 27 (50%)	n = 5 (9.3%)	n = 54
<i>with warning</i>	n = 10 (18.9%)	n = 37 (69.8%)	n = 6 (11.3%)	n = 53

4.2 Brand selection and the influence of a warning

The question as to whether the influence of the warning also extends to the choice of drink remains. For this purpose, we recorded how many test people in the respective test conditions opted for the spritzer or the orangeade. The results are presented in Table 3 irrespective of the soda brand. Evidently, without a warning 41% of the school children choose the orangeade; under the condition with a warning, the figure is only 22%. These differences between the groups are statistically significant (χ^2 ($df = 1$) = 4.29; $p = .038$). Evidently, a warning induces children, as H2 suggests, to reach for an alternative that is perceived as healthy.

Table 3: The influence of the warning on the drink selected

	Orangeade selected	Apple spritzer selected	Basis (100%)
without warning	n = 22 (40.7%)	n = 32 (59.3%)	n = 54
with warning	n = 12 (22.2%)	n = 42 (77.8%)	n = 54

Moreover, we expected this effect to be weaker for popular brands than unpopular brands. The results in Table 4 show that 52% of the children choose the popular brand Adidas in the condition without a warning.

Table 4: The influence of the warning on the drink

		Orangeade selected	Apple spritzer selected	Basis (100%)
Popular brand: Adidas	without warning	n = 14 (51.9%)	n = 13 (48.1%)	n = 27
	with warning	n = 10 (37.0%)	n = 17 (63.0%)	n = 27
Unpopular brand: Barbie	without warning	n = 8 (29.6%)	n = 19 (70.4%)	n = 27
	with warning	n = 2 (7.4%)	n = 25 (92.6%)	n = 27

With a warning, this figure falls to 37%. The influence of the warning here is statistically insignificant ($\chi^2 (df = 2) = 1.2$; $p = .273$; cramer's $v = .149$). 30% of the pupils opted for the more unpopular brand Barbie without a warning. With a warning, the value drops to 7%. The influence of the warning here is statistically significant ($\chi^2 (df = 2) = 4.43$ $p = .036$; cramer's $v = .286$). In other words, in our experiment 29% fewer pupils opted for the popular Adidas soda due to the warning (four out of 14 pupils), whilst 75% fewer pupils opted for the Barbie soda due to the warning (six out of eight pupils). This means the warning really did have a stronger impact for the more unpopular brand than for the more popular brand. The results therefore support hypothesis H3.

5 Discussion and implications

The present study ought to provide initial insights into how warnings about health risks of food and beverages have an impact on the consumption decision of school children between the ages of nine and eleven. Moreover, the influence of the food or drink brand on this effect is analyzed.

Our results prove that warnings have an influence on what drinks children consume. Interestingly, the effect of the warnings turned out to be much greater for less popular brands than for the popular brands. The warning in our study did not have a significant influence on the selection of a popular brand. In other words, warnings about health risks can play a major role for children. For popular brands, however, children are evidently more inclined to “turn a deaf ear” to warnings. As a result, the manufacturers of such brand products have a particular responsibility: If warnings even have little or no impact on consumption shortly before these products are consumed, these products should contain fewer health risks in the first place. At the same time, it must be in the interests of society to find other forms of health education that protect children against the health hazards that can also go hand in hand with popular brands in the long term. Furthermore, we cannot make any assumptions in this study as to what children would decide in the long run: In our study, the children were supposed to try an unknown product so the curiosity could have been predominant factor for the popular brand; this may have less of an impact in subsequent contacts.

Interestingly, the children in our study were not explicitly aware of the influence of the brands. In response to the question as to what role brands play in their decisions, 71% of the test people said that brands were not important for them. Incidentally, this proportion was considerably higher among the oldest children in our sample, the eleven year-olds (73% nine years old, 76% ten years old and 57% eleven years old). This result already shows how quickly the consumer socialization between the age groups can take place. The results of this study can therefore only be interpreted in due consideration of the socio-cultural environment and in the age groups examined. A further limitation of this study lies in the very narrow definition of the warnings (the test supervisor gives a verbal warning) and the fact it was conducted in the school environment.

Even though this study is not without its limitations, the results show how important and productive a detailed examination of child behavior in consumption-related contexts can be. If nothing else, the still limited cognitive abilities of the children and their lack of experience make them especially vulnerable market participants.

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Communicating Corporate Social Responsibility: Empty Promises or Smart Strategy?

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1 Introduction and purpose of the study

Today many companies communicate their Corporate Social Responsibility (CSR) activities via huge advertising campaigns, demonstrating to be a “good company” to their stakeholder groups. For instance, Pepsi’s “Refresh Project” gained attention when the company passed up running a commercial during the Super Bowl 2010 and spend the millions saved to a CSR campaign. In grants every month they spend \$1.3 million to fund public-selected ideas which will “refresh our world” (Forbes, 2010). Coca-Cola invests lots of money in CSR campaigns, for example they included on their iconic red cans a seasonal white polar bear in order to raise awareness and money for the World Wildlife Fond. Furthermore, they sponsored the so-called ‘red dress campaign’ with Heidi Klum for women’s heart health (Diet Coke, 2012). Moreover, almost every automotive manufacturer invests in “blue efficiency” (e.g., Volkswagen’s “Golf Blue-e-motion”). By doing so, companies hope to improve their corporate image and increase consumer purchase intentions as well as their willingness to pay more money for the company’s products.

Consequently, CSR has become a new consumer aspect, termed as a new buzzword (Greenfield, 2004). The hype in CSR has led to an increase in consumer expectations in the social behaviour of corporate businesses and has become an influence on consumers buying intentions (Baron, 2001; Brown and Dacin, 1997; Sen and Bhattacharya, 2001; Klein and Dawar, 2004; Sen et al., 2006).

However, consumers are confronted with newspaper reports about the waste of natural resources, environmental pollution, climate change, child labour, corporate affairs as well as the impersonality of multinational businesses. As nearly all of these issues are reported by modern communication media, consumers pay attention to such negative company information (Balabanis et al., 1998; Dawkins and Lewis, 2003). Ethical topics are of high interests for media and publicity (Porter and Kramer, 2006). Consequently, stakeholder groups are interested in information on whether and how companies act responsibly, which is available via newspapers, internet or other types of media. If there is a com-

pany paying “starvation wages” like Nike’s sweatshop in Malaysia (Channel 7, 2008), or if manufacturers pollute the environment in an irresponsible way such news go round the world. For instance, Greenpeace informed about Mattel’s packaging suppliers being responsible for rainforest deforestation (Greenpeace, 2011). Also regarding other companies such as Nestlé, there have been reports about the use of palm oil which was damaging the Indonesian rainforest (Greenpeace, 2010).

Hence, consumers have begun to be more critical of companies’ social or environmental advertisements. They look critically to see if a company, which advertises CSR, is really doing well. For instance, BP invested lots of money on CSR communication, indicating that the company cares for social and environmental needs of their stakeholder groups. Even in independent CSR rankings, BP has been evaluated as “doing good” (e.g., Good Company Ranking, Kirchhoff, 2009). However, then the BP crisis happened: BP’s Deep-water Horizon accidental oil spill was the largest accidental marine oil spill in history. The spill flowed unabated for three months and had released about 4.9 million barrels (780,000 m³) of crude oil. This accident caused extensive damage to wildlife habitats and industries, like fishing or tourism (Wall Street Journal, 2010). As a result of such incidents, many consumers lost their trust in companies’ behaviour. The public consciousness of ecological and social issues has been increased (Maignan and Ferrell, 2004; Freeman, 2006; Campell, 2007).

The purpose of this paper is to investigate what happens to consumers’ perceptions if journalists or social organisations look behind companies’ activities and report that those don’t act like they have advertised to consumers. Are consumers going to punish such companies even more if they have been emphasized on social or environmental issues in their communication to stakeholder groups before such a crisis? Hence, our study focuses on the question; is CSR communication able to protect a company from a crisis?

2 Literature review

2.1 Positive and negative effects of corporate social responsibility

Within the literature, companies which have been advertised on social and/or environmental issues are evaluated well by consumers and the public (e.g., Mohr et al., 2001; Maignan and Ferrell, 2004). In several studies it has been argued that CSR engagement will increase companies’ image from the consumer’s point of view and in the long run will also have a positive financial impact on the company (Margolis and Walsh, 2003; McKinsey, 2006; Campell, 2007; Du et al., 2010). Looking at 109 different studies about companies caring

for social issues, Margolis and Walsh (2003) discovered 54 studies with positive correlations between profit and the CSR behaviour of a company while in seven studies they report a negative correlation, and in 48 the results are unclear.

Furthermore, Creyer and Ross (1997) demonstrated that consumers were willing to pay a higher price for products that were responsibly produced. They were also willing to pay a higher price for brands and companies which donate some revenue through Corporate Responsible Marketing (CRM). However, consumers are only willing to pay a price premium of about 5-10% (Coddington, 1990; Trudel and Cotte, 2009). Another effect of CSR communication is Word of Mouth. Consumers will talk about socially responsible companies or recommend the brand or the product, if their activities are worth talking about (Bhattacharya and Sen, 2004; Thomas et al., 2011).

In various studies several authors discerned out that consumers support positive changing business attitudes in general (Brown and Dacin, 1997; Nan and Heo, 2007; Sen et al., 2006). But as long as customers do not trust corporate communications about their sense of responsibility they won't reward their new behaviour (Yoon et al., 2006). The more responsible and reliable business organizations are, the merrier their reputation (Fombrun, 1996). Thus, whether consumers believe in CSR activities is strongly dependent on trust. On the one hand, companies could potentially build up the trust of their stakeholders if they send credible signals to their consumers. On the other hand, if the companies' communications are not perceived as credible, negative consequences could occur, which could be even worse than no CSR advertising activity. For instance Yoon et al. (2006) showed that a company's image is going to be improved if consumers attribute CSR activities with sincere motives. But if motives are being perceived as equivocal or insincere, then a company's image decreases. This is the so-called 'backfire effect' which is even worse, if CSR has been reported from the company before the negative incident, because a company as source is perceived as less credible than a neutral source (Yoon et al., 2006).

Another important factor about corporate credibility is the fit¹ between the company and their CSR activity (Bhattacharya and Sen, 2004; Brammer and Pavelin, 2006). A low fit increases extrinsic (profit-orientated) motives of companies from the consumer's point of view (Du et al., 2010). Even a too strong demonstration of CSR can be counterproductive and can prejudice consumer perception of corporate reliability by creating some greed of 'gain image' (Dawkins and Lewis, 2003; Vlachos et al., 2009; Du et al., 2010). If consumers are not convinced that a company really engages in CSR, but just follows a "mar-

¹ Fit is the perceived context between CSR activity and product, corporate image, corporate positioning and/or target group (Varadajan and Menon, 1988).

keting trend”, then consumers are going to penalize such “greenwashing” or “window-dressing” and decrease company’s evaluation (Bhattacharya and Sen, 2004).

Regarding to Dacin and Brown (1997), the corporate image can be divided into corporate ability (CA) and corporate social responsibility (CSR) associations. CA associations term the capabilities for producing products, while CSR associations describes if the company is socially responsible or not. Dacin and Brown’s research shows that the relationship between CA and consumer product responses is stronger than those between CSR and consumer responses. CSR influences the attitude towards company image and in that way has an impact on consumer’s attitude towards company’s products. However, it does not affect product quality in a direct way (Dacin and Brown, 1997).

2.2 *Derivation of hypotheses*

Corporate failure is more tolerated by customers if they have some emotional bonding to a brand or company. Consumers with high emotional bondings are more likely to forgive corporates failures or scandals (Fournier, 1998; Vlachos, 2012). Some researchers assume that such a potential reputation or reliability advantage through CSR activities are especially helpful in times of a crisis or a scandal (Fombrun et al., 2000; Swaen and Vanhamme, 2005). Thus, corporations try to create a reputation-tank of reliability, benevolence and courtesy (Bhattacharya and Sen, 2004; Klein and Dawar, 2004). This moral credit should minimise reputation loss in case of scandals or negative company reports (Fombrun et al., 2000; Swaen and Vanhamme, 2005). According to Minor and Morgan such “insurance” is effective if corporate activities are enduring and companies are consistent with their responsible behaviour and do not balance good with bad behaviour (Minor and Morgan, 2011). Hence, we assume that in case of a company crisis, a company, which has advertised in CSR, will not be as vulnerable as companies who have not. Quite contrary, we assume that such a “moral credit” should lead to an improved attitude towards the company, if it has been communicating CSR before the crisis. Furthermore, it has been shown that there is a superiority effect of publicity over advertising for unknown brands (Eisend and Küster, 2011) as it seems to be more credible for consumers. In addition to this argumentation, newspaper reports are generally written from an independent source, which increases the credibility compared to advertising from the company itself (Hovland, 1951). Thus, we adopt that the approval ratings of a company after a crisis will be evaluated highest, if consumers are informed about the company’s CSR activities via PR rather than advertising. However, the attitude is worst without any kind of CSR.

H1: After a company's crisis, consumers evaluate the company most favourable, if they were informed about CSR via PR, rather than advertising, and worst without CSR.

If consumers have built up an emotional bond to companies, they tend to forgive corporate failures (Fournier, 1998; Vlachos, 2012). Hence, we assume that in case of a company's failure, consumers will be more willing to forgive the company rather, if the company had invested in CSR before the crisis. As the source of information (independent source of company) has an impact on the message itself (Hovland, 1951), we assume that in case of a company's failure, consumers would report greater sympathy towards the company if CSR has been communicated via (independent) press article than by advertising from the company itself. But we assume that the latter case will be perceived even higher than without any CSR before the company's crisis.

H2: After a company's crisis, consumers report greater sympathy toward the company best, if they were informed about CSR via PR, followed by advertising and no CSR.

Although consumers honour CSR, there is only little evidence that CSR has also an effect on Corporate Ability, which consumers connect to the quality of the company's product (Dacin and Brown, 1997). Hence, we do not believe that in case of a crisis, CSR will have an impact on the evaluation of the quality of company's products.

H3: After a company's crisis, consumers evaluate the quality of company's products similarly, if they were informed about CSR via PR, advertising or no CSR.

3 Experiment

3.1 Experimental design and development

The objective of this experiment is to analyse if CSR activities of a company are able to protect a company in case of a crisis or if consumer's perceptions will even worse. Furthermore, we would like to differentiate, if a CSR advertisement or if a more general PR article from an independent source about company's CSR will offer greater protection from a crisis. In addition to this, we consider also the condition that the company is not associated with CSR. Hence, our experiment consist of a 2 (CSR Advertising / CSR PR article) x 1 between subject design with one control group. In the study we randomly exposed the participants to a CSR advertisement, a PR article from a credible newspaper or no

stimulus, depending on their group. After that, subjects in all conditions were confronted with a negative PR article, which reported about a company's failure in a social and environmental issue. The source of the article was a credible, independent newspaper. Doing this, we created the case of a company's crisis.

As product category fruit juice was chosen, because it was considered as important and relevant for the target group, confirmed by a preliminary study. To achieve high internal validity, subjects were given to a fictitious company name, which we established in a preliminary study. We assured, that the fictitious company name did not evoke specific associations and that the product category was important and relevant for the respondents. Within the study 115 subjects participated within the study (aged 24 on average, 49.6% female).

The dependent variables, attitude towards the company ("good/bad"), the sympathy towards the company (dislike very much/like very much) as well as the quality of the company's products ("poor/high quality") (Gardner et al., 1985) were captured by seven point Likert scales. Moreover, as control variables we asked the respondents about their product involvement (Zaichkowsky, 1985) as well as their situational involvement ("low/high attention", Menon and Kahn, 2003).

3.2 *Experimental results*

Within our first hypotheses, we assumed that a company could be protected from a crisis, if its CSR activities have been reported from the newspaper before the crisis, followed by CSR advertising and no CSR. Results from an ANOVA showed, that the attitude towards the company is significantly different between the control group ($M=3.50$; $SD=1.21$), the PR-group ($M=2.77$; $SD=1.25$) and the advertisement-group ($M=2.63$; $SD=1.30$) ($F_{3,112}=5.098$, $p<0.01$). Testing our hypotheses by running a Turkey HSD Post hoc test, we observed that the attitude towards the company was significantly better in the control group than in the advertising condition ($p<0.01$) and in the PR condition ($p<0.05$) (Table 1). However, there was no difference between the advertising condition and the PR condition ($p>0.05$). Hence, we have to reject our first hypotheses.

In our second hypotheses, we also assumed that the sympathy towards the company should be rated higher from those respondents who firstly have been confronted with the PR article, followed by advertising and no CSR. Running a one way ANOVA, we only could discover weak significant differences between the three groups (advertising condition: $M=2.68$; $SD=1.45$; PR condition: $M=2.67$; $SD=1.28$; control group: $M=3.31$; $SD=1.22$; $F_{3,112}=2.785$, $p<0.1$). Comparing the groups to each other showed, that there are no differences be-

tween PR condition and advertising condition ($p > 0.05$), nor between PR condition and control group ($p > 0.05$) (Table 2). However, we found weak differences between advertising condition and control group ($p < 0.1$). Consequently, we cannot confirm H2.

Contrary to our expectations above, we found no significant differences between our experimental groups and the control group regarding the quality of company's products. However, opposite to our assumption, we observed that there are significant differences between the groups (advertising condition: $M = 2.82$; $SD = 1.35$; PR condition: $M = 2.82$; $SD = 1.30$; control group: $M = 3.60$; $SD = 0.86$; $F_{3,106} = 4.495$, $p < 0.05$). Comparisons between the individual groups indicated that evaluations of the control group have been significant better than those of both, the PR group ($p < 0.05$) and the advertising group ($p < 0.05$), but not between PR and advertising groups ($p > 0.05$) (Table 3). Thus, we have to reject also H3.

4 Discussion and implications

It is often argued within the literature that a company is able to build up a "moral credit" when doing CSR, which is going to protect or help the company in case of a crisis (e.g., Fombrun et al., 2000, Klein and Dawar, 2004, Swaen and Vanhamme, 2005). However, our results do not support this prediction. We cannot find any impact of a "moral credit". If the company has communicated CSR or if a positive PR article has been published before the company's crisis, we could not find an improvement of attitude or sympathy towards the company or the quality of company's products after the crisis. Quite contrary, we could observe that if respondents did not get any information about CSR before the crisis, evaluations concerning the attitude as well as company's product quality have been significantly better than in the experimental groups. In addition to this, we found weak significance regarding the sympathy towards the company between control group and CSR advertisement group. Consequently, there has been a 'backfire effect', as Yoon et al. (2006) reported. Due to the CSR information, the consumer's evaluations decrease, regardless if they get the CSR information from the company itself or from an independent source. Hence, an independent newspaper report cannot create a buffer in case of a company's crisis.

From Dacin and Brown's research, it is known, that CSR activities increase a company's CSR-associations and consumers adhere to a corporate brand. However, such activities do not lead necessarily to an increased perceived product quality (Dacin and Brown, 1997). In our study we confronted the subjects with a company's crisis and could investigate negative consequences for perceived quality of a company's product. Therefore, companies caring for consumers' perception of the company's quality should take such negative consequences

into account, because while CSR has little impact on CA, it has a negative impact in case of crisis.

In our study, we compared consequences of CSR in the case of a company's crisis, depending on the type of CSR communication: CSR advertising or an independent PR article. However, an important question for further research is how a combination of both, an advertisement from the company and an independent PR report, would influence consumers' perceptions. Furthermore, we did not observe long term effects of CSR communication and a scandal, which we would like to inspire for future research.

As a practical implication we would like to emphasize that companies should not solely keep an eye on the positive effects of CSR communication, following a huge hype in the market. Marketers should not have overreliance on the idea of creating a "moral credit", which is often sold by advertising agencies or brand consultants. Rather, marketers should focus on the main aims of their CSR activities. Due to huge CSR advertising campaigns consumers are increasingly sensitised which could result in negative spill over effects. Sometimes it is smarter not to communicate CSR than following simply a "marketing trend" as most competitors do.

5 References

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6 Appendix

(Name of well-known credible German newspaper)

Sonntag, 21.11.2010
Nr. 215 / Seite 19

Handeln Unternehmen verantwortlich? Wir gratulieren [brand name]

[brand name] hat es geschafft: Profit machen und verantwortliches Handeln muss kein Widerspruch sein! Als einem der wenigen Unternehmen seiner Branche gelingt es [brand name], ökologische und soziale Verantwortung in die täglichen Arbeitsabläufe zu integrieren. Und das schon seit über 10 Jahren! Dabei geht das Engagement von [brand name] weit über das gesetzliche Standardmaß hinaus. So unterstützt [brand name] ökologische und soziale Projekte lokal und weltweit durch freigestellte Mitarbeiter: Mitarbeiter werden bezahlt, um ökologische und soziale Projekte durchzuführen. Darüber hinaus wandern 10 Prozent des Jahresumsatzes in solche gemeinnützigen Projekte.

Gleichzeitig achtet [brand name] darauf, wertvolle Ressourcen nicht unnötig zu verschwenden, beispielsweise durch einen geringeren Energieverbrauch in der Produktion und effizientere Ressourcenverarbeitung. Somit rechtfertigt das Unternehmen seine Corporate Responsibility auch ökonomisch, indem Kosten gespart werden und man mit Ressourcen gewissenhaft umgeht.

Nicht nur im eigenen Unternehmen lebt [brand name]

seine verantwortungsvolle Linie, sondern auch innerhalb der gesamten Wertschöpfungskette bis hin zu den Zulieferbetrieben. So kündigte das Unternehmen z.B. sämtliche Verträge mit Zulieferern, wenn diese unnötig die Umwelt verschmutzen, Waldabholzung betreiben oder Kinderarbeit und Hungerlöhne zulassen. Man will Produkte, die nicht auf Kosten der Mitarbeiter oder der Umwelt produziert werden, sondern die Belange verschiedener Anspruchsgruppen und deren Bedürfnisse berücksichtigen.

Für seine Produkte bekam das Unternehmen [brand name] daher auch das Umweltzeichen des „Blauen Engels“ verliehen. Seit 1978 setzt dieses Siegel Maßstäbe für umweltfreundliche Produkte und Dienstleistungen, die von einer unabhängigen Jury nach definierten Kriterien beschlossen werden. Mit dem Blauen Engel werden Unternehmen für ihr Engagement im Umweltschutz belohnt. Und selbst Greenpeace gratulierte [brand name] jüngst zu ihrem vorbildlichen Verhalten.

Darüber hinaus setzt das Unternehmen sich für seine Mitarbeiter und deren Belange ein. Hierfür wurde es durch den Fair-Company-Award als besonders familienfreundlich ausgezeichnet.

Figure 1: PR article with headline: “Do companies act responsible? We congratulate (name of company)!”



Figure 2: Company's CSR advertisement with headline: "We only use organic fruits for our orange juice in a recycled bottle."

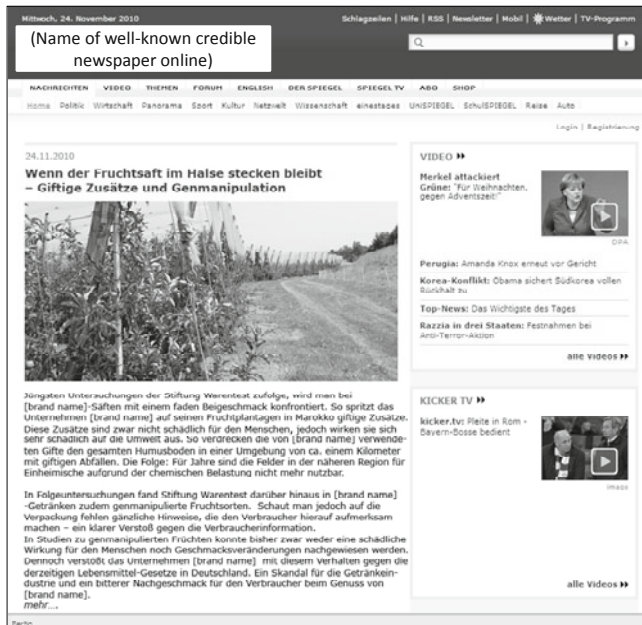


Figure 3: Negative PR report with headline: "Fruit juice getting stuck in your throat. Noxious ingredients and genetic engineering".

Table 1: Post hoc tests concerning the attitude towards the company (Turkey HSD)

Comparison of Groups	Mean Difference	Std. Error	Sig.	95% Confidence Interval	
				Lower Bound	Upper Bound
Advertising vs. PR	.138	.286	.880	-.54	.82
Advertising vs. Control Group	-.731	.290	.035	-1.42	-.04
PR versus Control Group	-.868	.291	.010	-1.56	-.18

Table 2: Post hoc tests concerning the sympathy towards the company (Turkey HSD)

Comparison of Groups	Mean Difference	Std. Error	Sig.	95% Confidence Interval	
				Lower Bound	Upper Bound
Advertising vs. PR	-.018	.302	.998	-.73	.70
Advertising vs. Control Group	-.639	.306	.097	-1.37	.09
PR versus Control Group	-.621	.308	.112	-1.35	.11

Table 3: Post hoc tests concerning the quality of company's products (Turkey HSD)

Comparison of Groups	Mean Difference	Std. Error	Sig.	95% Confidence Interval	
				Lower Bound	Upper Bound
Advertising vs. PR	.005	.276	1.000	-.65	.66
Advertising vs. Control Group	-.779	.294	.025	-1.48	-.08
PR versus Control Group	-.784	.296	.025	-1.49	-.08

Part III

Social Media, Online and Mobile Advertising

Social Media DNA: How Brand Characteristics Shape COBRAs

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1 Introduction

As online platforms such as Facebook, Twitter, and YouTube have greatly expanded people's opportunities to communicate with each other about brands the social media phenomenon has established a new dynamic in the area of marketing communications (Dholakia and Durham, 2010; Kaplan and Haenlein, 2010). Consumers have become a brand's most important persuasion vehicle. Instead of passively receiving marketer-generated content consumers in social media era actively advocate (or, for that matter, thrash) brands by engaging in online activities centred around brands and brand-related content. For instance, they share the videos that other consumers have uploaded on Absolut Vodka's YouTube channel, talk with other consumers about IKEA on Twitter, or upload pictures of their newly purchased Converse sneakers to Facebook, where their new pride is their peers to see and awe upon.

The pervasiveness of such online brand-related activities has, as is often noted, led to a loss of brand control by companies (Cova and Dallı, 2009; Muñiz and Schau, 2007). While there is on-going and lively debate over whether this is either a positive or a negative development, and over how companies should (not) deal with it, the impact of consumer's online brand-related activities (hereafter: COBRAs; Muntinga et al., 2011) on consumer behaviour is unquestionably stronger than the impact traditional marketing communication activities (Trusov et al., 2009; Villanueva et al., 2008). Despite the fact that much of social media's role in the marketing-communication mix remains to be clarified, it is crystal clear that for advertisers and marketing managers that wish to profit from social media's value, the challenge is to encourage their customers to engage in COBRAs (cf. Christodoulides and Jevons, 2011; Simmons, 2008).

A starting point for encouraging COBRAs is gaining an understanding of why consumers behave the way they do – why does someone upload brand-related videos or talk about a brand on Facebook? An increasing amount of academic research has accumulated to shed light on the motivational determinants of COBRAs (e.g., Muntinga et al., 2011; Wiertz and De Ruyter, 2009). As a result, it has become possible for marketers to guide a particular behaviour based on a consumer's motivations underlying this behavior. For instance, peer recognition is an important motivation for uploading brand-related content. Thus, a marketer may wish to build an interface on his brand's selected social media platform that allows consumers to comment on other consumers' user-generated brand-related content.

Knowledge of consumer motivations, combined with other consumer characteristics, increasingly allows advertisers and marketing practitioners to effectively encourage COBRAs. Yet while there is ample understanding of the consumer-side antecedents of COBRAs, practitioners and academics alike lack an understanding of the function of another potentially important antecedent of COBRAs: the brand. The authors' participant observation of several social media platforms suggests that some brands tend to elicit more COBRAs than others. For instance, consumers seem keen to engage with brands such as Starbucks and Puma, but brands such as BIC and Mercedes-Benz appear largely ignored by the social media sphere. Despite the adoption of social media in marketing campaigns for many, many brands, little is known about why some brands attract more, and perhaps different, COBRAs than others. Could it be something about a brand itself that shapes how active consumers are with this brand? To date it is difficult to say which, if any, brand attributes contribute to a brand's social media success, and consequently, in which direction marketers should then aim to cultivate their brand's image should they want to stimulate COBRAs. The present contribution therefore sheds light on the characteristics of social media brands: do they share a particular "DNA"?

The authors here report the findings of two consecutive studies into the characteristics of social media brands. The first study focuses on the brand's functional attributes; the second on the brand's symbolic attributes. In doing so, the authors provide a clearer picture of the context of COBRAs. The next paragraph contains a review of relevant literature. The two studies are explained; findings are reported separately. The authors discuss the findings of both studies in a distinct "general discussion" section, and close by offering practical implications as to how to improve the effectiveness of their social media strategy.

2 Review of relevant literature

2.1 *The COBRA-concept*

People's brand-related behaviors on social media are numerous and dispersed, ranging from passive activities such as reading book reviews on websites such as Amazon.com to very active behaviors such as uploading self-generated advertisements to YouTube. Several academic studies have made valuable attempts to merge the range of such activities under one umbrella concept (e.g., Kozinets, 1999; Cova and Dalli, 2009), but most have only partially succeeded in describing the phenomenon. For instance, a concept such as Godes and colleagues' (2005) "social interactions" (SIs) captures the spirit of the social media phenomenon. However, in focusing solely on consumer-to-consumer interactions on the web, it fails to incorporate other behaviors that are not so much consumer-to-consumer, but consumer-to-message and consumer-to-brand communications – for instance creating brand-related videos and uploading them to YouTube.

A recent behavioral construct that does effectively deal with this variety of brand-related behaviors is the notion of consumers' online brand-related activities, or COBRAs (Muntinga et al., 2011). A unifying framework for online brand-related activity, the COBRA concept is deliberately broadly marked out to cover all of such activities on social media. That is, it covers consumer-to-consumer, consumer-to-message, and consumer-to-brand communications. Moreover, it includes a gradient of consumers' activeness with brand-related content, as it differentiates between the notions of consuming, contributing to, and creating brand-related content (cf. Hutton and Fosdick, 2011).

As a result of this differentiation, the COBRA-concept covers a broad range of active-to-passive online brand-related activities. Practitioners and academics alike are able to understand the broader behavioral context (i.e., how a single brand-related activity relates to the range of other brand-related activities) as well as the particular ways in which consumers engage with a brand in a social media environment. Importantly, for the sake of the present contribution's purposes, it allows the benefit of differentiating brand characteristics based on relative consumer-brand activeness. For example, if certain brands tend to engage people in consuming brand-related content and others tend to engage people in creating brand-related content; what role do a brand's characteristics play therein?

2.2 *Brand characteristics and COBRAs*

Several authors (Aral, 2010; van Doorn et al., 2010) suggest that some brands may, by definition, be more receptive to COBRAs, but to date little empirical evidence exists to support this idea. In a recent explorative study, Berger and Schwartz (2011) investigate the characteristics that make products talked about online. They find that the more interesting and publicly visible (i.e., more top of mind) a product is, the more immediate (interesting; visible) and prolonged (visible) online word-of-mouth that product gets. A rather obvious finding, Berger and Schwartz' study warrants a more detailed and nuanced insight in the characteristics that make brands more – or less – talked about, viewed, created; more engaged with (cf. van Doorn et al., 2010) online. In this contribution, the authors therefore differentiate between two roles a brand may play in a consumer's life: a functional (represented by and measured using Rossiter, Percy, and Donovan's (1993) advertising planning grid containing the notions brand involvement and brand orientation), or a symbolic (represented by brand personality; Aaker, 1997).

2.2.1 *Consumer involvement and brand functionality*

Consumer involvement with a brand (high versus low) may play a significant role in the shaping of brand-related social media use. It is generally defined as "a person's perceived relevance of the object based on inherent needs, values, and interests" (Zaichkowsky, 1985, p. 342) and thus varies depending on both the consumer and the brand. Studies have linked high (low) involvement with a brand to increased (decreased) purchase intentions (Wu et al., 2011) and active (passive) advertising information processing (Laurent and Kapferer, 1985). Similarly, it has been suggested – but not tested – that brands that highly involve their consumers may enjoy increased online brand-related activity. Shang et al. (2006) propose that highly involved consumers may participate more actively in virtual brand communities than their less-involved counterparts.

Also not academically verified as an antecedent of COBRAs is a brand's function as a distinctive characteristic of social media brands. Brands can be functionally oriented towards information (e.g., a brand of computers) or transformation (e.g., a brand of video games). In a study on virtual brand community participation, Shang et al. (2006) investigated the effects of different participatory activities within a virtual community. While they did not focus on the difference between information versus transformation-orientation, in their discussion, Shang and colleagues posit that virtual communities centred on utilitarian brands may show different patterns of activity than, for instance, virtual communities centred on brands that have a transformational orientation. Accordingly, they expect that that participatory activities in a virtual brand community may

differ according to the subject brand's orientation towards information or transformation.

To conclude, although theoretically a solid case can be made that consumer involvement and a brand's functional differentiation may play a role in the execution of COBRAs, little empirical academic support exists to support these ideas. Therefore a research question is formulated:

RQ1: What is the role of consumer involvement and a brand's functional orientation in the formation of COBRAs?

2.2.2 Brand personality

Opposing a brand's tangible characteristics (e.g., "useful" and "reliable") a brand's symbolic characteristics concerns its intangible attributes (e.g., Replay portrays its apparel as "fresh," "uncooked," "harsh," and "naked"). A brand's symbolic function is for many, if not most consumers more important than its actual function (e.g., Creusen and Schoormans, 2005). There is some evidence that such symbolic characteristics are indicative of how brands differ with regard to COBRAs. Muñiz and Schau (2007) for instance argue that a brand's symbolic characteristics are a crucial part of that brand's virtual community dynamics. Consumers engage with a brand because it has a certain connotation, because a brand manifests itself with attributes that are appealing to certain consumers. Consumers join a community because of the meaning that is offered by the brand, and will even build on it to create new, idiosyncratic meanings (see also Berthon et al., 2009; Campbell et al., 2011). Discussing the value of virtual communities for consumer-brand relationship development, Escalas and Bettman (2009) suggest that brands with a meaning that is important to a consumer's self-perceptions engender more participatory behavior in virtual brand communities (cf. Christodoulides et al., 2012). Further, Rood and Bruckman (2009) investigate how participation dynamics in virtual brand communities intersects with brand its symbolic characteristics. For instance, the Campbell's Kitchen brand community has limited entry barriers, which reflects the brand's "welcoming" personality. Should the community have had rigid entry barriers, it would have undoubtedly put off some of those consumers that especially value this personal-trait

Brand personality is a reflection of a brand's symbolic characteristics. It is defined as the "set of human characteristics associated with a brand" (Aaker, 1997, p. 347) and a key differentiator between brands (Aaker, 1997; Keller, 1993), is considered a valid way to describe how individuals negotiate symbolic brand meanings within virtual environments (O'Guinn and Muñiz, 2009). Indeed, it is believed particularly relevant in environments that lack physical mate-

riality (Fournier, 1998). Supporting this line of thought, Pitt et al. (2006) suggest that online or “open source” (OS) brands such as Amazon.com and Linux may well differ in terms of personality from brands that are built offline, and only later brought online. Social media is such a “nonmaterial” environment in which personality may thus be a particularly relevant way of distinguishing between brands. Thus, if there are differences between brands with regard to their ability to elicit consumers’ online brand-related activities (COBRAs), these are likely to be reflected in a brand’s personality.

However, this all still leaves the authors unaware as to the actual personality traits that induce specific COBRAs. Because there is no empirical evidence to support any single brand personality trait (e.g., wholesome, spirited, intelligent, charming, tough) as relevant for COBRAs, a second research question is formulated:

RQ2: What brand personality traits and dimensions are relevant for COBRAs?

2.3 Social networking sites as platform for COBRAs

Social networking sites (SNSs) such as Facebook, Bebo, Google Plus, MySpace and Hyves are being used by billions of people across the globe and have accordingly become “the key feature of the social media landscape” (Hutton and Fosdick, 2011, p. 1). As any successful medium entering the media sphere, advertisers have quickly included SNSs in their media channel consideration set. Due to their reach within many a brand’s target audience and their interactive features, companies regard SNSs among the most important tools for developing marketing and advertising activities (Moran and Gossieaux, 2010).

On many SNSs, consumers and brands have initiated brand profiles, which can be equated with online brand communities (Trusov et al., 2009; Zaglia and Maier, 2011). Most companies use their brand’s profiles on SNS as the heart of their internet-based marketing activities (and, increasingly, as an add-on to their offline marketing activities, as evidenced by the fact that companies such as the retailers JCPenney and Urban Outfitters have recently started Facebook stores). For instance, they may entertain their consumers with “only on Facebook” content and special offerings, or invite them to review products. Whether encouraged by brands or on their own initiative, consumers use brand profiles for a wide variety of passive-to-active brand-related activities. This matches perfectly with the COBRA-concept and for that reason, for both studies mentioned in this contribution, brand profiles on SNSs are used for gaining answers to the research questions. In the following sections, the authors describe two consecutive

studies: the first study deals with research question 1; the second study deals with research question 2.

3 Study 1

3.1 Method

For Study 1, the authors made use of brand profiles on the SNS Hyves, which, following SNS-giant Facebook, is currently the second-largest SNS in the Netherlands. Brand profiles were solicited based on their distribution over the advertising planning grid developed by Rossiter, Percy, and Donovan (1991). This grid organizes brands on two axes: up-down corresponds with “high involvement” and “low involvement;” left-right corresponds with “informational” and “transformational.” The grid, commonly called the “Rossiter-Percy” grid, has been academically verified (Smit et al., 2007), and has been employed by various academic studies for a similar brand selection procedure (e.g., Dahlén et al., 2003; Govers and Schoormans, 2005).

From a list of 500 largest brand profiles on Hyves that was provided by Hyves, initially only the profiles with over 10.000 members were selected. From the remaining 87 profiles, only those were selected that were actual product and service brands: profiles of TV shows, sports clubs, and celebrities were excluded. The remaining 53 profiles were divided over the Rossiter-Percy grid. Next, the administrators of a random selection of these profiles were approached. The amount of brands in each quadrant was kept in proportion. Eventually, the administrators of the BMW, Dell (high involvement \times informational), Converse Allstars, Nike (high involvement \times transformational), Vaseline, Purol, Sensodyne (low involvement \times informational), McDonald’s and Heineken (low involvement \times transformational) profiles allowed the authors to send a group email, which contained a link to the online questionnaire. For several brand profiles additional banners were placed. The survey was fielded between 14 March and 21 March 2010, and was completed by 4,151 participants between 16 and 67 years of age ($M_{\text{age}} = 23$, $SD = 8.54$; 55.9% female).

3.2 Measures

The dependent variable COBRAs was measured with three questions based directly on Muntinga and colleagues’ (2011) COBRA gradation concept (consuming, contributing and creating). An example of such a question is “I read or view brand- or product-related blogs, reviews, videos, music, pictures, or articles” (5-point Likert scales anchored by 0 = never, 4 = very frequently; consum-

ing: $M = 1.65$, $SD = 0.21$; contributing: $M = 0.68$, $SD = 0.25$; creating: $M = 0.23$, $SD = 0.19$). For the brand dimensions high/low involvement and transformation/information, two dummy variables were created: one for the transformation-information dimension (transformation = 1, information = 0) and one for the high-low involvement dimension (high involvement = 1, low involvement = 0).

3.3 Results

Respondents' COBRA scores over the four quadrants of the Rossiter-Percy grid were compared using an ANOVA with Post Hoc (Tukey's B). There are significant differences between the four brand groups with regard to consuming ($F(3,4171) = 36.118$, $p < .001$), contributing ($F(3,4146) = 10.523$, $p < .001$), and creating ($F(3,4147) = 29.453$, $p < .001$). The Post Hoc test sheds light on the differences brand groups with regard to COBRAs (see Table 1).

Table 1: Mean scores of brand groups per COBRA type: ANOVA with Post Hoc analysis

Brand group	COBRA type		
	Consuming ($n = 3,422$)	Contributing ($n = 1,696$)	Creating ($n = 680$)
Low involvement \times information	1.49 ^b	0.33 ^b	0.00 ^c
Low involvement \times transformation	1.49 ^b	0.69 ^a	0.22 ^b
High involvement \times information	1.70 ^a	0.83 ^a	0.24 ^b
High involvement \times transformation	1.93 ^a	0.87 ^a	0.46 ^a

Note. Reported means are the mean scores of a five-item Likert scale whereby 0 = never and 4 = very often; a-c = M differs significantly at $\alpha = .05$ (column wise).

As evidenced from Table 1, consumers are the most active with brands in the high involvement \times transformation quadrant; they are the least active for brands in the low involvement \times information condition. Between the four COBRA types, the following results stand out. Consumers consume significantly more brand-related content for high involvement brands ($M = 1.70$ and 1.93 , $p < .05$) than for low involvement brands ($M = 1.49$, $p < .05$). This is regardless of whether the brand is information or transformation oriented. For contributing, the brands in the low involvement \times information quadrant show significantly less brand-related activity than the other brand groups ($M = 0.33$, $p < .05$). Overall, the means for creating are considerably lower than the means for contributing and consuming, which indicates that creating is performed less often than the other two COBRA types. Creating is most frequently performed for brands that are in the high involvement \times transformation quadrant ($M = 0.46$, $p < .05$). It particularly stands out that consumers do not at all create brand-related content for brands in the low involvement \times information quadrant ($M = 0.00$, $p < .05$).

In Study 1 a classification was used that differentiates between brands based on functional attributes. To shed a more detailed light on the brand characteristics that shape COBRAs, a second study was initiated to gain insights in the symbolic differences between brands.

4 Study 2

4.1 Method

Participants for the second study were recruited from a variety of brand fan groups as found on the SNS Facebook. The administrators of 20 different brand groups were contacted. These brands were randomly chosen from a self-composed list of active brand profiles. The group administrators of eight brand groups (Kleenex, Doritos, Dove, Heineken, H&M, Sony, Mini Cooper, and Nikon) agreed to distribute our online survey to their group members. The survey was fielded between April 1 and April 10, 2010, and was completed by 315 participants between 11 and 65 years of age ($M_{\text{age}} = 27.9$, $SD = 9.8$; 43.3% female).

4.2 Measures

Similar to Study 1, the dependent variable COBRAs was measured with three questions derived from Muntinga and colleagues (2011). To gain more variation in the scores than in Study 1, 7-point Likert scales were used (1 = never, 7 = very frequently; consuming: $M = 4.40$, $SD = 2.09$; contributing: $M = 3.26$, $SD = 2.02$; creating: $M = 2.68$, $SD = 2.01$). Brand personality was measured using 12 items of a validated scale recently developed by Geuens, Weijters, and DeWulf (2009) (7-point Likert scales anchored by 1 = not characteristic for the brand at all and 7 = very characteristic for the brand). Using explanatory factor analysis the 12 items extracted into three dimensions. These dimensions were saved as Bartlett factor scores (DiStefano et al., 2009): Exciting, Responsibility, and Ordinary (see Appendix). Additionally, several socio-demographic variables were measured to serve as control variables. As the variable age correlates with the dimension Ordinary ($r = -.19$, $p < .05$) it was included in the analyses as a covariate.

4.3 Results

OLS hierarchical regression analysis was used to test the relationship between the three brand personality dimensions (Exciting, Responsibility, and Ordinary) and the three COBRA types (consuming, contributing, and creating). The brand

personality dimensions Responsibility and Exciting contribute significantly to consuming behavior ($\beta = .37, p < .001$; $\beta = .18, p < .001$). For the contributing COBRA type, results show a same pattern: both the brand personality dimensions Responsibility and Exciting are demonstrated significant predictors of contributing behavior ($\beta = .16, p < .001$; $\beta = .31, p < .001$). For the creating COBRA type, results differ slightly: all three brand personality dimensions are significant predictors of creating behaviour (Responsibility: $\beta = .18, p < .001$; Exciting: $\beta = .23, p < .001$; Ordinary ($\beta = .15, p < .05$) (see Table 2). Overall, the Exciting brand personality dimension is both the strongest predictor of COBRAs and the only dimension that significantly predicts all three COBRA types. The covariate age plays no significant role.

Table 2: Brand personality dimensions and COBRAs: standardized regression coefficients (β) reported.

Brand personality dimension (Block 1)	COBRA type		
	Consuming	Contributing	Creating
Responsible	.18**	.16**	.18**
Exciting	.37**	.31**	.23**
Ordinary	-.01	.05	.15**
Adjusted R^2	.15	.11	.09
<i>Demographics (Block 2)</i>			
Age	-.01	-.01	.02
R^2 change	.00	.00	.00
Total Adjusted R^2	.15	.10	.09

Note. * β = significant at $p < .05$; ** β = significant at $p < .001$

5 General discussion

5.1 Conclusions

Despite the omnipresence of social media as a marketing tool for many brands for some time now, and the academic and practical knowledge about this now fully established medium that has been accumulating along the way, many aspects of social media marketing remain to be investigated. As a result, advertisers still often board the social media train without ample knowledge about where this train might bring them. In this contribution, the authors bring some clarity to a question that fascinates many advertisers: are some brands more suited for a social media strategy than others?

Many companies try to encourage their consumers to actively engage with their brands on online environments. It is generally believed that the more consumers' online brand-related activities (COBRAs), the better. To date however, it remained unclear if any brand may profit from such an approach. In that light the authors question whether there are things about a brand itself that shape how active consumers are with this brand. To that end, they aimed to investigate the role of functional and symbolic brand attributes in the formation of COBRAs.

Two consecutive studies were conducted using two popular social networking sites. In Study 1, the authors distinguish between brands based on their functional differences and consumer involvement. It is demonstrated that there are indeed differences between brands when it comes to consuming, contributing to, and creating brand-related content. Consumers tend to consume, contribute, and create more for high involvement brands; low involvement brands are given scarce online attention by their consumers. Consequently, (high) consumer involvement appears to stand out as characteristically for brands that succeed in actively engaging their consumers on social media: a first bead on the social media DNA string. Moreover, the functional dimension information/transformation does not affect COBRAs. The authors therefore conclude that consumers do not engage in COBRAs because of a brand's functional orientation.

Study 2 was conducted to gain a view on the symbolic differences between brands in relation to COBRAs by applying a measure of brand personality. Brand personality traits do not differ between the COBRA types consuming and contributing. It is demonstrated that the more a brand is perceived as exciting and responsible, the more consumers consume and contribute to brand-related content. For creating, things are different, as all three brand personality dimensions contribute to this very active type of brand-related behavior. This indicates that if a brand's personality consists of several traits, consumers will be more inclined to engage in more active COBRAs, that is, create brand-related content. As such, it is established that brands that have multi-faceted personalities are more prone to spur creating behaviors among consumers than brands that are perceived as having a less versatile personality. "Multi-facetedness" thus stands out as a characteristic of brands with which people engage very actively on social media, and can therefore be considered a second bead on a social media brand's DNA string.

5.2 *Practical implications and directions for future research*

With the discovery of two brand characteristics that shape consumers' online brand-related activities – two beads on the string of social media DNA – the

authors believe they have made a noteworthy contribution to the study of the relationship between brands and COBRAs. This article provides advertisers with a much-needed insight into whether any brand is suited for a social media strategy. Brands that are perceived as low involving may do well to focus their attention to other types of media. Alternately, little brand personality differences were found between COBRAs, suggesting that any brand may be suited for social media. Or is it? Based on this study's findings, the authors argue that for brands with multi-faceted personalities, encouraging their consumers to create brand-related content may be an effective social media strategy.

The authors believe that this contribution's subject is fertile ground for future research. Little specific DNA-differences were observed between separate brand-related behaviors – for instance, consumers that perceive a brand as responsible do not only consume, and consumers that perceive a brand as exciting do not only contribute. Accordingly, it is difficult to make the case that advertisers should, for instance, only encourage their consumers to consume (rather than contribute or create) brand-related content if their brand has an ordinary personality. However, seeing that symbolic differentiation (as opposed to functional) is today often the only way to tell one brand from another, and the possibilities the Internet brings for brand building without physical boundaries, we cannot discard the idea that differences in brand-related social media use are related to certain brand characteristics (cf. Berger and Schwartz, 2011). Other concepts particularly relevant for social media may be the magnifying glass that is necessary to unravel these characteristics. Seeing social media's glorified qualities for consumer-brand relationship building (e.g., Kane et al., 2009), perhaps the concept of brand relationship quality (Smit et al., 2007) is an interesting perspective.

Other interesting research paths may prove to be: consumer characteristics (cf. Correa et al., 2010), characteristics of social media platforms (cf. Porter, 2004), and the interrelationships between motivations, consumer characteristics, brand characteristics, and COBRAs. The authors have meanwhile taken up this last path and will be able to present results in the near future. As a long-term research outlook, they plan to explore the following: if groups of consumers affect the symbolic brand meaning on virtual brand communities through ongoing symbolic interaction (cf. Campbell et al., 2011; O'Guinn and Muñiz, 2009), then a brand's personality may change over time – and brands that induce COBRAs may well have particularly dynamic personalities. Longitudinal research is needed to investigate how brand meaning is created and how a brand's personality is affected by consumer-to-consumer interactions in online brand communities; what factors play what role; and how this all relates to consumers' offline brand-related interactions. Such research would significantly contribute to our understanding of the social dynamics of COBRAs and with that, to any brand's social media success.

6 References

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7 Appendix

	<i>Component</i>		
	<i>1</i>	<i>2</i>	<i>3</i>
	<i>Responsible</i>	<i>Exciting</i>	<i>Ordinary</i>
Down to earth	.68	-.00	.32
Stable	.83	.14	.01
Responsible	.83	.14	.05
Active	.59	.55	-.13
Dynamic	.58	.57	-.26
Innovative	.62	.46	-.27
Aggressive	.42	.40	.14
Bold	.46	.32	.17
Ordinary	.08	.05	.85
Simple	.05	.03	.84
Emotional	.03	.88	.09
Sentimental	.10	.81	.06
R ²	.39	.15	.10

EFA: Rotated component matrix

Note. Extraction method: Principal component analysis with Varimax rotation; Eigenvalues of extracted components > 1

A Brand Equity Model for an Internet Portal Website

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1 Introduction

The value of branded websites as critical elements of an e-commerce strategy is without dispute (Reynolds, 2000; Ward and Lee, 2000; Flores, 2004; Ibeh et al., 2005). Yet knowledge about how the various characteristics of websites influence critical customer brand related cognitions, attitudes and behaviors is in its infancy compared to the non-web commerce world (Argyriou et al., 2006). This paper reports the results of an exploratory empirical investigation into how website brand equity is developed in the mind of consumers for a branded internet portal. The study proposes and tests the explanatory power of a customer-based brand equity (CBBE) model formed from indices of brand meaning, brand responses and brand resonance as postulated by Keller (2008). While this perspective has been suggested by a wide variety of previous research findings (Müller and Chandon, 2003; Ha, 2004; Ha and Perks, 2005; Na and Marshall, 2005), this study expands on the previous work by modeling how user experiences with website performance affects brand preferences, brand image perceptions and subsequent brand loyalty and advocacy. The methodology uses a soft modeling approach (Falk and Miller 1992) incorporating perceived brand performance rating scales along with multiple response brand image measures from the brand asset valuator (BAV) (Lebar et al., 2005) and brand preferences derived from ordinal categorizations of brand preferences. The novel and parsimonious use of second order indices allows for different measurement types (interval, ordinal and nominal) to be combined into an integrated cause and effect explanatory framework. The method is not confirmatory, but rather exploratory because it tests for the presence of proposed theoretical relationships among a variety of measures. This paper contains four sections. It begins with a brief review of the key perspectives that formed the basis for the proposed causal framework presented herein and the research questions investigated. It then describes the research design and methodology used to investigate the problems and test the hypotheses. The findings are presented and discussed in the third section, and the final section provides a summary of the contribution, limitations and directions for future research.

2 Literature review

The literature relevant to this study can be roughly grouped around three themes: (1) the conceptualizing and measurement of website experiences by users; (2) the factors (i.e., website attributes) that affect brand development of websites; and (3) models for quantifying the relationship of various brand dimensions (i.e., brand image, brand personality) with customer or user responses such as brand loyalty. [Note: because of space limitations a summary table of the relevant literature is available by request from the author.]

2.1 *User experiences on branded websites*

In recent years, a number of studies have investigated user experiences with branded websites. The studies have examined the perceptions of website design characteristics and how they relate to the atmospherics of the website (Eröglu et al., 2001; Mummalaneni, 2005; Richard, 2005), attitudes toward the website (Balabanis and Reynolds, 2001; Chen and Wells, 1999; Dahlen et al., 2003; Newman et al., 2004) and perceived service or website quality (Janda et al., 2002; Trocchia and Janda, 2003; Zhang and von Dran, 2001). In addition, some studies have treated the measurement of website characteristics as predictors of user satisfaction (Ho and Wu, 1999; Mummalaneni, 2005; Trocchia and Janda, 2003; Szymanski and Hise, 2000; van Riel et al., 2001; Yen and Gwinner, 2003; Zviran et al., 2006) and shareholder value (Rajgopal et al., 2000). Collectively the findings provide evidence that branded website performance characteristics play an important role in website attitude formation, satisfaction, and future behaviors.

2.2 *Brand development of websites*

Observational and anecdotal evidence about the importance of website branding abounds in both the practitioner and academic literature (Basu, 2000; Bergstrom, 2000; Clarke, 2001; Flores, 2004; Kathman, 2002; Page and Lepkowska-White, 2002; Rowley, 2004; Rubinstein, 2002; Travis, 2001). These articles document and demonstrate the notion that like other types of products and services, websites must cultivate recognizable brands to distinguish their offerings from those offered by other websites. The role of website branding may even be more important in e-commerce because of the sheer number of choices available to web browsers and shoppers, the low switching costs, and the intangibility of cyberspaces. Many studies have examined the relationship of various branding concepts such as personality and image with website design features (Chang et al., 2002; Coupland et al., 2003; Chen and Rodgers, 2006; Ha, 2004; Thorbjørnsen et al., 2002; Thorbjørnsen, 2004). Others have employed among internet compa-

nies (Müller et al., 2008), while Jin and Sook (2004) proposed how internet branding strategy can affect customer emotion. In addition, some studies have modeled the relationships between facets of website brand strategy and various responses. For instance, Na and Marshall (2005) applied to the internet a brand power model built upon customer satisfaction and loyalty, and Müller and Chandon (2003) focused on how website exposure related to perceptions of brand personality.

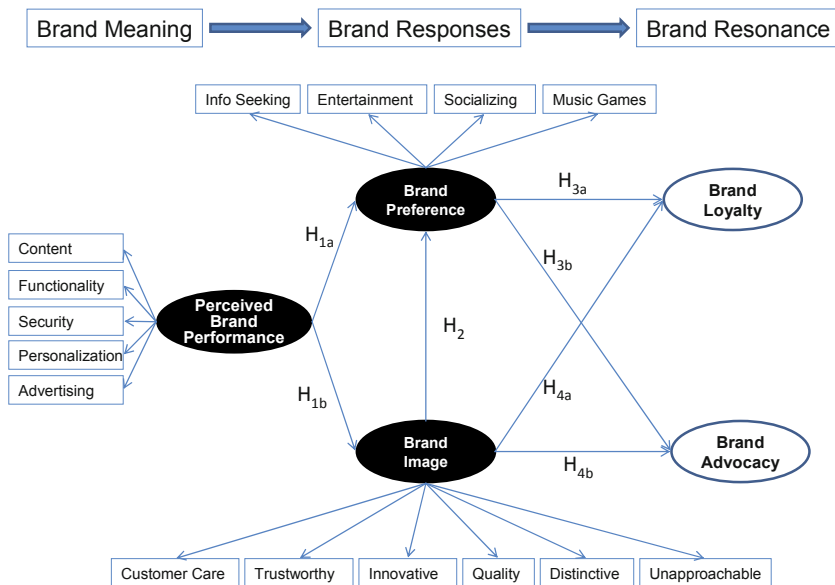
2.3 *Quantifying relationships between brand components*

Despite the many descriptive studies about website branding factors, and the empirical work done to develop useful measures of various brand dimensions (e.g., brand identity, personality, loyalty), there are few reported studies that evaluate how website brand characteristics are linked to, or explain other brand related measures and performance outcomes. For example, the relationships between brand experiences and brand trust (Ha and Perks, 2005), brand trust and brand purchases (Lee et al., 2005), branded communications and brand image (Müller et al., 2008), brand image and brand loyalty (Alwi, 2009), and brand personality congruence and brand loyalty (Magin et al., 2003) have been explored, but taken together they lack a consistent integrative approach based on theory.

2.4 *Research objective and conceptual model*

While the literature reveals a broad and growing set of brand related studies focusing on websites, there is a theoretical gap in understanding how the overall brand equity of a website is defined and developed. The objective of this study is to propose and test the explanatory power of an integrated brand equity model partially based on the customer-based brand equity (CBBE) framework developed by Keller (2008). The proposed model is similar in its use of three customer-based developmental stages proposed by Keller (brand meaning, brand responses, and brand resonance), but it does not include the brand salience foundation stage. However, since the study is based on survey data collected from current users of an internet portal website, the connection of the brand to customer needs is assumed to be established. Keller (2008) postulates that brand equity is formed by causally linking brand salience, brand meaning, brand responses and finally brand resonance in the minds of consumers. This chain of cause and effect linkages defines the brand equity of a product or service and represents a departure from more traditional, financially based approaches to the measurement of brand equity (Keller, 2008).

To accomplish the objective, an index of perceived brand performance is used to explain two indices of brand responses (brand preferences and perceived brand image), that are then related to two indicators of brand resonance (brand loyalty and brand advocacy) (see Figure 1). Four research questions are derived from the conceptual model and are addressed in this study. First, do user experiences with the performance of a branded website affect the preferences of the users for the website? Second, do user experiences with website performance affect the brand image that users form about the brand in their mind? Third, do brand images help explain website brand preferences? Fourth, do brand preferences and imagery jointly affect brand loyalty levels and brand advocacy strength.



Note: The "Perceived Brand Performance", "Brand Preference" and Brand Image" components are second order latent variables.

Figure 1: Conceptual framework of website brand equity and hypotheses

2.5 Research hypotheses

To answer the research questions posed above, four general hypotheses are addressed in this study (see Figure 1 for a graphical representation of the conceptual model and hypotheses).

In previous research, website experiences were found to be instrumental in the development of positive attitudes and preferences towards websites (Chen

and Wells, 1999; Ho and Wu, 1999; Newman et al., 2004; Szymanski and Hise, 2000; Ward and Lee, 2000). In addition, many studies (Page and Lepkowska-White, 2002; Ha and Perks, 2005; Chang et al., 2002; Coupland et al., 2003; Müller et al., 2008) speculated or provided evidence that website design elements correlated with general brand image or brand personality measures. Consistent with this previous work, the perceived brand performance of the website experienced by users is expected to explain the website brand preferences held by users and the nature of the website brand image associations formed by users. These expectations are also specified by Keller (2008) as important linkages in the development of brand equity. Thus, specifically:

H1a: The index of website brand preference is positively explained by the index of perceived website brand performance.

H1b: The index of website brand image is positively explained by an index of perceived website brand performance.

Several previous research studies speculated or showed a relationship between brand image (functional and expressive aspects) or reputation and summary brand judgments such as attitudes toward the website, customer satisfaction, and trust (Argyriou et al., 2006; Dahlen et al., 2003; Ho and Wu, 1999; Janda et al., 2002; Ha and Perks, 2005; Na and Marshall, 2005). It is plausible then that website brand image affects website brand preferences; thus:

H2: The index of website brand preference is positively explained by the index of website brand image.

Finally, as specified by Keller (2008) and consistent with the findings of previous research that demonstrated a explanatory relationships between attitudes toward the website and brand loyalty or commitment (Chen and He, 2003; Ha, 2004), and also between brand image and loyalty (Alwi, 2009; Na and Marshall, 2005; Yen and Gwinner, 2003); it is expected that:

H3a,b: The index of website brand preference positively explains the variation in two indicators of brand resonance (a) website brand loyalty and (b) website brand advocacy.

H4a,b: The index of website brand image positively explains the variation two indicators of brand resonance (a) website brand loyalty and (b) website brand advocacy.

3 Methodology

3.1 *Measurement*

The website used in this study is a branded internet portal that provides a full range of services to users such as shopping assistance, access to information sources such as news and sports, online games, e-mail, etc. The use of one website was considered sufficient for an exploratory examination of the hypothesized relationships. The questionnaire was developed by a marketing research firm using qualitative techniques combined with secondary research. The sets of measures used in the study are described below. [Note: because of space limitations a summary table of all indicators and relevant descriptive information is available by request from the author.]

The index of brand performance is a composite second order latent measure comprised of five first order latent variables that capture the perceived performance of the website along the dimensions of content, functionality, security, personalization, and advertising. These dimensions are similar to those identified in previous qualitative and survey research of retail websites (Trocchia and Janda, 2003; Szymanski and Hise, 2000; Newman et al., 2004). All of the nineteen items used to measure the five perceived brand performance components are measured on a 10 point “poor” (= 1) to “excellent” (= 10) scale.

The index of brand image is a composite second order latent measure comprised of six BAV brand image factors specified by Lebar et al. (2005) developed from twenty four multiple response items. Respondents were asked to “please consider each of the following words and select the ones you “feel” best represent this website”. The use of “pick any” multiple response measures has been used in other studies related to brand image and has been found to be a valid and reliable method of collecting perceptual data (Romaniuk and Sharp, 2003). The six brand image dimensions identified by Lebar et al. (2005) were customer care, distinctive, innovative, quality, trustworthy, and unapproachable.

The index of brand preference is a composite second order latent measure comprised of four dimensions of brand preferences derived from twelve four level ordinal preference rankings of the branded website compared to other websites (1 = this brand is primary choice in category, 2 = this brand is secondary choice, 3 = this brand is not considered, 4 = do not use this category on internet). The four preference dimensions were derived from a factor analysis of the rankings (the process used is described below) and represented information seeking, entertainment, socializing, and music/gaming categories of usage.

Brand loyalty is measured as a first order latent construct containing three items measuring the likelihood that the respondent will: (1) use the website again, (2) choose the website as primary internet portal in future, and (3) whether the website brand has earned the respondent's loyalty. All items are measured on a 10 point "not at all likely" (= 1) to "very likely" (= 10) scale.

Brand advocacy is measured as single item scale asking respondents to rate the likelihood that they will recommend the website to someone else.

3.2 *Data collection*

The data was collected during a two week period from website visitors who were randomly selected and asked to participate through on-network invitations in a web survey hosted by a data collection firm. There were 3,127 complete and usable responses to the invitation. All participants were required to be at least 18+ years and have visited the website in past 30 days. No check for non-response bias was done, but because of the randomness of the survey trigger, it is not believed that the responses are substantially biased.

3.3 *Analysis methods*

The analysis was comprised of three steps. First, since brand preferences were measured using a set of ordinal ranking measures without a previously defined model structure, the underlying brand preference dimensions were defined by using principal axis factoring with oblique rotation because it is believed that this approach gives the best estimate of the underlying theoretical structure in the data (Velicer and Jackson, 1990). This resulted in the identification of four underlying constructs that were used to measure brand preference. Second, a separate first order model was estimated using a latent variable partial least squares (LV-PLS) algorithm for each brand equity index (perceived brand performance, brand preference and brand image) and the first order latent variable scores were saved. Third, the first order latent variable scores were then used as indicators for the brand performance, brand image and brand preference indices in a second order model to test the hypothesized causal structure as illustrated in Figure 1.

Overall, the model was constructed from fifty-nine indicators, fifty-five of which were used to compute fifteen first order latent variables in step two above. These then served as indicators for the three second order composite indices (perceived brand performance, brand preference, and brand image) in step three. The rationale for the second order modeling used in this study is described by Wetzels et al. (2009). The structural equations modeling (SEM) used

SmartPLS™ software which provides a full range of capabilities as well as many quality evaluation tools for assessing analysis results (Ringle et al., 2005).

4 Findings

4.1 *Sample profile and variable summary statistics*

Examination of the sample profile shows that most respondents are female (54.4%), middle aged (35-54, 42%), with household incomes of between \$35K to \$110K (51.2%), and education that includes some college education through the bachelor's level (59.9%). In addition, most respondents have used the website for over five years (56.5%) with light, moderate and heavy usage segment sizes of 16.3%, 28.2% and 55.5% respectively.

4.2 *Structural equations modeling*

To test the hypotheses shown in Figure 1, a structural equations model (SEM) with latent variables was estimated using the SmartPLS™ latent variable partial least squares (LV-PLS) algorithm (Ringle et al., 2005). As explained above, the first order latent variable scores were saved and used as the indicators for the hypothesized brand equity indices. The quality of a PLS model is assessed by examining the item loadings (>0.7) and reliability coefficients (composite reliability) (>0.7), as well as the convergent and discriminant validity of the measurement model, along with the significance of the path coefficients and variance explained by the structural model (Fornell and Larcker, 1981; Barclay et al., 1995; Hair et al., 2011). The overall quality of the proposed second order model meets the minimum standards required as shown in Table 1.

Table 1: Model quality indicators

Latent Variables	Perform	Image	Prefer	Loyalty	Advoc
Brand Performance	0.823	0	0	0	0
Brand Image	0.504	0.760	0	0	0
Brand Preference	0.361	0.390	0.747	0	0
Brand Loyalty	0.697	0.507	0.377	0.888	0
Brand Advocacy	0.479	0.376	0.417	0.670	1
Average Variance Explained (AVE)	0.678	0.578	0.558	0.789	1.000
Composite Reliability (CR)	0.913	0.890	0.834	0.918	1.000
Cronbachs Alpha (α)	0.858	0.853	0.838	0.870	1.000
R^2		0.258	0.189	0.295	0.229

Diagonal elements are the square roots of the average variance extracted.

Off diagonal elements are the correlations among the constructs.

Diagonal elements should be larger than off-diagonal elements in order to obtain the discriminant validity.

4.3 Measurement model

Table 1 displays the reliability, construct and discriminant validity indicators for the second order brand equity indices in the model. All of the indices possess acceptable levels of composite reliability (>0.7), and the Cronbach's alphas meet the minimums (>0.8) for good measurement reliability. An examination of the AVE values reveals that all of the constructs exceed the 0.5 level a construct must have to possess acceptable construct validity. In addition, the square roots of the AVE values exceed the off diagonals in the correlation matrix indicating acceptable discriminant validity. An additional check made of the loadings and cross-loadings (Table 2) found three loadings at less than 0.7 indicating some measurement weakness. However, since all of the cross loadings were far below the quality criteria of 0.6, the measurement model is considered sufficient for exploratory analysis (Fornell and Larcker, 1981).

Table 2: Loadings and cross loadings of indicators and latent variables

First Order LVs	Second Order LVs		
	Image	Perform	Prefer
CusCare	0.769	0.427	0.303
TrustWorthy	0.746	0.403	0.276
Innovative	0.824	0.409	0.319
Quality	0.866	0.424	0.347
Distinctive	0.772	0.342	0.304
Unapproachable	0.545	0.267	0.192
Content	0.454	0.917	0.321
Functionality	0.415	0.857	0.290
Security	0.387	0.740	0.256
Personalization	0.419	0.841	0.302
Advertising	0.410	0.749	0.328
Info Seek	0.320	0.320	0.832
Entertain	0.243	0.247	0.768
Social	0.294	0.223	0.681
Music/Games	0.322	0.280	0.699

4.4 Structural model

The path coefficients from the PLS analysis are shown in Table 3 and Figure 2. All of the coefficients are in the hypothesized direction and are significant. Thus, all of hypothesized relationships are supported by the model. Overall the model explains 25.8% of the variance in Brand Image, 18.9% of the variance in brand preference, 29.5% of the variance in brand loyalty, and 22.9% of variance in brand advocacy. The significance levels of the path coefficients were assessed by running a bootstrapping routine (3127 cases re-sampled 5000 times) (Hair et al., 2011) to generate estimated t-statistics (see Table 3 for a summary).

Table 3: Significance of path estimates

Bootstrap Results (3127 cases resampled 5000 times)

Model Path	Hypothesis	Original Coefficient	Bootstrap Coefficient	Standard Error	T Stat	p
Brand Perf -> Brand Prefer	H _{1a}	0.218	0.219	0.021	10.517	1.91E-25
Brand Perf -> Brand Image	H _{1b}	0.508	0.507	0.014	37.721	5.79E-257
Brand Image -> Brand Prefer	H ₂	0.281	0.281	0.020	14.373	2.09E-45
Brand Prefer -> Brand Loyalty	H _{3a}	0.203	0.203	0.017	11.963	2.80E-32
Brand Prefer -> Brand Advoc	H _{3b}	0.317	0.318	0.016	20.081	1.85E-84
Brand Image -> Brand Loyalty	H _{4a}	0.431	0.431	0.013	32.059	3.08E-195
Brand Image -> Brand Advocacy	H _{4b}	0.256	0.256	0.015	16.751	2.20E-60

5 Discussion

5.1 Contribution

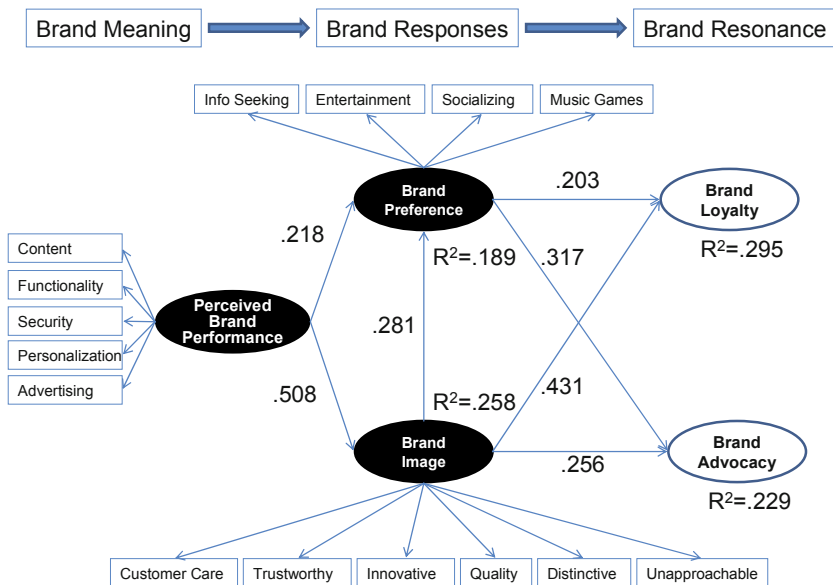
The results of this study provide preliminary evidence supporting the application of the customer-based brand equity framework (Keller, 2008) to an internet portal website. Based on the analysis reported herein, all of the study hypotheses were accepted. The key contributions are the following.

First, the index of perceived brand performance significantly explained the variance in both brand preferences and brand image indices (H_{1a}, H_{1b}). Past research into the relationships between brand performance attributes and subsequent brand attitudes supports this finding (Zviran et al., 2006; Na and Marshall, 2005). In addition, previous research in the area showed observational and qualitative evidence of these effects (Chang et al., 2002; Coupland et al., 2003) and some more general findings related to overall brand attitude (Balabanis and Reynolds, 2001; Chen and Wells, 1999; Newman et al., 2004; Song and Zahedi, 2005), but this study quantified the hypothesized causal relationships.

Second, this study demonstrates that the brand image index in combination with the index of brand performance significantly predicts brand preferences for the services provided by this website (H₂). The ability of brand image to significantly contribute to preference formation independently from the direct effects of brand performance suggests that users are receiving intangible benefits from the brand that are created by the design of the website and appears to be a unique finding of this study. Some research (Jin and Sook, 2004; Ha and Perks, 2005; Müller and Chandon, 2003) showing the relationship between websites and emotional enhancement provides some support for this notion. In addi-

tion, the findings show that the brand image effect on brand preference is 29% larger than the effect of perceived brand performance.

Finally, the brand preference index along with the brand image index were both found to be significant predictors of brand loyalty and brand advocacy, the indicators of brand resonance in this model (H_{3a} , H_{3b} , H_{4a} , H_{4b}). It is interesting to note the differential effects on these two brand resonance measures. The brand image effect on brand loyalty is 112% larger than the effect of brand preference, while brand preference has a effect on advocacy that is 24% larger than brand image. Clearly the findings suggest the central role played by brand image in the formation of both brand preferences and brand loyalty for this particular website.



Note: The "Perceived Brand Performance", "Brand Preference" and Brand Image" components are second order latent variables.

Figure 2: Path coefficients and variance explained (R^2)

5.2 Implications

The brand management implication for pure-play websites, such as the one used in this study, is that the design of the website is a more strategic decision for brand positioning than simply as a media or service delivery vehicle. These results support the view that a website's design provides the basis for perceived brand performance that also helps form an overall brand image of the website in

the memory of users. As websites become a ubiquitous element of B2C marketing activities for increasing numbers of firms, greater attention to the role of website design decisions in the areas of content, interactivity, security, etc. needs to be considered so they are consistent with the desired brand image and its role in building brand equity.

5.3 Limitations and directions for future research

This exploratory study utilized limited and rather abstract measures of the customer-based brand equity framework espoused by Keller (2008). Future studies need to consider a broader set of brand measures perhaps along the lines of brand judgments (i.e. perceived superiority, consideration) and emotional responses to the brand. In addition, a fuller set of brand resonance indicators including community and engagement aspects are needed. Regarding the respondents to the survey, this study did not examine how user differences might affect the measurement of and the relationships between the perceptions and judgments of the brand examined. Although many of the users in the current sample have been using the website for some time, their objectives or motivations might be quite diverse. Examining different segments in the sample may reveal alternative brand equity configurations reflecting variations in usage rates, conditions and frequency of use. Finally, only a single pure-play website was used in this study to examine the hypothesized relationships. Subsequent studies of website brand equity need to expand the range of websites as study objects.

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Social Media Marketing: How Design Features Influence Interactions with Brand Postings on Facebook

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1 Introduction

The use of social networks is becoming more and more popular among consumers (Fox et al., 2010). Facebook, for instance, the predominant network online, has more than 700 Mio. members who often visit the platform several times a week (Poynter, 2008). Thus, social networks offer interesting perspectives for marketers (Eisend and Küster-Rohde, 2008; Zhang, 2010), and it is not surprising that several marketers already use Facebook as a marketing tool (e.g., Coca Cola, Red Bull, Audi, and many others) or plan to be present in social networks in the future (e.g., Busby et al., 2010; CFMR, 2009).

For marketers, Facebook offers several opportunities to promote their brands: Facebook ads (similar to usual online banners), Apps (applications, e.g., games like FarmVille), and fan pages. Fan pages are websites within Facebook which are created by marketers. Interested Facebook users may become a “fan” of a fan page by linking their personal profile with the fan page. Fan pages can contain several features, for example integrated apps, discussion boards, or even Facebook shops (Ivens and Rauschnabel, 2011). Every fan page also contains a so called “wall” where a brand (and often also fans) can publish postings (e.g., text, videos, votes and/or pictures). Fans can react to those postings by clicking the “I like” button or by writing a comment (for an example, see Figure 1). Many marketers use this function daily (or even several times a day) to keep consumers active and interested in the fan page. An average Facebook user is a fan of about nine brands (DDB, 2010). As several studies reveal, fan pages can be a very effective marketing tool (e.g., Dholakia and Durham, 2010; Fox et al., 2010).

For marketers it is highly relevant that consumers pay attention to their postings on fan pages and feel attracted to them, because postings contain advertising messages and may increase consumers’ interaction with the brand. Previous research demonstrates that design features (e.g., size, pictures, or the amount of text) may determine receivers’ awareness and liking of advertisements. However, while research has studied the effects of design features on the effectiveness of *print* ads extensively (e.g., Rossiter and Percy, 1997; Pieters et al., 2010), very little is known about how brand postings on fan pages should be

designed. Pieters et al. (2010) and Burmann (2010) emphasize that research is of particular relevance here, because websites are highly competitive contexts which may make design features even more critical.

This paper studies how several design features affect consumers' liking of postings that marketers provide them with on Facebook brand-fan pages. The design features that this research examines are: size of the posting, amount of text, number of media elements (e.g., pictures), and an invitation to respond to the posting (e.g., to vote). The dependent variable is the (adjusted) number of "Likes" a posting receives (Facebook users who read a posting can express their positive view by clicking on "I like this"). In addition, we test the effects of the design features on the number of comments a posting receives (our second dependent variable). However, for the latter dependent variable we do not propose hypotheses, but only show our findings (section 3). This research uses real data of internet users. The advantage of real user data (number of Likes and number of comments) is that consumers are not forced to look at certain postings, are not aware of taking part in a study, and therefore behave naturally.



Figure 1: Example for a posting (Brand: Audi Germany)

2 Theory and hypotheses

In this section we introduce hypotheses on the effects of the design features this study considers, on the number of Likes a posting receives. We use the number of Likes as a dependent variable because it contains the relevant aspect of ad liking, which may transfer to the brand and may motivate receivers to interact with the brand (MacKenzie et al., 1986; Homer, 2006). Furthermore, the number of Likes considers whether or not internet users paid attention to a posting. Ros-siter and Percy (1997) argue that attention is a crucial initial response to advertising messages. Messages that consumers do not process cannot influence their

brand attitudes or brand beliefs. In addition, clicking on the “Like” button, which represents a positive evaluation of a posting, can function as a form of word-of-mouth communication, because an individual’s “Like” on a fan page is visible to their online friends (Hennig-Thurau et al., 2004; Morpace, 2010). Thus, brands may receive attention of an individual’s online friends through viral spreading.

The relevant literature has studied the effects of several design features on liking of the ad for print ads. This study tests whether or not this knowledge applies to Facebook postings. The design features this research focuses on are: the size of a posting, the amount of text, the number of media elements, and an invitation to respond to the posting.

2.1 The effects of posting size and amount of text

With regard to print ads and online banners previous research demonstrates that advertisement size has a positive effect on ad awareness, recognition, or liking of the ad, whereas the amount of text has a negative effect (e.g., Fritz et al., 2007; Robinson et al., 2007; Baltas, 2003; Trohdahl and Jones, 1965). Larger ads and postings are more eye catching (Rossiter and Percy, 1997) and provide more opportunities for not overstuffing the ad. Large ads are also more likely to use large font sizes, pictures, and white spaces, which positively affect liking of the advertising message (see, for instance, Pieters, Wedel, and Batra, 2010). A large amount of text, in contrast, increases the perceived complexity of the advertising message, because text is usually more complex to process than pictures (Rossiter and Percy, 1997). The more complex an advertising message is, the more motivation (involvement) and mental capacity receivers need to process the information (Meyers-Levy and Malaviya, 1999). Thus, advertising messages that contain a lot of text are less likely to be processed. We propose that this knowledge can be transferred to online postings:

H1: Posting-size is positively related to the number of Likes.

H2: The amount of text a posting contains is negatively related to the number of Likes it receives.

2.2 The effect of the number of media elements

Media elements are pictures, graphs, or videos that marketers may include in an online posting. Rossiter and Percy (1997) argue that pictures are the most important element for gaining attention and may “pull the reader in”. In line with this, previous research demonstrates that media elements generate attention and interest for print ads and banners (e.g., Pieters and Wedel, 2004; Fritz et al., 2007). Furthermore, the literature shows that pictures are processed more easily than

texts and are more likely to transport a message (Meyers-Levy and Malaviya, 1999). Finally, Rossiter and Percy (1980) and MacInnis and Price (1987) argue that pictures may help the receiver to imagine brand usage or other pleasant situations, which may result in positive affect and liking of the advertisement. We assume that the positive effects of media elements on ad liking apply to online postings and propose:

H3: The Number of media elements has a positive effect on the number of Likes.

2.3 The effect of an invitation to respond

Invitations to respond to a posting may, for instance, contain specific questions (which car colour do you like best?) or may ask receivers to vote for alternative options (should white or sand be the colour of the year?). Research demonstrates that consumers' interactions with brands and company representatives lead to several positive effects; for an overview see Smith and Mackie (2000). Particularly when an interaction is rewarding, individuals tend to like their interaction partner. An interaction is rewarding when it is interesting or fun (Smith and Mackie, 2000). In addition, the invitation to respond gives consumers room for self-expression, which they may find rewarding per se (Shen and Khalifa, 2008). Finally, interactions may make individuals feel connected with an interaction partner (or a fan page) and may increase perceived familiarity, which also increases liking. We propose:

H4: Postings with an invitation to respond receive a larger number of Likes than postings without an invitation to respond.

3 Study

3.1 Procedure

We used German fan pages of four brands in the automotive sector (Audi, BMW, Lexus, Opel) for our data collection. Altogether, 369 postings were included in the analysis. Postings were only taken into account when they had been online for at least four days. Prior research shows that most of the fan reactions occur within the first few hours after publishing a posting (Ivens and Rauschnabel, 2011). Table 1 gives an overview of the investigated postings.

Table 1: Description of the sample

Brand	Postings (N)	Period of posting analysis	Average number of Likes	Average number of Comments
Opel	129	01.09.2010 – 22.03.2011	59,23 (<i>SD</i> =43,29)	10,36 (<i>SD</i> =10,21)
Lexus	46	01.09.2010 – 22.03.2011	75,85 (<i>SD</i> =34,47)	12,89 (<i>SD</i> =9,69)
BMW	99	01.08.2010 – 22.03.2011	271,77 (<i>SD</i> =239,80)	34,47 (<i>SD</i> =46,48)
Audi	95	01.09.2010 – 22.03.2011	328,23 (<i>SD</i> =346,21)	44,67 (<i>SD</i> =64,35)

3.2 *Dependent Variable*

The number of Likes was recorded manually for each posting. All values were checked again from another researcher. To take into account the different fan numbers of the fan pages (dependent on the brand), the number of Likes per posting was divided by the number of Likes for all postings of the corresponding brand. A score of 1 shows that the posting resulted in an average number of Likes, while a larger number demonstrates that the posting was liked more often than average.

Additionally, we recorded the number of user comments for each posting. In contrast to the number of likes, one fan can comment on a posting several times (for example, by leading a dialogue with other fans). However, our observations suggest that most of the fans only commented once.

3.3 *Independent variables*

The size of the posting was measured by the number of pixels. For this purpose, the size of all postings was measured manually with the programme “MeasureIt” (a free plugin for Mozilla Firefox). To control for errors caused by resolution and display characteristics, the measures were conducted on one and the same computer.

The amount of text in a posting was measured by the number of letters used, divided by the number of pixels of a posting. For long texts that had to be activated by the users to be fully visible, the number of visible letters before activation was used.

The number of media elements consists of the sum of immediately visible pictures, photos and videos (due to Facebook's settings, between 0 and 3). Please note: Our study does not distinguish positive and negative valence of media elements. Since marketers mainly use media elements that consumers find appealing (positive valence), there is a strong positivity bias in the media elements this research uses.

Finally, we went through all postings to see whether or not they included an invitation to respond to the posting. Invitations may invite the consumer to comment on a message, to vote for specific options, or to click the Like-button. Even though all postings allow consumers to click on a Like-button, not all postings invite or prompt consumers to do so as part of the message (e.g., "If you like this information, please click on the Like-button below"). For an example, the posting in Figure 1 is characterized by a size of 91,575 pixels, a length of 145 letters, a media score of 1, and invites the consumer to respond.

4 Results

To test the hypotheses H1, H2, and H3, Table 2 shows the relevant bivariate correlations. A correlation analysis is sufficient, because there is no reason to assume that the number of Likes of a certain posting affects its size, its amount of text, or its number of media elements. The results of our study show that size ($r = .252$, $p < .001$) and the number of media elements ($r = .365$, $p < .001$) affect liking of the posting positively, while the amount of text influences liking of the posting negatively ($r = -.403$, $p < .001$). Thus, the study supports H1, H2, and H3.

Hypothesis H4 states that invitations to respond to the posting positively affect liking of the posting. To test H4, we use a one-way ANOVA with the invitation to respond (yes/no) as independent variable. The study also supports H4 ($\text{Eta} = .204$, $p < .001$).

In Table 2 we also report our findings for the second dependent variable (i.e., the number of comments). The findings demonstrate that size is not significantly related to the number of comments ($r = .070$, $p = .182$). However, for the amount of text ($r = -.306$, $p < .001$), the number of media elements ($r = .178$, $p < .001$) and the invitation to respond ($\text{eta} = .411$, $p < .001$) significant effects show.

A comparison of the two dependent variables shows that the effects of size, amount of text, and media elements are stronger on the number of likes than on the number of comments. It is not surprising that "liking" is strongly related to these design elements, whereas "commenting" also requires receivers' motivation and information processing. As a result, the relationship between the num-

ber of comments and design elements is comparably weak. However, the relationship between the number of comments and an invitation to respond is relatively strong. This finding suggests that an invitation to respond strongly motivates consumers to express their views.

Table 2: Results

H	Independent Variable	Dep. Variable: Likes	Dep. Variable: Comments
H1	Size	.252** (p<.001)	.070 (p=.182)
H2	Amount of text	-.403** (p<.001)	-.306** (p<.001)
H3	Number of media elements	.365** (p<.001)	.178** (p<.001)
H4	With/without invitation	.204** (p<.001)	.411** (p<.001)
<i>H1-H3: bivariate correlations</i>			
<i>H4: one-way-ANOVA (Eta)</i>			
<i>N=369</i>			

5 Discussion

The results indicate that previous findings on the effects of design features on liking of print ads apply to online postings.

The study shows that the size of the posting, the number of media elements included (e.g., pictures), and an invitation to respond to the posting increase liking, whereas the amount of text decreases liking. Thus, our recommendation to marketers who create online postings for brands is to use pictures and to encourage interaction, but to avoid large amounts of text.

This study however, has its limitations. The study did not control for potential extraneous effects. This issue may be improved in follow-up studies using additional methods, for example, eye tracking and experiments. Furthermore, moderating variables, such as receivers' involvement or personality traits, should be considered. Postings should also be evaluated content wise. In this initial study, a useful classification proved to be difficult due to the limited number of postings and their high content variance. Only linear relationships were considered in the analyses and we did not test for interaction-effects. However, non-linear relationships and interaction-effects may show and should be taken into account. Future research should also study additional design features, such as the specific content of media elements (e.g., their valence), or visual complexity (e.g., Tuch et al., 2009). Finally, our findings are based on a limited number of postings of few brands within one industry. Follow-up studies should use different product and service categories.

6 References

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Moderating Influences on Interactivity Effects

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1 Introduction

Research on website interactivity is widespread and there are two important reasons for this popularity. The first is that interactivity is assumed to be the key characteristic that distinguishes communication in traditional media from communication in new media such as websites (Chung and Zhao, 2004; Jo and Kim, 2003). The second reason for the great interest in website interactivity is the generally positive influence of website interactivity on affective consumer responses to websites. While there is also some discussion on the possible detrimental or inverted u-shaped influence of interactivity on information processing (Liu and Shrum, 2002), a bulk of studies have shown that interactive websites are more positively evaluated and this positive website evaluation generally spills over to positive evaluations of the content that is presented in this website. More specifically, in the domain of marketing communications, interactivity effects research shows similar findings. In this context it was demonstrated that interactive brand websites are evaluated more positively, resulting in positive evaluations of the brands that are advertised on this website (Chung and Zhao, 2004; Jee and Lee, 2002; McMillan et al., 2003; Sicilia et al., 2005; Wu, 2005).

Unfortunately, hardly any empirical studies investigated whether the influence of website interactivity goes beyond direct affective responses like website appraisal and attitudes toward the website content. Therefore, it remains unknown whether the influence of interactivity has a more enduring impact. More specifically, in the field of marketing communications hardly any empirical study examined whether interactivity in brand websites is able to build brands and to generate long term responses such as influencing attitudinal beliefs about the benefits of the brand and consumer perceptions of the consumer-brand relationship (Chang and Chieng, 2006; Keller, 1993). Preliminary research in this field suggests a promising role of website interactivity in enhancing relationship building online (Heldal et al., 2004), because interactivity gives possibilities for dialogue between consumers and brands (Jo and Kim, 2003; Yoon et al., 2008; Thorbjørnsen et al., 2002; Argyriou et al., 2006; Dou and Krishnamurthy, 2007). Therefore, the first aim of the current study is to examine website interactivity effects on attitudinal brand beliefs and the consumer-brand relationship.

A probably even more important aim of the current study is to examine conditions under which website interactivity effects are stronger or weaker, following Liu and Shrum's (2009) call for research on factors that moderate website interactivity effects. Investigating such moderating influences could put theory on interactivity effects on a higher plan, which is of vital importance according to Sundar (2004). In the current study, these issues are investigated in the context of brand websites. We examine the moderating role of experience because, in general, advertising literature has shown that advertising effects are less prominent for individuals that have prior experiences with a brand (Derbaix, 1995). More specifically, in the current study we focus on three types of prior experiences individuals may have before they visit a brand website. These three types are usage of the advertised brand (i.e., prior brand experience), prior visits to the website of the brand (i.e., prior website experience), prior usage of the product category (i.e., prior product category experience). The influence of prior experiences on website interactivity effects has never been investigated before. Therefore, we investigate the role of three types of prior experiences in the influence of website interactivity in the context of marketing communication and more specifically on brand beliefs and consumer-brand relationships. By doing so, we hope to give insight into the circumstances under which interactivity effects are stronger or weaker. Such knowledge can be used by advertisers, and website builders to know under which circumstances extra effort should be taken to develop a website that is experienced as interactive by its visitors.

2 Theoretical background

2.1 Defining interactivity

While research on website interactivity is not new anymore, there is still a lot of discussion on its definition and dimensions. The multidimensional nature is reflected in existing theoretical definitions. It is, however, not our goal to provide an extensive overview of the definitions and dimensions of website interactivity in this book chapter. Therefore, we refer to several excellent papers that provide an interesting overview on these issues: Liu and Shrum (2002), Johnson et al., (2006) and Voorveld et al., (2011). In the current study, interactivity is defined in line with the definition of Liu and Shrum (2002). This definition was developed after an extensive literature review and was also developed for the context of commercial websites and therefore fits the marketing communications context of our study. Liu and Shrum also acknowledge the multidimensional nature of the interactivity construct. Website interactivity in this study is defined as: "the degree to which two or more communicating parties can act on each other, on the communication medium, and on the message and the degree to which such influences are synchronized" (2002, p. 54). This definition captures

three dimensions of interactivity that are mentioned by several authors in the field (Voorveld et al., 2011). The first dimension in this definition is active control, which is characterized by “voluntary and instrumental action that directly influences the controller's experience” (Liu and Shrum, 2002, p. 54). The second dimension is synchronicity, which refers to “the degree to which users' input into a communication and the response they receive from the communication are simultaneous” or without delay (Liu and Shrum, 2002, p. 55). The last dimension is two-way communication, which refers to “the ability for reciprocal communication between companies and users, and users and users” (Liu and Shrum, 2002, p. 55).

Another discussion within the interactivity literature focuses on the effects that are being studied. It is debated whether research should concentrate on investigating effects of the objective presence of interactive features on a website (i.e., actual interactivity) or on the extent to which website users perceive the website as interactive (i.e., perceived interactivity). Researchers following the view of actual interactivity argue that interactivity should be studied as a characteristic of the medium, while researchers following the view of perceived interactivity argue that research should investigate user perceptions instead of technological possibilities (Mollen and Wilson, 2010; Song and Zinkhan, 2008; Sundar, 2004). The current study concentrates on perceived interactivity because several academics hold the opinion that not actual, but perceived interactivity of a website determines responses of consumers (McMillan and Hwang, 2002; Mollen and Wilson, 2010; Newhagen et al., 1995; Song and Zinkhan, 2008; Wu, 2006). Moreover, research demonstrated that the relationship between actual and perceived interactivity is not always clear: Including a large amount of interactive features on a website does not necessarily mean that consumers also perceive a website as interactive (Lee et al., 2004; McMillan and Hwang, 2002; Song and Zinkhan, 2008; Voorveld et al., 2011). This incongruence between the two variables underlines the importance of investigating perceived interactivity as the independent variable when testing interactivity effects.

2.2 *Interactivity effects*

Within the context of marketing communication and more particularly of brand websites, research on interactivity effects is extensive (for an overview see Voorveld et al., 2009). Overall, this research has shown that perceived interactivity of a website positively influences affective responses to the website. When consumers perceive a website as more interactive, they also have a more positive impression of that website (McMillan et al., 2003; Jee and Lee, 2002; Chung and Zhao, 2004; Wu, 2005). Also for actual interactivity, research has generally shown a positive relationship between the actual (i.e., objectively assessed) in-

teractivity and the affective and cognitive reactions to the website (Sicilia et al., 2005; Wu, 2005; Coyle and Thorson, 2001). The positive influence of interactivity can be explained by the amount of flow experienced on a specific website. Online flow is defined as an optimal enjoyable experience when an individual is immersed in an online activity. Individuals who perceive higher levels of website interactivity, experience flow more intensely, resulting in more positive attitudes (Van Noort et al., in press).

The focus of the current study is on more enduring affective responses that go beyond attitudes, such as brand beliefs and consumer-brand relationships. For such responses, a similar influence of interactivity can be expected because interactivity contributes to reciprocity. Interactivity facilitates two-way communication between consumers and brands and gives consumers control over the communication process. Interactivity gives consumers the idea that there is a reciprocal relationship between consumers and a brand. Thus, perceptions of interactivity contribute to the perceived investment of a brand in the relationship with the consumer (Yoon et al., 2008). Therefore, we expect that experiencing higher levels of interactivity while visiting a brand website results in a more positive evaluation of the consumer-brand relationship.

For brand benefit beliefs we may also expect a positive effect of perceived interactivity. First, prior research demonstrated positive effects on attitudes, and because brand attitudes and brand beliefs are conceptually related we expect an influence in the same direction. Second, interactivity positively influences attitudes and these more positive attitudes towards a website may result in a greater persuasion power of a website. Greater persuasion in turn results in brand beliefs that are more in line with the image exposed on the brands' website (MacKenzie et al., 1986; Karson and Fisher, 2005). Therefore, we expect that experiencing higher levels of interactivity while visiting a brand website results in positive brand beliefs.

2.3 Moderating role of prior experiences

While research on website interactivity effects is getting more and more common, less is known on factors influencing these effects (Liu and Shrum, 2009). Therefore, in this research we focus on the role of several types of prior experiences to the website visit as a moderator in explaining interactivity effects in a marketing communications context. On the one hand it could be argued that prior experiences are pivotal in explaining interactivity effects, because we know from advertising research that prior experiences with a brand generally diminish effects that advertising has on consumers. The explanation for this is that consumers that already have a high level of experience with a brand probably hold

strong attitudes towards this brand and the product. If consumers already have strong beliefs and attitudes about a brand, it is unlikely that these attitudes change because of exposure to advertising (Castleberry and Ehrenberg, 1990; Van Reijmersdal et al., 2010). If we apply this to interactivity effects research, this suggests that interactivity on brand websites might only influence, or have a stronger influence on, consumers who do not already have experiences with a brand. However, on the other hand, it could be argued that browsing an interactive website is a much more powerful experience than passively being exposed to an advertisement, which means advertising effects studied for non-interactive media, such as print and television, cannot be applied to the online context. This intense experience that consumers might experience while browsing an interactive environment might result in elaborate processing, and a change in consumer responses, also for consumers who already have experience with a brand (Liu and Shrum, 2009).

Besides, different types of prior experience might have a different influence on interactivity effects, depending on how specifically related these experiences are to the advertised brand and product on the website. In general, we expect that an experience that is closer to the brand and/or the product (i.e. actual prior usage of the brand and prior visits of the brand website) is more important in explaining interactivity effects than experiences that are less specific for or less related to the brand and the product (i.e. prior product category experience). Thus, we argue that the magnitude of the influence of prior experience on interactivity effects might depend on the type of prior experience consumers have. Having a personal experience with using the brand that is central to the website might have a stronger influence on interactivity effects than an experience in the form of a prior website visit.

3 Method

3.1 Participants

A total of 133 participants participated voluntarily in the online empirical study. Of these participants, 58 % were female. The mean age was 32 years ($SD = 12.97$). Participants did not receive any compensation for their participation in the study.

3.2 Design

An online empirical study was conducted to test the hypotheses. Participants were exposed to an existing brand website. Interactive features of this website

were not manipulated as perceived interactivity was used as the independent variable. Because perceived interactivity is determined by participants perceptions of a website, perceived interactivity was measured instead of manipulated (in line with views of Liu and Shrum, 2002; Steuer, 1992, see discussion above). The moderators prior brand usage, prior brand website visits and prior product category experience were measured as well because it is hard to manipulate these variables in empirical research. The moderating variables prior brand usage and prior website visits were measured before measuring the independent variable (Kenny, 2009). The other moderator, product category experience was measured after measuring the independent variable.

3.3 *Procedure*

Participants were asked to participate in an online study on brand websites. After filling in the scales to measure their prior brand usage and prior website visit, they were asked to freely browse the brand website of the coffee brand Nespresso (www.nespresso.nl) for as long as they want. After browsing the website participants' perceived interactivity, brand benefit beliefs and consumer-brand relationship, and some background variables were measured. Completing the online study took about 10 minutes.

3.4 *Measures*

3.4.1 *Independent variables*

Perceived interactivity was measured with a scale developed by Song and Zinkhan (2008). Nine items measured the three dimensions of interactivity distinguished by Liu and Shrum (2002) and Liu (2003): two-way communication, synchronicity and active control. Example items included: "While I was on the site, I could choose freely what I wanted to see" (active control dimension), "The website processes my input very quickly" (synchronicity dimension), and "The website makes me feel it wants to listen to its visitors" (two-way communication dimension). Response categories ranged from 1 (*strongly disagree*) to 7 (*strongly agree*; $EV = 4.49$; $R^2 = .56$; Cronbach's alpha = .88; $M = 4.28$, $SD = 1.15$).

3.4.2 *Moderating variables*

Prior brand experience was measured by asking participants: "How often do you use Nespresso products". The scale ranged from 1 (*never*), to 7 (*very often*; $M = 2.47$; $SD = 2.02$).

Prior website experience was measured by asking participants whether they have visited the website of Nespresso before participating in this study, yes or no. Of the participants, 28 indicated they had visited the website before (21.1%) and 105 indicated they had not visited the website before (78.9%).

Prior product category experience was measured by asking whether respondents drink coffee or not. Most of the participants indicated they drink coffee (114 participants, 85.7%) 19 participants did not drink coffee (i.e. 14%).

3.4.3 *Dependent variables*

Attitudinal brand beliefs were measured with 5 items, measuring the rational and emotional benefits of Nespresso (Keller, 1993). These benefits were based on Nespresso's ambition as stated on their website. For example, "I think Nespresso is stylish", "I think Nespresso coffee machines are easy to use". Response categories ranged from 1 (*strongly disagree*) to 7 (*strongly agree*; $EV = 3.18$; $R^2 = .64$; Cronbach's $\alpha = .85$; $M = 5.26$, $SD = 1.10$).

Consumer-brand relationship was measured with 12 items of a scale developed by Chang and Chieng (2006). This scale is based on the work of Fournier (1994), example items were, "Nespresso is reliable" and "I love Nespresso". Scales ranged from 1 (*totally disagree*) to 7 (*totally agree*; $EV = 8.69$; $R^2 = .72$; Cronbach's $\alpha = .97$; $M = 4.13$; $SD = 1.43$).

4 Results

Before describing the results of the study, it is important to make a few remarks. First, four participants were excluded from the analyses, because an outlier analysis showed that they had standardized residuals higher than 2.5 on both dependent variables. Thus, 129 participants remained in the further analyses. Second, a correlation analyses demonstrated that the moderators did not correlate with the independent variable perceived interactivity. Third, to test the hypothesized interaction effects for each dependent variable, separate regressions were conducted with centered predictors. The results are discussed for each moderating variable separately.

4.1 *Prior brand experience*

Results for prior brand experience are presented in Table 1. The regression analysis with brand beliefs as dependent variable demonstrated that perceived interactivity and prior brand experience were significant predictors ($p < .001$). Participants that perceived higher levels of interactivity and with more prior

brand experience evaluated the brand as more beneficial. More important, this effect was qualified by the expected interaction effect between perceived interactivity and prior brand experience ($p = .048$). Simple slope analysis revealed that the impact of perceived interactivity was stronger for participants with less prior brand experience ($b = .471, t = 4.87, p < .001$), than for participants who score relatively high in prior brand experience ($b = .217, t = 2.39, p = .02$). An illustration of this effect is presented in Figure 1.

Table 1: Regression results for prior brand experience

	Attitudinal Brand Beliefs			Consumer-Brand Relationship		
	B	SE	β	B	SE	B
PI	.344	.069	.374***	.359	.085	.303***
PBE	.222	.041	.410***	.367	.050	.526***
PI*PBE	-.062	.031	-.150*	-.093	.039	-.173*

PI = Perceived Interactivity; PBE = Prior Brand Experience; * $p < .05$, ** $p < .01$, *** $p < .001$

With respect to consumer-brand relationship, the regression analysis demonstrated a similar pattern, see Table 1. Again, the main effects were predicted by the expected interaction effect ($p = .02$). Simple slope analysis revealed that the impact of perceived interactivity is significant for participants low in brand experience ($b = .548, t = 4.60, p < .001$), but not significant for participants high in prior brand experience ($b = .170, t = 1.53, p = .13$; see Figure 2).

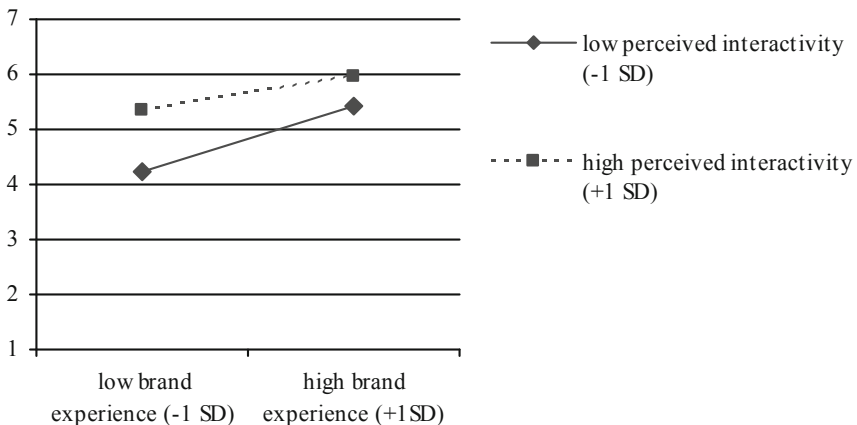


Figure 1: Illustration of the interaction effect with prior brand experience on brand benefit beliefs.

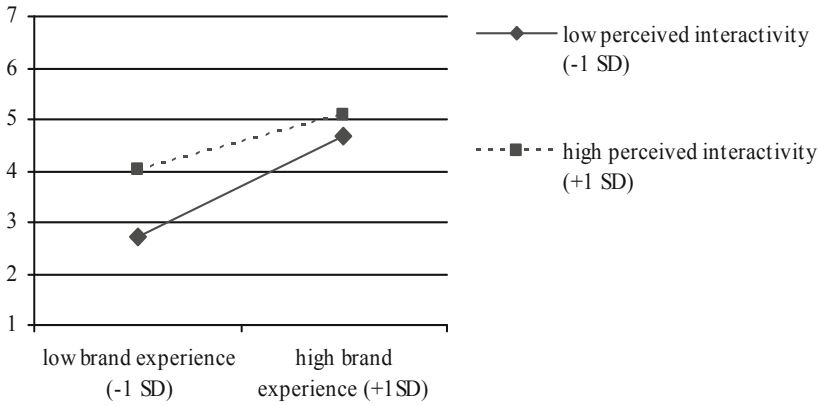


Figure 2: Illustration of the interaction effect with prior brand experience on consumer-brand relationship.

4.2 Prior website experience

Results for prior website experience are presented in Table 2. The regression analysis with brand beliefs as dependent variable demonstrated that perceived interactivity and prior brand experience are significant predictors ($p < .001$ and $p < .01$ respectively). Higher levels of perceived interactivity and higher levels of prior website experience resulted in a more beneficial evaluation of the brand. However, these effects were not qualified by an interaction effect.

With respect to consumer-brand relationship, the regression analysis demonstrates a similar pattern as for the moderator prior brand experience, see Table 2.

Table 2: Regression results for prior website experience

	Attitudinal Brand Beliefs			Consumer-Brand Relationship		
	B	SE	β	B	SE	B
PI	.338	.075	.368***	.359	.093	.303***
PWE	.606	.215	.228**	1.294	.266	.378***
PI*PWE	-2.12	.168	-.103	-.444	.208	-.166*

PI = Perceived Interactivity; PBE = Prior Website Experience; * $p < .05$, ** $p < .01$, *** $p < .001$

Higher levels of perceived interactivity and prior experience with the website resulted in a more positive evaluation of the consumer-brand relationship

($p < .001$), and these effects were qualified by an interaction effect ($p = .04$). Simple slope analysis revealed that the impact of perceived interactivity is significant for participants low in prior website experience ($b = .543$, $t = 4.07$, $p < .001$), but not for participants high in prior website experience ($b = .175$, $t = 1.47$, $p = .14$).

4.3 Prior product category experience

The results for prior product category experience are different than for the other two experience predictors (see Table 3). The regression analysis with attitudinal beliefs as the dependent variable only demonstrated a significant effect for perceived interactivity ($p < .001$), but not for prior experience with the product category ($p = .25$). The analysis did not reveal an interaction effect either. The same findings result from the regression analysis with consumer-brand relationship as the dependent variable. Again only perceived interactivity significantly predicted this variable ($p < .001$). Thus, whether the respondents were coffee drinkers or not, did not moderate the effect of perceived interactivity on attitudinal brand beliefs and consumer-brand relationship.

Table 3: Regression results for prior product category experience

	Attitudinal Brand Beliefs			Consumer-Brand Relationship		
	B	SE	B	B	SE	B
PI	.306	.079	.333***	.289	.105	.244**
PPCE	.307	.264	.097	.350	.349	.086
PI*PPCE	.231	.296	.067	.484	.3921	.109

PI = Perceived Interactivity; PPCE = Prior Product Category Experience; * $p < .05$, ** $p < .01$, *** $p < .001$

5 Conclusion and discussion

This study examined under what conditions interactivity effects in brand websites can be explained. More specifically, it tested whether website interactivity affected more enduring responses than attitudes: brand benefit beliefs and consumer-brand relationships. Moreover, it investigated the moderating role of three forms of prior experience: prior brand experience, prior website visit and product category experience. Results convincingly showed that participants perceiving a higher level of website interactivity hold more positive brand benefit beliefs and more positively evaluate the consumer-brand relationship. This effect

was moderated by prior brand experience and prior website visits in a way that interactivity effects were more pronounced for people with a low level of experience. Thus, experience is an important moderator in explaining interactivity effects. In line with our expectations, the magnitude of the influence of experience depends on the type of experience. Types of experiences that are closer to the advertised brand and product are stronger predictors of the interactivity effects than prior experiences that are less relevant to the website content. Prior experience with the product category (drinking coffee or not) did not influence the effects of perceived interactivity on enduring affective responses, whereas experience with the actual brand and the brand's website did influence these effects.

This study contributes to the literature in two important ways. First, the study is the first that investigates whether interactivity is able to affect enduring responses beyond attitudes. Up till now, interactivity research totally concentrated on attitudes towards the website and attitudes towards the brand portrayed on the website. Second, the study is one of the first that gives insights into moderating influences on interactivity effects. Therefore, the study is a direct answer to the call of Liu and Shrum (2009) and Sundar (2004) for research that investigates under what conditions interactivity effects are stronger or weaker. Based on this empirical study, it can be concluded that interactivity effects are stronger when people have only low levels of experience with a brand in terms of prior brand usage and prior website visits. Experience in terms of product category experience did not moderate interactivity effects, suggesting that only experiences that are closely related to the brand portrayed on the website are able to influence interactivity effects.

The study not only has theoretical implications, but also practitioners can benefit from the insights given. A practical implication is that it is recommendable to integrate interactive websites in an advertising campaign if the aim of the campaign is to build brands, because interactivity is able to affect brand benefit beliefs and consumer-brand relationships. To build interactive websites, websites should include interactive features, but it is most important that consumers perceive the website as interactive (e.g., Cho and Cheon, 2005; Okazaki, 2005; Song and Zinkhan, 2008; Voorveld et al., 2011). Measuring perceived interactivity can easily be integrated in standard usability tests that are administered to test website quality.

Another practical implication of the study is that interactivity in brand websites is also important for consumers new to the brand and the product. Especially people with little or no experience with the specific brand and its website were more strongly affected by the interactivity perceived. Therefore, interactivity should be the focus in marketing communications targeted at novice consum-

ers. To attract consumers that did not use the brands' product or visited the brands' website before, it is important to present website content that is specifically targeted at them in an interactive way. Websites could for example include interactive 3D product presentations of their product to communicate the benefits of a certain product.

6 References

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The Perceived Usefulness of Online Review Sets: The Role of Balance and Presentation Order

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1 Introduction

Online consumer reviews are one of the various forms of eWOM that have challenged the interest of both researchers and practitioners. Such online articulation can contain evaluative information about a certain object and may be useful for potential consumers in determining whether they should or should not buy the product (Chen and Xie, 2008). Prospective consumers are more likely to use a brand recommended by satisfied previous users than marketing-related sources, because information coming from other consumers are considered more truthful and relevant (Bickart and Schindler, 2001). Furthermore, due to the assumed absence of financial benefit, consumer-created product information is less likely to trigger persuasion knowledge (Friestad and Wright, 1994), so the shared information is more likely to be accepted or adopted. Despite their recognized effect, there is little understanding of the processing mechanism behind their impact. Previous studies on eWOM have usually focused on the impact of online consumer reviews on sales (e.g., Chakravarty et al., 2010; Chevalier and Mayzlin, 2006; Duan et al., 2008) or attitudes/intentions (e.g., Chiou and Cheng, 2003; Doh and Hwang, 2009; Lee et al., 2008).

In this paper, we argue that before deciding whether or not to buy the reviewed product or service, consumers first have to decide whether to adopt the information provided in online reviews or not. Assuming that consumers are consulting online reviews because they have the intention to buy a certain product or service (Goldsmith and Horowitz, 2006; Hennig-Thurau et al., 2004), some reviews will be categorized as useful in assisting them to make the right decision, while other reviews are less useful. In this study, we define the degree of perceived usefulness of the reviews by the extent to which the reviews are considered helpful in making a decision about whether or not to buy or use the reviewed product or service (Cheung et al., 2008). If the information is perceived useful, there is a greater likelihood that the reader will adopt this information (Cheung et al., 2008). This means, in contrast to less useful information, useful information is more likely to be included in the further decision process, and thus, is more likely to affect the formation of attitudes and behavioral intentions. Therefore, investigating factors that influence the perceived

usefulness of online reviews is highly relevant and important. For this reason, we attempt to examine to what extent the ratio of positive and negative reviews and the presentation order of a set of reviews affect the perceived usefulness of the reviews (H1 and H2, Figure 1).

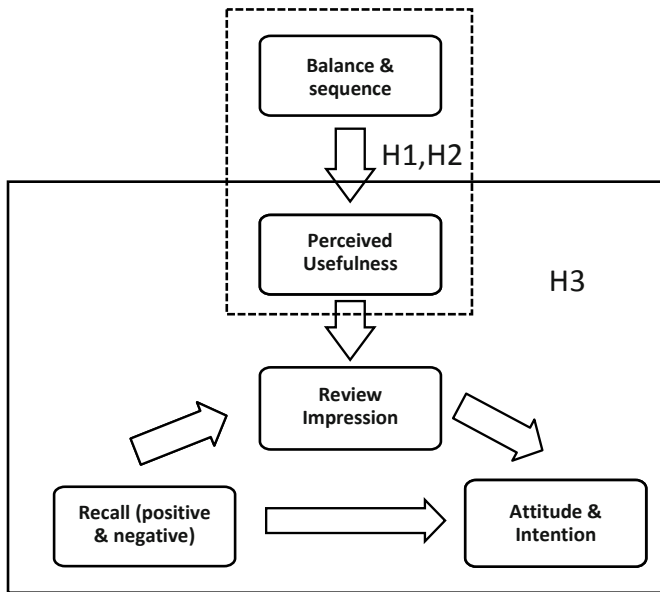


Figure 1: Research overview

In addition, we will demonstrate how highly useful information, as opposed to less useful information, will affect further decision making process (H3, see figure 1). A lot of researchers failed to find a significant relationship between recall and attitude/intention. We will elaborate that information usefulness may be accountable for these inconclusive results.

The study adds to the existing knowledge on how the composition and presentation of online information by other consumers affect information processing and decision making. Practitioners may infer good practice rules as to how to present reviews to optimize persuasive effects.

2 Literature review and hypothesis development

2.1 *The impact of balance and presentation order of a review set on its perceived usefulness*

The valence of a review refers to the evaluative direction of the review, and can be positive, neutral or negative. For the purpose of this study, we are interested in the relative amount of positive and negative reviews (integrated in the concept of *balance*) and therefore, we only focus on positive and negative reviews. The balance of a set of reviews refers to the ratio of positive and negative reviews. When the number of positive reviews is higher than, equal to or lower than the number of negative reviews, the balance is defined as positive, neutral or negative, respectively. According to the conformity tendency principle, when people evaluate an object they have no prior knowledge or experience with, they tend to form their judgment in line with the group's judgment (Burnkrant and Cousineau, 1975). Consistent with the conformity tendency, readers who are exposed to, for instance, a positively balanced review set will develop a more favorable attitude and purchase intention than those who are exposed to review sets with a negative or neutral balance (Park and Kim, 2008; Purnawirawan et al., 2010; Yin et al., 2010).

A different question is to what extent readers perceive balanced or unbalanced review sets as more or less useful. Drawing from the conformity tendency principle (Burnkrant and Cousineau, 1975), a positive and a negative balance allow the audience to conform to a group's judgment, because there is a majority to conform with. In contrast, in a neutral balance, it is difficult to form a judgment as the opinion of the group is inconsistent. A neutral balance confuses the readers and hinders them to make a decision. As a result, the readers will perceive a neutral balance to be less useful than a negative or a positive balance.

In conclusion, when the balance of a set of reviews is clearly positive or negative, meaning that the majority of the reviewers are positive or negative respectively, we expect readers to perceive this information as more useful than when the balance of a review set is neutral and an equal number of positive and negative reviews is provided. We hypothesize:

H1: People perceive a set of reviews as more useful when the balance of the review set is clearly positive or clearly negative (an unbalanced review set) than when the balance is neutral.

The impact of the presentation order can be explained by serial position theories. The primacy effect refers to the tendency to remember or to disproportionately take into account the first item of a list or a sequence over all other items.

This effect occurs because the cognitive capacity of the short term memory at the beginning of the list is still unburdened, compared to its status in the middle of the list (Deese and Kaufman, 1957; Haugtvedt and Wegener, 1994). The recency effect, the inverse of the primacy effect, is the tendency to recall or to mainly take into account the last item of a list or a sequence, because this last item is the latest piece of information and therefore the easiest to bring to mind (Cohen, 1981; Murdock, 1962). Previous studies have also identified a reinforcement of primacy and recency effects (wrap effect), resulting in a higher recall or impact of the first and the last elements in a list, in comparison to all other elements in the list, when these first and last items are of equal valence (positive or negative) (Craig and Watkins, 1973; Purnawirawan et al., 2010; Rundus and Atkinson, 1970).

Consistent with the wrap effect or the primacy-recency reinforcement principle, we argue that the perceived usefulness of a set of reviews will be reinforced when a review set starts and ends with the valence shared by the majority of the reviewers, in other words, wrapping the minority opinions in these consistent with the majority. The valence of the first review plays a crucial role in making judgment as a reference or a primary idea about whether or not the target object is good. Additionally, this reference may be held with a high degree of confidence and influences the encoding and retrieval processes of other information. In case the closing reviews in the wrap structure repeat the evaluation of the first reviews in term of valence, this last review serves as a confirmation and reinforcement of the initial judgment, providing the reader with more helpful information in making decision than in case the reviews do not have a wrapped configuration. We expect an interaction effect between balance and presentation order. While the impact of balance on various dependent variables has come out consistently in different studies (Chiou and Cheng, 2003), studies on the impact of sequential bias are often inconclusive. Furthermore, as we predicted in H1 that unbalanced review sets would lead to higher perceived usefulness, we expect that only in these cases, the sequence effect is likely to further moderate the results. In contrast, balanced review sets would not be considered useful (H1), regardless of how the reviews are presented. We expect that in conditions where the balance is clearly positive (negative), wrapping the few negative (positive) reviews in positive (negative) ones enhances the perception that the reviews are useful. Hence:

H2a: In a negatively balanced set of reviews, a review set wrapping the positive reviews into the negative ones is perceived as more useful than other presentation orders.

H2b: In a positively balanced set of reviews, a review set wrapping the negative reviews into the positive ones is perceived as more useful than other presentation orders.

2.2 *The moderating role of perceived usefulness on the relationship between recall, impression, attitude and intention*

Classical consumer behavior theories such as hierarchy of effects models (Bruner and Kumar, 2000; Lavidge and Steiner, 1961) and the theory of reasoned action (e.g., Ajzen and Fishbein, 2000; Hansen et al., 2004) postulate that attitudes and behavioral intentions are formed on the basis of beliefs accessible in memory. In this perspective, recall of information and attitude are intrinsically related (Hovland et al., 1953; Krugman, 1965). However, a lot of researchers did not find significant relationship between recall and attitude/intention and claimed that recall is only one of the information sources in influencing judgment (Mackie and Asuncion, 1990; Russell, 2002). In the context of our study, as consumers are reading reviews about a certain object they were previously unfamiliar with, the recalled review information should strongly influence consumers' impression of the reviewed object. We expect that both positive and negative elements from reviews which are recalled by the reader will have a significant impact on the formation of a general impression about the reviews, and that this general impression will in turn have an effect on the attitude and behavioral intention towards the object (Holbrook et al., 2001; Klein, 1996).

The information that is stored in short term memory due to recent acquisition or recent use, can thus have a strong influence in judgments and the decision to which it is relevant (Wyer and Srull, 1989). According to the accessibility-diagnostics model, information that is more accessible is also more likely to be used for judgment (Ahluwalia and Gürhan-Canli, 2000). When making a judgment people rarely retrieve all relevant information they have in their memory. Instead, they are more likely to base their judgment on a subset of information that is most accessible and subjectively judged as relevant. The accessibility-diagnostics model further predicts that apart from being accessible, information should also be judged by the evaluator as diagnostic, before it will influence attitudes and behavioral intention. This means that the effect of recalled (and thus accessible) review information on attitude and intention formation will only be significant when the information diagnosticity is high, in other words when people consider the information as useful. Consequently, when the reviews are considered useful, review information recall will strongly affect the impression about the reviews and consequently attitude and intention formation. In contrast, when the reviews are not considered very useful, review information recall will not affect general impression and attitude and behavioral intention formation. We hypothesize:

H3: Only when a set of reviews is perceived as very useful, the general impression about the set of reviews mediates the impact of recall of review information on the attitude towards the object and behavioral intention.

3 Procedure

In a first pretest, the vacation context used (all-inclusive beach hotel in Tenerife) was found to be appealing to 12 out of 14 respondents. In the second pretest ($n = 31$) sixteen attributes relevant for evaluating a hotel were incorporated into eight reviews (two attributes per review). A repeated measures ANOVA confirmed that the eight reviews were all perceived as equally important ($p = .933$). In the third pretest ($n = 29$) each review was reversed into its opposite to generate identical reviews with both a positive and a negative valence. Independent samples t-test confirmed that each original review and the reversed valence score of its opposite were not significantly different ($p > .091$). Moreover, a one-way ANOVA showed that the eight positive reviews were perceived as equally positive, and so were the negative reviews ($p > .185$). In the second and the third pretests over 90% out of 60 participants reported to read five to ten reviews per session and 76.7% reported to read reviews following the order in which they are presented (top-down). These results confirmed the external validity of the main study.

Table 1: Overview of the 3x4 factorial design

Balance	Presentation order			
	Positive/ negative/ positive	Positive/ negative	Negative/ positive	Negative/ positive/ negative
Positive	3+/2-/3+	6+/2-	2-/6+	1-/6+/1-
Neutral	2+/4-/2+	4+/4-	4-/4+	2-/4+/2-
Negative	1+/6-/1+	2+/6-	6-/2+	3-/2+/3-

Note: Numbers depict numbers of sequential statements of same valence, signs depict valence. For example, 3+/2-/3+ signifies three positive reviews, then two negative reviews, followed again by 3 positive reviews.

The main experiment was a 3 (balance: positive, neutral, negative) x 4 (presentation order: positive/negative, negative/positive, positive/negative/positive, negative/positive/negative) full factorial between-subjects design (see Table 1). In order to ensure that the content of the reviews would not confound our results, four scenarios for each of the 12 conditions were created, resulting in 48 scenarios in total. In constructing these 48 scenarios a positive review about an issue (e.g., +A) did not appear together with its opposite review (-A). Respondents were recruited from a consumer database available to the marketing department of a Belgian university, via an e-mail containing a link to the questionnaire. We randomly assigned 413 respondents ($M_{\text{age}} = 39$ years, 38% male) to the 48 different scenarios. After reading the vacation scenario and the eight reviews, the respondents rated the perceived usefulness of the reviews (PU, $\alpha = .902$), overall

general impression based on those eight reviews (GI, $\alpha = .963$), their attitude toward the reviewed hotel (AH, $\alpha = .832$) and their intention to stay at this hotel (SI, $\alpha = .962$) on seven-point multi-item scales. Construct scores were computed by calculating the average of the items per construct. Recall of review information was measured by means of an open question, which was coded by two independent coders as “correct” (score “1”) or “incorrect” (score “0”) recall. The coders agreement percentage was at least 96% for each review and the Cohen’s κ score was higher than .875 for all reviews (Bakeman, 2000; Cohen, 1968). Disagreements were solved by discussion between the coders. The relative recall of both positive (Rpos) and negative reviews (Rneg) was calculated as the number of correctly recalled positive (or negative) reviews divided by the total number of positive (or negative) reviews in the set.

4 Findings

4.1 *The impact of balance and presentation order of a review set on its perceived usefulness*

A 3 (balance: negative, neutral, positive) x 4 (presentation order: positive/negative/positive, positive/negative, negative/positive, negative/positive/negative) ANOVA with perceived usefulness (PU) as the dependent variable revealed a significant main effect of review balance ($F(2, 413) = 7.758, p < .001$). As hypothesized in H1, Bonferroni-corrected pairwise comparisons show that a positive balance in the review set ($M_{\text{pos}} = 4.57$) is perceived as useful as a negative balance ($M_{\text{neg}} = 4.60, p = .999$), and both are perceived as significantly more useful than a neutral balance set ($M_{\text{neutral}} = 4.13, p_{\text{pos}} = .003, p_{\text{neg}} = .002$). The main impact of presentation order is not significant ($F(3, 413) = .363, p = .780$). Bonferroni-corrected pairwise comparisons do not reveal any significant differences between the four presentation orders ($p > .999$). The interaction between balance and presentation order is significant ($F(6, 413) = 3.997, p = .001$) (Table 2, Figure 2).

Table 2: The interaction effect of balance and sequence on review perceived usefulness

	Negative balance			Neutral balance			Positive balance		
Presentation order	n	Mean	SD	n	Mean	SD	n	Mean	SD
Positive/negative/positive	31	4.27	1.28	31	4.16	1.28	34	5.04	.68
Positive/Negative	29	4.21	1.15	30	4.22	1.16	39	4.58	.67
Negative/positive	41	4.87	1.09	40	4.15	1.38	32	4.34	.97
Negative/positive/negative	28	5.04	.84	37	4.00	1.34	32	4.32	.97
F statistics	F(3, 138) = 5.012			F(3, 137) = .182			F(3, 136) = 5.421		
p-value	.003			.908			.002		

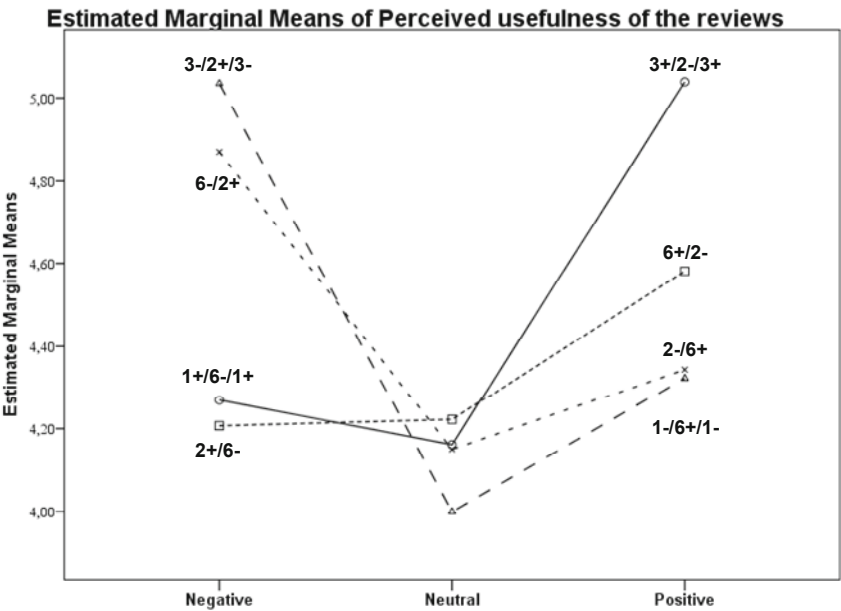


Figure 2: The effect of balance and presentation order on perceived usefulness

Within the negative balance, negative/positive/negative (negative wrap) results in the highest level of PU ($M = 5.04$), followed by the negative/positive ($M = 4.87$), positive/negative/positive (positive wrap) ($M = 4.21$) and positive/negative configuration ($M = 4.21$) ($F(3, 138) = 5.012, p = .003$). Bonferroni post hoc tests show that a negative/positive/negative wrap format results in significantly higher PU compared to the positive/negative/positive ($p = .025$) and positive/negative formats ($p = .015$), but not to the negative/positive format ($p > .999$). H2a is supported except for the difference with the negative/positive review configuration.

Within the positive balance, we obtain similar results, but in the opposite direction. The positive/negative/positive wrap configuration results in the highest PU ($M = 5.04$), followed by positive/negative ($M = 4.58$), negative/positive ($M = 4.34$) and negative/positive/negative ($M = 4.32$) ($F(3, 136) = 5.421, p = .002$). Bonferroni post hoc tests show that positive/negative/positive results in a significantly higher PU compared to negative/positive ($p = .005$) and negative/positive/negative ($p = .003$), but not significant compared to the positive/negative condition ($p > .117$). H2b is supported except for the difference with the positive/negative review format. Within the neutral balance, there is no significant effect of presentation order on PU ($F(3, 137) = .182, p = .908$).

4.2 *The moderating role of perceived usefulness on the relationship between recall, impression, attitude and intention*

To test the mediating role of GI on the impact of recall on AH and SI at both low and high PU levels, the three step regressions procedure proposed by Baron and Kenny (1986) was followed. The first step involves regressing the relative recall of positive and negative reviews (R_{pos} and R_{neg}) (the independent variables) on the two dependent variables, AH and SI. For individuals rating PU as low, R_{pos} and R_{neg} do neither significantly impact AH ($\beta_{R_{pos}} = .100, p = .209; \beta_{R_{neg}} = -.090, p = .258$) nor SI ($\beta_{R_{pos}} = .120, p = .132; \beta_{R_{neg}} = -.136, p = .088$). At high PU, both R_{pos} and R_{neg} significantly affect AH ($\beta_{R_{pos}} = .333, p < .001; \beta_{R_{neg}} = -.232, p = .002$) as well as SI ($\beta_{R_{pos}} = .317, p < .001; \beta_{R_{neg}} = -.178, p = .018$). A higher R_{pos} leads to a significantly more positive AH and SI, while R_{neg} has a negative influence: The more positive reviews people remember, the more positive their attitude and staying intention, and the more negative reviews people remember, the more negative their attitude and staying intention. In case of low PU, there is no direct effect of the independent recall variables on either AH and SI. Consequently, a mediation test is meaningless for the low perceived usefulness group.

In the second step for the high PU group, the regression analysis shows that both Rpos and Rneg (the independent variables) significantly affect GI (the mediator) ($\beta_{Rpos} = .385, p < .001$; $\beta_{Rneg} = -.227, p = .002$) (Table 3). Again, Rpos induces a positive impression, while the effect of Rneg is negative. In the third and final step of the mediation analysis, the effect of recall (independent variables) and GI (mediator) on AH and SI is tested for the high perceived usefulness group. The results demonstrate that GI fully mediates the impact of recall on AH and SI. When GI is included into the regression, the effects of both Rpos and Rneg on AH ($\beta_{Rpos} = .032, p = .527$; $\beta_{Rneg} = -.061, p = .205$) and SI ($\beta_{Rpos} = .031, p = .570$; $\beta_{Rneg} = -.015, p = .776$) become non-significant, while the effect of GI on both AH ($\beta_{GI} = .787, p < .001$) and SI ($\beta_{GI} = .747, p < .001$) is strongly significant. As we expected, at low PU, both Rpos and Rneg are not found to affect attitudes or behavioral intentions, while at high PU, the formed impression fully mediates the impact of recall on attitudes and behavioral intention. Our findings support H3.

Table 3: Mediating role of GI on the impact of Rpos and Rneg on AH and SI (high PU)

	Dependent var.	Independent var.	R ²	F-value	p-value	Beta	t	Sig.
Step 1	AH	R _{pos}	.116	11.995	<.001	.333	4.539	<.001
		R _{neg}				-.232	-3.163	.002
	SI	R _{pos}	.097	9.775	<.001	.317	4.278	<.001
		R _{neg}				-.178	-2.395	.018
Step 2	GI	R _{pos}	.146	15.715	<.001	.385	5.376	<.001
		R _{neg}				-.227	-3.172	.002
Step 3	AH	R _{pos}	.647	110.683	<.001	.033	.633	.527
		R _{neg}				-.061	-1.273	.205
		GI				.787	16.501	<.001
	SI	R _{pos}	.575	81.738	<.001	.031	.569	.570
		R _{neg}				-.015	-.285	.776
		GI				.747	14.278	<.001

5 Discussion, implications and suggestions for further research

The purpose of this study was to investigate the role of online review perceived usefulness in the message elaboration process. Our findings established that perceived usefulness is affected by balance and presentation order. More specifically, when the goal of acquiring information is to help the readers make a decision, unbalanced review sets are found to be more useful than those that are balanced because the unbalanced sets of reviews fulfill this need. In contrast to a positive or a negative balance, a neutral balance consists of too many opposing arguments. The equal number of positive and negative reviews in a neutral balance decreases the clarity of the recommendation (to buy or not to buy) and results in a low usefulness evaluation. Review presentation order also affects the perceived usefulness of these unbalanced review sets. Drawing from the primacy-recency reinforcement and the wrap effect, the findings indicate that positive wrapping (positive/negative/positive) in positively balanced sets and negative wrapping (negative/positive/negative) in negatively balanced sets, improves the perceived usefulness of the reviews. Our findings regarding the wrap effect confirm the sequential bias in information processing in online environment (Purnawirawan et al., 2010). It is noteworthy that when the balance is positive (negative), positive (negative) wrapping does not generate significantly better usefulness perception than the positive/negative (negative/positive) configuration. This suggests that next to reinforced primacy-recency or wrapping, the primacy effect, i.e. the tendency to mainly take into account the first item of a list, rather than all other items in a list, may also play a role. Some online sellers have implemented this tactic, namely by showing potential customers some highlight reviews (usually positive, to encourage sales) (Lee et al., 2008). When an object receives a lot of reviews, it is usually impossible to present all these reviews at the same time. By presenting potential users a couple of highlighted positive reviews, the positive characteristics of the object become prominent. Therefore, highlight reviews may be capable of motivating consumers to proceed to the actual purchase transaction. In case the readers decide to look (read) further, wrapping the negative reviews into the positive one, at least in the first pages is advisable. The repetition of the valence in the wrap structure, induces a sense of consistency in valence between the first and the last items. This confirmation strengthens the primacy effect and enhances the perceived usefulness of the reviews.

The perceived review usefulness moderates the impact of recall on the readers' attitude and behavior, mediated by their general impression. After reading the reviews, people may retain some information in their short term memories. This recalled information forms the basis of their attitudes and behavioral intention toward the reviewed object, but this recall effect is fully mediated by their impression of the reviewed object. However, information recall only affects the attitude and behavioral intention when the information recalled is perceived as

highly useful. These findings are consistent with the accessibility-diagnostics framework, showing that this framework can be extended to the context of online reviews or eWOM. Our results suggest that PU might contribute in explaining the non-significant relationship between recall and attitude found by some authors (e.g., Mackie & Asuncion, 1990). In some situation, people just do not find the information useful and therefore, although they might recall the information, this recalled information does not affect attitude and intention formation. Our study demonstrates that perceived usefulness plays a crucial role in the attitude and intention formation. This may also explain the findings of Chiou and Cheng (2003), who showed that information on the internet has a greater impact when there is a higher level of consensus (i.e. more individuals sharing similar opinion regarding the performance level of a product or service) between the reviewers. These reviews are considered more useful, and thus are more likely to impact behavior.

The limitations of this study provide opportunities for future research. First, only eight reviews were used and the readers were forced to read them in a pre-determined order to ensure internal validity. Future research can investigate what the impact of presentation order and balance is when people are allowed to read as many reviews as they want or in the order of their choice (which reflects reality better). Second, in the present study we ensured that all reviews were equally important and equally strong in valence. As there is no standard in writing or reading reviews, it is very likely that readers attach higher value to one review and less value to the other one. Further research could investigate to what extent reviews of varying importance or usefulness vote interact with balance and presentation order effects. Third, we limited our research to online product reviews which only includes textual information, while a lot of product review websites allow consumers to share video, photographs or other visual elements. Future research could include both pictures and text in a review to investigate how different combinations play a role in information processing and consumer decision making.

Additionally, as previously mentioned, usefulness vote may affect reader's usefulness perception and review persuasiveness. It would be interesting to explore how relevant these votes are for attitude formation, or if there is a conflict between the balance and the usefulness vote. Finally, a number of studies have emphasized the importance of social networks in business. More specifically, companies are encouraged to communicate with their consumers to build a trustful relationship. As negative reviews have a potential to damage brand image, companies may need to interfere by giving response to (negative) reviews that consumers place on review sites. The extent to which the nature of these reactions affect attitude formations (e.g., neutralize or reinforce positive or negative reviews) is another area for further research.

6 References

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Ad Intrusiveness of Location-Based Advertising – A Virtual Reconstruction

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1 Introduction

An important problem for advertisers is the general tendency to avoid advertising (Li et al., 2002; McCoy et al., 2008; Zanot, 1984). Ads typically get the 'blame' that they do not meet the goals and desires of consumers, thus the commercial message is perceived as disturbing and therefore avoided (Li et al., 2002, McCoy et al., 2008; Speck and Elliott, 1997). In order to reduce interference and ad avoidance, advertisers must use forms of marketing which reflect the situation of the consumer (Cho and Cheon, 2004).

A possible solution could be the use of personalized and context-congruent ads based on 'behavioral tracking' (Cho and Cheon, 2004; Leppäniemi and Karjaluoto, 2005). A relatively young marketing method based on this principle is Location Based Advertising (LBA). We define LBA as a form of mobile advertising, where advertisers use location-tracking technology (e.g., GPS) to send context-congruent ads to the mobile communication device of the consumer. Stores could use LBA for example to advertise to only those who are approaching the window of the shop. LBA relies on the expectation that an ad that adapts to the context of the user is considered as more relevant and less intrusive (Banerjee and Dholakia, 2008; Xu, 2006/2007).

Recent developments in communication technology have increased the possibilities considerably to make LBA an everyday practice (Dhar and Varshney, 2011). Within a short timeframe we have experienced a transition from simple mobile devices, suitable for telephony and SMS, to so-called smartphones equipped with powerful processors, a rich software platform, intuitive and multi-modal user interface, advanced sensors, high-speed internet

and GPS. The user base of this new generation of phones is rapidly growing: in 2011 there are approximately 449 million smartphone users worldwide (RBC Capital Market Report, 2008). These developments increase the potential for mobile advertising significantly. Where advertisers until recently focused on the use of SMS (Short Message Service) and MMS (Multimedia Messaging Service) (Unni and Harmon, 2007), they can now use mobile applications with a high degree of interactivity, multimedia, connectivity and context-sensitivity. Furthermore, progress is also expected in the field of positioning techniques. In contrast with GPS, new techniques based on WLAN, WiMax, Bluetooth, RFID and NFC give advertisers the possibility to track consumers with high precision in in-door situations (Dhar and Varshney, 2011; Liu et al., 2007). With these developments personalized advertising can be deployed within commercially attractive areas such as department stores and supermarkets. Usability research of Hosbond and Skov (2007) shows that a location-based application in the context of a supermarket is already feasible.

However, despite the growing potential there are still some barriers with regard to the widespread deployment of LBA. Dhar and Varshney (2011) show in their description of the status quo, that the end-devices, infrastructure, logistics, application development, cost, privacy and search for the right business models still deal with difficulties. In addition consumers still perceive mobile applications as 'nice to have' instead of 'must have' (Dhar and Varshney, 2011). Furthermore, advertisers continue to be cautious and sceptical regarding the use of LBA, because little is known about the effectiveness of these mobile context-congruent advertisements (Xu et al., 2009). This knowledge gap leaves room for further investigation.

Scientific studies about 'mobile advertising' and LBA in particular are still in their infancy (Bruner and Kumar, 2007; Unni and Harmon, 2007). Not only advertisers, but also researchers are caught by surprise by the high speed of technological developments. Despite the advanced features that "mobile advertising" offers nowadays, the bulk of mobile research still deals with SMS and MMS-based advertising forms (e.g., Barwise and Strong, 2002; Bauer et al., 2005; Drossos et al., 2007; Soroa-Koury and Yang, 2010; Unni & Harmon, 2007; Varnali and Toker, 2010; Wehmeyer, 2007; Xu, 2006/2007; Xu et al., 2009; Zhang & Mao, 2008).

Another shortcoming of mobile advertising research is the limited data based on user experience. This is partly caused by the novelty of location-based ads (Bruner and Kumar, 2007; Unni and Harmon, 2007; Wehmeyer, 2007). On the other hand most researchers disregard methods that study the user experience of mobile advertising *in situ*, partly because of the practical and methodological

complications caused by the mobile nature of the medium (Kjeldskov, 2004; see paragraph 'a comparison of methods').

Instead of an experiential approach past studies are largely based on general expectations measured through surveys (Bauer et al., 2005; Bruner and Kumar, 2007; Okazaki, 2004; Tsang et al., 2004; Xu, 2006/2007) or on mental representations of hypothetical use cases triggered by story-based scenarios (Banerjee and Dholakia, 2008; Drossos et al., 2007; Unni and Harmon, 2007; Wehmeyer, 2007; Xu et al. 2009). While some of these studies have yielded interesting results with respect to recipient and message-related conditions for the acceptance of LBA, there are significant limitations associated with these results. Because respondents cannot base their evaluation of LBA on prior experience, the results provide limited insight into cognitive processes that occur during the use of LBA and the contextual factors that may affect these processes. In addition, the results may not be indicative of the practice, as a direct experience is qualitatively different from a mental image or expectation. Schwarz states (2007: 640) that human evaluation is context-sensitive, because it is grounded in the physical contextual experience. Consequently, assessments based on a contextual experience of mobile advertising are preferable. In line with this recommendation Xu (2006/2007) states with regard to their own survey research that consumers cannot imagine what personalized ads mean to them because they did not have a real life experience with this form of advertising. Also Wehmeyer (2007) takes into account the possibility that the results from their scenario study differ from how users react when they actually receive a mobile advertisement in real life.

This limited access to the user experience within mobile advertising research keeps researchers from getting a conclusive answer regarding the question if mobile context-congruent ads have a positive effect on consumers. Until now we only have data in terms of the general expectations of consumers towards LBA. The scenario study of Banerjee and Dholakia (2008) for example found that consumers do not expect LBA to be more useful than non-location based ads. The study of Drossos et al. (2007) found similar results based on scenarios as well: context-congruent ads do not lead to significantly more positive attitudes towards the ad and the brand.

Based on these results, we could conclude that LBA has no added value, but according to the aforementioned reservations towards scenario studies we can be doubtful regarding this conclusion. First, there is the possibility that the lack of contextual experience in these studies cause the results to differ from the real world. Second, the results did not capture the possible psychological reactions after receiving a context-congruent ad. It is possible that context-congruency does not affect the overall evaluation (attitude) and behavioural intentions directly, but instead influences the preceding cognitive processes that occur during

a real interaction with LBA. Perceived ad intrusiveness, or 'the psychological reaction to ads that interfere with the consumer's ongoing cognitive processes' (Li et al., 2002: 39) focuses specifically on the formation of perception. It shows how the advertisement is related to the cognitive state of the user and the context in which it appears (Li et al., 2002; Morimoto and Chang, 2006). Thereby the concept offers a suitable approach for determining the efficacy of LBA, since this form of advertising is also characterized by the close interaction between the message, the recipient and its context. Yet there is no research on the effect of context-congruent mobile ads on perceived ad intrusiveness.

Thus we find two important research objectives in determining the effectiveness of context-congruent mobile ads: the effectiveness of LBA should be examined with regard to cognitive processes and should be based on an actual contextual experience of using a LBA application. The first goal is pursued by studying the perceived intrusiveness of context-congruent ads. Additionally this study examines the impact of perceived ad intrusiveness on attitude and behavioural intentions. For the second objective we introduce a virtual reality environment where the user experience is being reconstructed. With this method we are able to carry out an experiment without the complications mentioned above.

2 Theory

2.1 *Perceived ad intrusiveness & LBA*

Intrusiveness has proven to be a relevant indicator for feelings of ad irritation and ad avoidance in traditional media (Ha, 1996) and on the web (Edwards et al., 2002; Li et al., 2002; McCoy et al., 2008). With regard to the mobile platform intrusiveness has already been investigated by Wehmeyer (2007) and Unni and Harmon (2007). However, when it comes to LBA, perceived ad intrusiveness is an under-explored phenomenon, even though the concept is theoretically appropriate for the investigation of context-congruent ads. Instead most studies have concentrated on the concept of irritation and its effects on attitude and behavioural intentions (Tsang et al., 2004; Xu et al., 2009) but at the same time provide little understanding of how these feelings of irritation arise. Li et al. (2002) emphasize that intrusiveness differs conceptually from irritation. Irritation finds itself in the domain of affective evaluation of attitude, whereas intrusiveness occurs at a precursory stage, as a result of the discrepancy between the ad and the cognitive processes of the consumer.

In addition to the cognitive dimension intrusiveness also consists of a contextual dimension (Morimoto and Chang, 2006), which makes it an attractive concept for studying the efficacy of context-congruent advertising forms such as

LBA. Ha (1996: 77) emphasizes the importance of context by defining intrusiveness 'as the degree to which advertisements in a media vehicle interfere with the editorial unit'. In this case editorial unit refers to the media content where the ad appears in. Subsequently, Li et al. (2002: 39) expand the definition by replacing 'editorial unit' with "every possible environment in which ads might appear." Moreover, they claim that as communication technology progresses, ads increasingly appear at unexpected moments and in non-traditional contexts. As a consequence of this new medium neutral definition, intrusiveness is well suited for the investigation of mobile advertising and LBA in particular. Where the old definition mainly applied to forms of advertising in television, radio, newspaper and web, which interrupted the media content, the new definition encompasses the transcendent nature of mobile ads. Mobile devices, because of their ubiquitous quality, can also potentially disturb the consumer at times when he or she pays attention to the physical environment rather than the medium itself (Bauer et al., 2005; Wehmeyer, 2007). However, following the assumptions of Edwards et al. (2002), this disturbance, i.e. perceived intrusiveness can be decreased by relating the content of the ad to the context which it is intruding. Context-incongruent ads activate divergent knowledge structures and create added processing demands, whereas context congruent ads are seen as positive social influences and thus not be considered threats to the consumer's freedom (Edwards et al., 2002: 86). This assumed relation between context-congruency and intrusiveness has already been confirmed by Edwards et al. (2002) with respect to banners on websites. Since LBA offers context-congruent ads we would expect that people perceive LBA as less intrusive than their context-independent counterpart. In line with this expectation we propose the following hypothesis:

H1: Location-based ads will be perceived as less intrusive compared to location-independent ads

2.2 Intrusiveness, attitude and behavioural intentions

Smartphone owners are in the first place technology users but secondly also a potential target group for ads (Xu et al., 2009). To create a conceptual model in which both aspects are represented, we relied on the Theory of Reasoned Action (TRA) of Fishbein and Ajzen (1975), Theory of Planned Behavior (TPB) of Ajzen (1991) and Technology Acceptance Model (TAM) of Davis (1989). The theories of Fishbein and Ajzen suggest that perceptions/beliefs lead to a global (affective) evaluation, or attitude (Liska, 1984). We therefore assume that the negative perception of "perceived ad intrusiveness" affects the overall evaluation of the LBA application negatively. The relationship between intrusiveness and the affective evaluation (attitude) has been confirmed in the case of mail advertising (Morimoto and Chang, 2006) and web ads (McCoy, 2008). This study tries

to find a similar relationship in the case of LBA. Thus we propose the following hypotheses:

H2: Lower level of perceived ad intrusiveness results in a more favourable attitude toward the mobile advertising application.

Subsequently, according to the TRA/TPB theoretical framework the attitude in turn can influence the behavioural intention, which in turn is a predictor for actual behaviour. In the case of advertising, the influence of the affective evaluation of ads on the intention to buy the advertised product has been studied thoroughly. With regard to LBA this specific relation has already been confirmed by the study of Xu (2009). However, this result was found with surveys using scenarios. It is therefore interesting to see if we can find a similar relationship when having an actual LBA experience. We therefore propose the following hypothesis:

H3: The attitude towards the mobile advertising application is positively related to the intention to buy the advertised product.

The 'Technology Acceptance Model' takes the aforementioned sequence of effects as a theoretical basis to investigate the acceptance and use of technology. The model assumes that a positive evaluation of the technology leads to the intention to use the technology in the future (Davis, 1989). TAM is used extensively within advertising research (e.g., Bauer et al., 2005; McCoy et al., 2008; Morimoto and Chang, 2006; Tsang, Ho and Liang, 2004; Xu, 2006/2007; Xu et al., 2009) because of the possibility to study precursors of acceptance and the focus on novel technology. Therefore LBA research (e.g., Banerjee and Dholakia, 2008; Drossos et al., 2007; Unni and Harmon, 2007; Xu et al., 2009) is largely based on the framework of Fishbein & Ajzen and Davis.

Hence with the use of TAM we can assume that a positive attitude towards LBA will increase the intentions to use it. As was the case with our former hypothesis, this causal relationship has been confirmed by the scenario-based study by Xu et al. (2009). This study wants to confirm this relationship in the case of an actual LBA experience, hence our following hypothesis:

H4: The attitude towards the mobile advertising application is positively related to the intention to use the mobile advertising application.

3 Method

3.1 *A comparison of methods*

Field experiments are praised for respecting the use-context. Particularly in the case of LBA an in situ approach seems appropriate, given the prominent role that context plays in the communication process. Yet this type of research is scarce when it comes to the investigation of mobile applications (Kjeldskov and Graham, 2003) because of the considerable investment in time, resources (Kjeldskov, 2004) and the dependence on third parties such as network providers, mobile marketing agencies and other facilitative parties (Wehmeyer 2007). In addition, there are currently relatively few initiatives that can serve as a vehicle for field research.

Apart from the practical issues there are also methodological complications, causing field studies to be not necessarily preferable. Kjeldskov and Stage (2004) report difficulties in regard to measurement, control and manipulability as a consequence of the unstable research setting due to the mobile nature of the medium. In addition, Wehmeyer (2007) states that controllability of mobile advertising research is compromised because crucial aspects such as time and place must be included in the study design.

Previous studies regarding the evaluation of mobile applications have avoided these organizational and methodological obstacles associated with field studies by conducting scenario-based surveys. However these approaches obviously lack a practical user experience with a LBA application. Although some lab studies hand their participants a mobile phone (e.g., Duh et al., 2006; Tang et al., 2009; Xu et al., 2009), they still lack the interaction with an immersive context (Kjeldskov and Stage, 2004;). Especially in LBA research, the environment is an important aspect since it is actively involved in the communication process (Kjeldskov and Stage, 2004). The contextual experience is also a determining factor in shaping perceptions and evaluations (MacInnis and Jaworski, 1989; Schwarz, 2007; Wright, 1973). With the absence of this experience it is possible that respondents may respond differently in practice (Wehmeyer, 2007). This shows the need for a design that merges the benefits of field studies, such as context, realism and physical experience, with the manipulability, measurability and control of lab experiments while keeping costs in check.

These requirements are met to a certain extent when extending lab studies with virtual environments. The unique combination of a malleable and a dynamic virtual context with a stable research environment, gives the researcher the opportunity to offer the participant an interactive and photo-realistic context, without sacrificing control and measurement capabilities. Moreover, because of

the plasticity of virtual reality scenarios and stimuli are relatively easy to operationalize, and the influence of confounding factors can be excluded. This makes it easy to carry out research under similar thereby securing reproducibility. Finally we also report practical benefits in terms of organizational effort, cost and time.

3.2 *Setup*

The experiments took place within a virtual supermarket simulated by a CAVE (see Khan, Nuijten and Deslé, 2011). A supermarket seemed to be the most suitable setting since mobile ads are more effective if they are aimed at low-priced and frequently bought products (Barwise and Strong, 2002). The VE (modelled in Maya and rendered in OGRE) is projected onto four rear-projection screens (each 3.6 meters wide by 2.6 meters high). The screens form a closed space, thereby offering the participant a 360° view of the environment. Participants can move in the virtual setting with the help of a head-tracking system based on four Wii-mote IR cameras. In contrast with head-mounted displays, the CAVE does not block out the physical world, which offers the opportunity to use physical objects and the representation of the participant's own physical body. In this particular case, it gave us the possibility to use an actual smartphone, with which participants were able to receive location-based ads. The tracking device (Figure 1, right) determines the participant's head position in the physical room, which is then used to control motion in the virtual supermarket. In essence, the participant acts as a "human joystick": when the participant stands in the centre of the CAVE the virtual camera stands still, whereas when the participant takes one step in a certain direction, the virtual camera moves accordingly, thus giving the illusion of movement within the virtual space. The participant is able to turn and step in every direction relative to the CAVE's centre. The simulation is also sensitive to the magnitude of the participant's distance from the centre of the physical room. This distance, determines the speed with which a participant walks within the environment. The simulation also corrects the first person view for the vertical axis. Thus, in the case in which one, for example, jumped or ducked the simulation corrected the perspective according to the vertical position of the participant's head. When it comes to shopping within the supermarket our simulation does not yet support interaction with virtual products. To simulate the act of selecting a product, participants were asked to make a grabbing gesture, without actually attempting to interact with the virtual product (Figure 1, left). When the participant made this grabbing gesture, they received auditory feedback.



Figure 1: CAVE setup. Left: Overview right: Participant with phone 'grabs' product

We created a simple user interface for the application using the supermarket's corporate style. Furthermore, participants had to start the application themselves in contrast to the pilot where the application was already started and was running in the background. In this way we wanted to convey the idea to the participant that this is an opt-in service within the environment of an application instead of a simple push message.



Figure 2: The soup ad (left) the participants received when they reached the trigger location. Subsequently, participants could pull more information about the offer by using 'yes' and 'no' buttons (middle, right).

3.3 Experimental design

For this study we used a between-subjects design to test our hypotheses. Participants were randomly assigned to two conditions: 1) Location-congruent: the mobile ad with product x was presented when the user entered location A where product x, product group X and product group Y were available, 2) Location-incongruent: the mobile ad with product x was presented when the user entered location A where only product group Y was available. We kept location constant

and manipulated the products on the shelf to keep as many circumstantial factors constant as possible. Location A could be found approximately in the centre of the supermarket and covered the space with a radius of 0.5 meter from the manipulated shelf. For product x, a well-known Dutch soup product was used. Accordingly, the ad showed an offer with this specific soup product (Figure 3). Further, product group X consisted of soups and product group Y consisted of meal mixes.

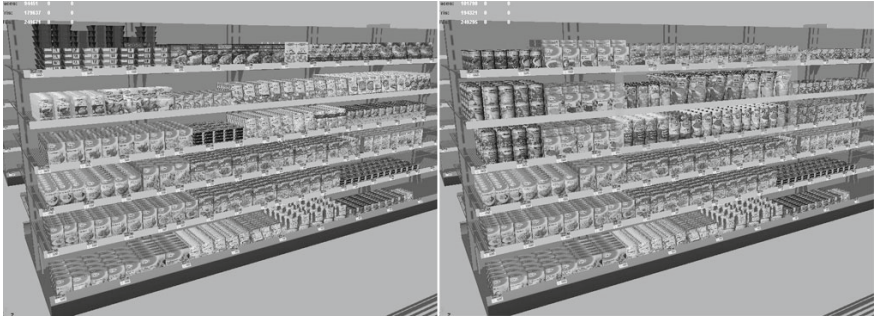


Figure 3: Left: incongruent shelf; right: Congruent shelf with advertised product

3.4 Participants

We recruited 70 participants through a marketing research company. From the 70 participants 15 participants received the ad outside the perimeter as a consequence of an unstable Bluetooth connection and 2 participants did not notice the ad. The remaining 53 participants (31 male, 22 female; age range 17-64 years, $M = 28.57$ years, $SD = 11.60$) consisted of 26 who witnessed the location-incongruent setup (15 males and 11 females; $M = 28.96$ years, $SD = 14.22$) and 27 who witnessed the location-congruent (16 male and 11 female; $M = 28.19$ years, $SD = 11.22$). Moreover, they all owned a mobile phone and were familiar with smartphones equipped with a touch screen interface. For their effort participants received a five euro coupon.

3.5 Tasks

Participants were given two tasks during the briefing: first, they freely navigated in the supermarket for a few minutes to get familiar with the controls and the interaction. Second, they had to pick five different food products and then had to go to the counter. The central location of our trigger area, the task of shopping five products and the limited product set of the virtual supermarket ensured that both groups visited the trigger area. In this way we did not have any specific

instructions for participants to visit the manipulated shelf, thereby keeping our research goal concealed.

3.6 Measurement

After the virtual shopping experience, a questionnaire assessed the perceived intrusiveness (C's $\alpha=.841$), based on the scale of Li et al. (2001), attitude toward the mobile application (single item) based on a scale of Bergkvist and Rossiter (2007) and measured their intention to use the application (C's $\alpha=.921$) based on a scale of Kowatsch and Maas (2010). As was the case with our pilot study we also took into account relevant control variables: product involvement (C's $\alpha=.842$) (Verbeke and Vackier, 2004), the attitude towards advertising in general (C's $\alpha=.841$) (Muehling et al., 1990) and personal innovativeness (C's $\alpha=.845$) (Agarwal and Prasad, 1997).

4 Results

The variable *intrusiveness* shows a statistically significant higher value with the incongruent-group ($M=3.15$, $SD=0.90$) than with the congruent-group ($M=2.45$, $SD=1.07$); ($t(51, N=53)=-2.546$, $p<.05$), thereby pointing in the direction expected by H1. The ANCOVA (see Table 1) confirms the significant effect of the congruent/incongruent condition when controlled for *product involvement* and *attitude toward advertising in general*. It also shows that the congruent/incongruent condition has the greatest effect ($\eta^2=0.094$). H1 is thereby supported by the data. Furthermore, we tested the remaining hypotheses by conducting a regression analysis. We once again took the congruent/incongruent condition (incongruent=0, congruent=1) into account and found a significant effect in the expected direction ($\beta=-0.286$, $p<.05$). The congruent/incongruent condition explains together with the control variables 23.2% of the variance of *intrusiveness*. *Intrusiveness* in turn has a significant effect on the *attitude toward the app* ($\beta=-0.173$, $p<.05$) and is responsible for 14.1% of the variance, thereby supporting H2. *Attitude toward the app* has a positive influence on 'intention to use the application' ($\beta=0.393$, $p<.001$) when controlled for *innovativeness* (H3 supported). Together they explain 48.1% of the variance of *intention to use the application*.

Table 1: ANCOVA for 'intrusiveness'

<i>Variable</i>	<i>Df</i>	<i>MS</i>	<i>F</i>	<i>partial η^2</i>
Product involvement	1	1.621	1.826	.036
Attitude ad in general	1	4.369	4.921	.091*
Context congruency	1	4.514	5.085	.094*
Error	49	.888		
Total	53			
Corrected Total	52			

Note: * $p < .05$

5 Conclusion and discussion

With this study we studied the influence of context (in)congruent ads on perceived ad intrusiveness. Further, we examined whether the degree of "intrusiveness" has a negative impact on the attitude in regard to the application and how these attitudes in turn affect behavioural intentions.

Following the results we find that LBA has a significant influence on the degree in which the consumer considers mobile ads to be "intrusive". It turns out that mobile ads that focus on the context of the user are experienced as less intrusive than context-incongruent ads (H1 confirmed). The significant relationship between context-(in)congruency and intrusiveness even holds up when we take into account people's attitude towards advertising in general and their product involvement. Against our expectations we did not find a relationship between someone's product involvement and intrusiveness.

Further results show that people who have experienced a lower intrusiveness, developed a more positive attitude towards the mobile application (H2 confirmed). This attitude in turn determines the intention to use the application. It was found that as people develop a more positive attitude towards the application, they were more likely to use it in the future (H3 confirmed). Besides the effect on the intention to use the application we also saw a positive impact of the attitude towards the application on the intention to buy the product. People who developed a positive attitude about the application, were as a result inclined to purchase the advertised product (H4 confirmed).

Our findings are in line with theories about "perceived ad intrusiveness" (Ha, 1996; Li et al. 2002). The theory states that ads are to some degree capable of interrupting cognitive processes, depending on how these ads are disturbing the flow of 'editorial content' (Ha, 1996). Due to the interruption of these processes

the consumer perceives the ad as intrusive (Li et al., 2002). Based on the medium neutral definition of intrusiveness from Li et al. (2002) we were able to translate the theory to everyday practice of LBA. Hence, we hypothesized that the editorial content is comparable to the physical environment in which the recipient is located. Both represent an information environment that determines the cognitive processes. Receiving a message interrupts the attention towards this environment. However, by relating to the 'content' the ad with the environment less divergent knowledge structures of the recipient are addressed, than is the case with context-independent ads. This results in less disruption of cognitive processes and subsequently leads to lower intrusiveness levels.

We also find in accordance with previous studies (Unni and Harmon, 2007; Xu, 2009; Zhang and Mao, 2008) a confirmation of the Theory of Reasoned Action, Theory of Planned Behavior and Technology Acceptance Model. The assumed sequence of effects has been proven to be valuable in predicting attitudinal and intentional change. In addition, it appeared that the theoretical framework of Fishbein and Ajzen and Davis was not only in theory compatible with perceived ad intrusiveness, but also in practice.

We consider a few limitations of our study. First, we have some reservations regarding the ecological validity of the research. Although the CAVE gives us the unique opportunity to collect data based on a LBA-user experience and managed to produce consistent data, our experimental design and specific operationalization could have consequences for the generalization of our results. The virtual supermarket, though based on reality, still shows considerable differences with the real world. While the graphic quality of the simulation was high, the image was still distinguishable from the real. The interaction, such as navigation and manipulation of objects, also differed from practice. Furthermore at the level of the supermarket simulation we also observe important differences: for instance, not all the shelves were filled and there were no other people/customers.

In addition, the presence of supporting equipment such as video cameras, projection screens, projectors, computers and head-tracking system could have impaired the level of empathy. However, these restrictions are not necessarily inherent to the concept of a virtual reconstruction of user experience, but are caused by our operationalisations and by the limitations of current technology. Therefore, a validation study in which the results of a cave setting are compared with a real life supermarket is highly recommendable.

Second, we identify limitations concerning the measuring instrument. Although the stability of the CAVE-setting allowed the use of direct measuring instruments, we chose for a post-hoc measurement for practical reasons with the disadvantage that experiences are evaluated retrospectively. A psychological

concept like 'intrusiveness' relates to direct experience and should be measured instantly instead.

This study delivers a few contributions to the expansion of scientific knowledge. While former scenario-based studies (Banerjee and Dholakia, 2008; Drossos et al., 2007) have found no significant effect of context-congruent advertising, this study provides for the first time insight into the disturbing effect that context-(in)congruent mobile ads have on consumers. We also showed that the interference that is experienced as result of the mobile advertising, has a significant influence on the evaluation of the LBA application, and thereby indirectly on the purchase intention and intention to use the LBA application.

In addition, this study contributes to the theoretical concept of intrusiveness. In line with the definition of Ha (1996), intrusiveness has mainly been studied within the context of editorial content. However, the extension of the definition by Edwards et al. (2002) enables researchers to apply intrusiveness to other non-traditional environments. In our study we have demonstrated that this indeed the case by measuring the concept in relation to the content of the spatial (virtual) environment instead of the editorial content. Besides we have also demonstrated that the Theory of Planned Behavior (Ajzen, 1991) and Technology Acceptance Model (Davis, 1989) are compatible with the concept of perceived ad intrusiveness.

Finally, this study makes a first step in developing a new method for the assessment of the effect of mobile advertising applications. Research regarding these applications has a number of practical and methodological complications due to the mobile nature of the medium. With the CAVE set-up however, researchers have the opportunity to explore the mobile medium in a dynamic context, without sacrificing the advantages of laboratory experiments.

The research shows also its relevance beyond the scientific goals we set out. Against the backdrop of the current exponential technological development more and more opportunities arise to adapt the communication process on a mass scale to the individual user (e.g., mobile advertising, narrow casting, personalized advertising). Hence, this raises the question with advertisers and other communicators/communication specialists how these new technologies have to be deployed. This study provides a number of strategic recommendations on how communication can effectively work out using these ubiquitous context-sensitive communication technologies.

6 References

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Will They Come Back Again? Assessing the Effectiveness of QR Code Campaign

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1 Introduction

Consumer participation in loyalty programs continues to flourish and has become more frequent in service companies (Bolton et al., 2000). A loyalty program is a marketing program that is designed to build more involving relationships with customers by providing attractive incentives (Yi and Jeon, 2003). The logic behind this program is that loyal customers are a profitable segment as they tend to repeat their purchase, pay premium prices, and bring in new customers by word-of-mouth (O' Brien and Jones, 1995). The use of loyalty programs is particularly important when firms want to win back inactive customers. The present study sheds light on this specific segment: those former customers who have left and not come back of their own accord. How can we get them back by QR code loyalty campaign? Quick response (QR) code is a unique, two-dimensional barcode that can be reproduced in a diverse range of printable surfaces.

A typical QR code promotion works as follows. First, firms reproduce a QR code in print media. Second, customers scan the code with their mobile device to access a Webpage where they are asked to register by providing their personal data, in exchange of rewards.

In an increasingly competitive market, QR code offers a quick, attention-seizing way to awaken sleeping clients. However, QR code also casts its shadow upon on a clear sky. The success of QR code loyalty campaign largely depends on the customers' willingness to register their personal information. Nevertheless, due to an increasing number of unethical information practices, consumers are more and more reluctant to disclose their privacy.

Given this background, this study seeks to address two primary issues. First, we will examine how QR code loyalty campaign could enliven inactive clients' loyalty. Second, we will explore what factors influence such loyalty formation in terms of information privacy concerns, timing of rewards, and level of involvement. This study contributes to the literature in two ways. First, despite increasing importance of m-commerce, QR code promotion has received scant attention

in the academic literature. Second, the study envisages the issues associated with internet information privacy concerns in a ubiquitous context.

2 Information privacy concerns

Information privacy can be defined as the claim of individuals, groups, or institutions to determine for themselves when, how, and to what extent information about them is communicated to others (Westin, 1967). Information privacy has become a prominent issue in e-commerce, because the interactive process can collect significant amounts of personal information and store it indefinitely for later use. The organizational literature offers several theories about consumers' information privacy concerns. Smith et al. (1996) develop a 15-item scale that measures information privacy concerns on four dimensions: improper access to personal information, collection, errors, and unauthorized secondary use. The scale has received empirical validation in several offline contexts (Milberg et al., 2000; Rose, 2006). Furthermore, drawing in part on Smith et al.'s (1996) scale, Malhotra et al. (2004) develop an extended scale to measure internet users' information privacy concerns, and to identify the internet-specific dimensions of privacy, which are distinct from those surrounding traditional marketing. On the basis of social contract theory, they also propose three factors: collection, control, and awareness of privacy practices.

In the context of mobile advertising, information privacy is usually protected by mandatory opt-in and opt-out systems, which are associated with any subscription to message-based promotions. Barwise and Strong (2002), Tsang et al. (2004), and Rettie et al. (2005) investigate consumers' acceptance of permission-based advertising in the form of SMS (short message service); unknown messages sent to consumers are likely to annoy the recipients, and appear to be spam. However, recent evidence indicates that opt-in is no longer sufficient, because a permission system alone cannot ensure consumers' confidence.

3 Loyalty program scheme

The focal point of our study is repeat purchase, which has been considered as behavioral aspect of loyalty (Jacoby and Chestnut, 1978; Oliver, 1997). Our interest lies in a question as to how firms motivate inactive customers to use the service which they once decided not to. Although prior research indicates that, in many purchase situations, consumers tend to be passive recipients of product information who spend minimal time and cognitive effort in choosing brands (Hoyer, 1984), inactive customers' decision making seems more complex.

In this light, Thomas et al. (2004) argue that an area largely neglected in marketing literature is customer winback. Customer winback is “the process of firms’ revitalizing relationships with customers who have defected” (Thomas et al., 2004). Griffin and Lowenstein (2001) suggest that, while there is a 60-70% chance of successfully repeat-selling among “active” customers, this probability decreases to a 20-40% among lost customers. Thus, winning back lost customers could substantially and efficiently increase firms’ profitability. Here, this study focuses explicitly on QR code loyalty campaign as a means to recapture customers.

Dowling and Uncle (1997) proposed a loyalty program framework based on three psychological effects, namely (1) the effect of type (direct versus indirect effect), (2) the value of the rewards, and (3) the effect of timing. Yi and Jeon (2003) empirically confirmed that these three effects are significantly intertwined to influence the loyalty formation, while identifying involvement as an important determinant. Focusing on the type and timing of rewards, Keh and Lee (2006) replicate their study by testing the effect of satisfaction as an additional determinant of loyalty. The present study extends this line of research by introducing a new perspective: privacy concerns.

Unlike satisfaction in service research, consumer concerns have seldom been examined in terms of loyalty paradigm. In a way, privacy concerns are not directly related to displeasure that customers feel from what the service provider offers. Instead, privacy concerns stem from the information practice the provider may be engaged in - directly or indirectly - from which personal information may be leaked to the third party in an intentional or unintentional manner. Although information privacy concerns are not related to satisfaction, such a state of apprehension can be fatal in mobile communication, and therefore, would affect the resulting loyalty, because the loyalty program acceptance only depends on how safe customers feel in accepting the message to access further information.

4 Hypotheses

The effects of privacy concerns may be similar to dissatisfaction terms of the mental accounting. The logic behind consumers’ mental accounting is based on costs and benefits accruing from the service consumption. Regardless of the source of displeasure, those who are highly concerned with information privacy may decide not to respond to QR code loyalty campaign as it sounds risky as to privacy disclosure. Prior research indicates that the insistence of immediate decision cause consumer anxiety (Wietz et al., 2007). Furthermore, prior research suggests that consumers tend to prefer delayed, rather than immediate rewards, when the value of the delayed reward is perceived high. In addition, the post-

ponement of redemption from the time of choice may cause consumers to underestimate the future effort or uncertainty of redemption. Holding the value of the reward constant, when consumers demonstrate a state of apprehension over privacy, delayed reward would therefore be perceived more attractive, thus stimulating repeat purchase. Furthermore, such apprehension over immediate decision is stronger when customers are highly involved with the service. Because involvement represents the strength of motivation in the form of personal relevance, the higher the involvement, the more likely it is that customers pay more attention to uncertainty and insecurity. Thus:

H1: When customers are concerned about privacy,

H1a: Delayed rewards, compared to immediate rewards, would more likely lead to repeat purchase.

H1b: Low involvement service, compared with high involvement service, would more likely lead to repeat purchase.

H1c: The positive effects of delayed over immediate reward on repeat purchase would be more pronounced if the loyalty program promotes low involvement service rather than high involvement service.

On the other hand, when consumers are not concerned with privacy disclosure or information risk, they are considered to be indifferent to the service. It may be that the discontinuance of service usage occurred for reasons other than dissatisfaction, for example, price, proximity or anything unrelated to the service quality. When consumers are indifferent and inactive, immediate rewards, rather than delayed ones, would be more effective, creating more affective value, thus an instant gratification is more preferred. In our study settings, this propensity would be even stronger due to a “quick response” of the code-based campaign. Furthermore, holding the value and type of rewards constant, customers are more likely to pay more attention to the campaign for high involvement service. This leads us to the following hypotheses:

H2: When customers are not concerned about privacy,

H2a: Immediate rewards, compared to delayed rewards, would more likely lead to repeat purchase.

H2b: High involvement service, compared with low involvement service would more likely lead to repeat purchase.

H2c: The positive effects of immediate over delayed reward on repeat purchase would be more pronounced if the loyalty program promotes high involvement service rather than low involvement service.

5 Methods

5.1 Measures

We created four scenarios based on two independent variables: the timing of rewards (immediate versus delayed) and the level of service involvement (high versus low). We chose bank and supermarket as high and low involvement services, respectively. The basis scenario presumes that an inactive client is given a QR code promotion leaflet that offers a cash back (immediate reward) or gift voucher (delayed reward) if she or he participates in its loyalty program by subscribing to email newsletters. Specifically, in the scenario employed for bank (high involvement service), an individual was handed out a promotional flyer in front of a station. The flyer describes a loyalty program of a famous bank, which s/he has an inactive savings account. If s/he scans a QR code on the flyer, s/he is led to the firm's campaign registration Website. If s/he subscribes an email newsletter, the bank will immediately deposit \$50 in her/his account. In order to participate in this campaign, s/he needs to register name, birth date, home address, marital status, and annual income. In the low involvement scenario, the service is replaced by a famous supermarket chain that is promoting a loyalty program in the same way. In addition to these variables, one additional independent variable, information privacy concerns, was measured by four items on seven-point Likert-type scales (Lwin et al., 2007). Based on the resulted scores, the sample was divided into two groups, concerned and unconcerned groups, using a median split method.

Our main dependent variable, repeat purchase, was measured by the scales used by Keh and Lee (2006). The wording of each item was adapted to the context of QR code loyalty campaign. They were all based on seven-point Likert-type scales, in tandem with what was asked (1 = completely disagree, and 7 = completely agree).

5.2 Surveys

A quasi-experimental survey of mobile users was conducted in Japan. We recruited 680 participants from a research firm's online panel. Filter questions associated with mobile internet usage, QR code usage, and mobile campaign participation were employed, while the respondents' demographic distribution matches approximately that of the general Japanese population. We used a 2 x 2 between-subject design in which 170 participants were randomly assigned to each of the four scenarios. The sample was almost equally divided between males and females, with occupational composition approximated to the Japanese population. The participants were asked to read and complete the questionnaire.

Missing or incomplete data were eliminated from the dataset, leaving 667 usable data for the subsequent analysis.

6 Results

H1a postulates that greater repeat purchase could be fostered through delayed rewards, compared with immediate rewards. Our ANOVA results indicate that this is truly the case (4.04 vs. 3.72, $p < 0.05$), thus providing support for H1a. In H1b, we predicted that low involvement service generates greater repeat purchase than high involvement service does. Our results indicate that the mean value of supermarket (4.20) is statistically greater than that of bank (3.57) at $p < 0.05$. Therefore, H1b was supported.

Table 1: Cell means for hypotheses 1a-c.

Level of involvement	Concerned Customers	
	Time	Means
High	Immediate	3.25
	Delayed	3.88
	Total	3.57
Low	Immediate	4.18
	Delayed	4.21
	Total	4.20
Total	Immediate	3.72
	Delayed	4.04
	Total	3.88

H1c suggests that the positive effect of delayed rewards would be greater in low involvement service. The interaction effect between the timing of reward and the level of involvement was indeed statistically significant in the predicted direction at $p < 0.001$. Thus, H1c was supported.

Table 2: ANOVA results for hypotheses 1a-c.

Variables	Concerned Customers		
	df	F-value	P
Involvement	1	17.17	.000
Time	1	4.61	.032
Involvement x Time	1	4.00	.046
Error	360		

H2a-c addresses similar questions when customers are not concerned with their privacy disclosure. H2a contemplates that immediate rewards are better than delayed rewards in terms of the resulted repeat purchase. Although this relation holds true in raw scores (4.19 vs. 4.23), this difference was not statistically different. Thus, H2a was not supported. In H2b, high involvement service generates greater repeat purchase, compared with low involvement service. However, the difference was marginal and statistically insignificant. Thus, H2b was not supported. Given the rejection of both H2a and b, the interaction effect between the timing of rewards and the level of involvement, which was posited in H2c, was not significant. Therefore, H2c was not supported.

7 Conclusions

The present study explores the effects of privacy concerns, timing and involvement in QR code mobile promotion. First, based on Dowling and Uncle's (1997) loyalty program scheme, this study corroborates Keh and Lee's (2006) findings in that, holding the value of rewards constant, delayed rewards are more attractive to foster repeat purchase, when consumers are in a state of anxiety. In a way, this study demonstrates that privacy concerns significantly impede customers' positive mental accounting, and firms should plan an appropriate lapse in time between choice and redemption of the rewards. Given that time consciousness is a crucial factor in the value creation in mobile commerce (Kleijnen and Ruyter, 2007), this finding is uniquely important in a mobile promotion context: When customers are concerned with their privacy, QR code loyalty campaign with delayed rewards could be a useful tool for winning back inactive customers.

In addition, a fact that, for those customers who are concerned with their privacy handling, low involvement service (supermarket) with delayed rewards was found to be more effective in repeat purchase generation seems significant. This finding contradicts Yi and Jeon (2003) who found that, under low involvement, immediate rewards were perceived to be more valuable than delayed ones. Our study therefore demonstrates that, when consumers are concerned with their privacy, the service itself, rather than the timing of rewards, is becoming of utmost concern to customers.

Furthermore, a significant interaction effect between the timing of rewards and the level of involvement suggests that QR code loyalty campaign could especially work for retailing chains where fast moving consumer goods (FMCG) are sold. An obvious implication of this finding is that firms from both service and FMCG industries could coordinate joint campaigns using QR code to maximize their sales.

On the other hand, when consumers are not concerned, no difference was found not only for the timing of rewards, but also for the level of involvement. Given that we hold the level of satisfaction constant, they are thought to be indifferent in the service usage. In a way, our findings seem to indicate the complexity of QR code mobile promotion in that “indifferent” customers are more difficult to win back. Here, more complex reward stimuli are necessary to reactive loyalty of the customers lost in the past. For example, some emotional stimuli may be effective in awakening these customers. Apparently, this is far beyond the scope of our study, and needs further explorations in the future.

8 Limitations and future research suggestions

Any generalization should be treated with caution due to a few limitations. First, this study only focuses on repeat purchase behavior. Thus, our results should not be interpreted in a broader context of general loyalty. Second, this research uses a scenario method to create an experimental setting. Thus, the participants’ responses are not based on real experience, which may be suffered from demand effects. While overcoming these limitations, future research should address how and what kind of values QR code loyalty campaign creates.

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Online Advertising by Tell-a-Friend Services

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1 Introduction

From its beginning the digitalization of media was accompanied by the introduction and use of new forms for online and interactive advertising, e.g. banner, interstitials, e-mail advertising, ad-games, and in-game advertising (Silberer, 1997; 1997a; 2000; Fritz, 2004; Schulz et al., 2008). This development is still going on and includes efforts of stimulating an electronic word-of-mouth (Henning-Thurau et al., 2004) by the application of tell-a-friend services. This type of viral marketing could provide a fast and nearly cost free diffusion of website content and advertising messages. One of the main characteristics of viral marketing is that the distribution of the advertising is carried out by the consumers (Helm, 2000; Riemer and Totz, 2005). In this context, the recommended content will be delivered within the social network of a consumer to other consumers by using different forms of electronic media (e.g., by electronic mail, blogs, internet forums and social networking sites. Therefore, marketers or companies, whose information is distributed in that way, only have an indirect contact with the consumers (Smith et al., 2007). According to Phelps et al. (2004) this could have a positive effect on the consumers' perception and evaluation of the distributed content, because "consumers often hit the delete key when they know the message is from a marketer" (Phelps et al. 2004, p. 334). But, if the messages are send from a well-known person of the addressee the message itself as well as the content will gain more attention and are evaluated as more trustworthy (Bickart and Schindler, 2001; Sun et al., 2006) and therefore could have a positive effect on the consumers shopping behavior.

Furthermore, tell-a-friend services represent an efficient method of website promotion (Usborne, 2001; Zorbach, 2001; Frey, 2002; Wilson, 2002; Grunder, 2003; Carmody, 2004; Langner, 2005; Sweeney et al., 2006). For example, actually more than 50 million members of the social networking site facebook use the well-known "like it"-button several times a day to share especially different advertising content as well as Social Plugins. The results of a study by Spread.ly, a provider of an ad-network based on different kinds of tell-a-friend services, in July 2011 show that this type of recommendation service is the most popular form to share content with other people in the internet. About 24% of all shared content is conducted by using the facebook "like it"-button on different websites.

Another important and often used way to recommend and to share content online is the usage of e-mails. Today, about 11.1% of all content recommended by tell-a-friend services is forwarded by using electronic mail, which contains more or less personal information of the sender, information about the source – the marketer – as well as information regarding the addressee of the mail.

But, up to now there is no idea about the relevant criteria which should be taken into account for evaluating the opportunities of the application of tell-a-friend services to realize its potential positive effects. Therefore, this study contributes to advertising research by analyzing the design and deployment of specific elements of such recommendation services in different branches which could form the basis for a thorough examination of tell-a-friend services and the effects of this advertising measure in different branches – including systematic interaction analysis (Silberer, 1997b). Furthermore, the results of a cluster analysis provide insights into fundamental types of actually used tell-a-friend services.

2 Elements of tell-a-friend services

In general, a tell-a-friend service consists out of three elements– the *starting element*, the *form*, which has to be filled out, and the *mail*. After activating the service by clicking on the starting element a web form is provided in which the user at least has to fill in the e-mail address one or more addressees. In some cases, the web form offers the opportunity for further particulars, e.g. for sending greetings to the addressee. Finally, the website provider carries out the sending of the mail and their content to the inbox of the addressee. According to Nielsen (1999) these criteria and their specific characteristics could be regarded as important factors for the success of tell-a-friend services.

2.1 Criteria of the starting element

One of the most important aspects of the starting element is that it has to have a good visibility and is easy to identify on the website and therefore, could stimulate the user to recommend the website actually visited as well as its content. Hence, following criteria are of specific relevance for activating and using a tell-a-friend service:

- the placement of the starting element on the website (e.g., on the home-page or on individual pages within the site);
- the placement within a specific web page (e.g., within the navigation bar or within the website content);
- the design of the starting button regarding its visibility, readability, and understandability (see *figure 1*);

- the design of specific drivers to stimulate the use of the tell-a-friend service which go beyond the design of the starting element (e.g., receiving credit points in loyalty programs or becoming member of an online community).



Figure 1: Examples of the starting element

2.2 Criteria of the form

The requested data, the provided assistance for filling out the web form as well as the layout and the structure and the design and visibility of the send button are essential aspects of the web form of a tell-a-friend service (see *figure 2*).

Furthermore, the design of the form should stimulate and motivate the willingness to recommend. Therefore, the following criteria are of specific relevance:

- the kind and amount of the requested data;
- the opportunities for personalization of the recommendation;
- the provided assistance for the users when filling out the form (e.g. providing hints for incorrect data or a transmission confirmation);

- the layout and the structure of the form;
- the design of the send button (e.g., placement and visibility);
- the verification of the user as a real person which will avoid misuse of the recommendation service e.g., by spam-bots.

Find accounts and follow them.

Browse Suggestions Find Friends **Invite By Email** Find On Twitter

You can invite folks by sending them an email. See what you'll send them.

Enter some email addresses:

Separate multiple email addresses with commas, ex: joe@twitter.com,jane@twitter.com

invite

Figure 2: Example of the form

2.3 Criteria of the mail

From the point of view of the website provider applying a tell-a-friend service to its website users, the mail should be opened and read by the addressee to unfold its advertising effect. In this context, the design of the header of the mail is of specific relevance. Furthermore, after opening the mail the design of the body of the mail should support a positive reception of the (advertising) content by the addressee and hence, stimulate the visit of the recommended website. In this regard, one would expect that a higher level of personalization will increase the likelihood of the addressee of perceiving the content as a recommendation of a friend with similar preferences and interests and not as commercial advertising. Moreover, the presence of a signature could have a positive impact on perceiving the mail as professional and secure (see *figure 3* for an example).

Summing up, the design and deployment of the header, the body and the signature of the mail are of specific interest:

- the identification of the sender and the wording of the subject in the e-mail header;
- the length, the content as well as the design of the body of the e-mail (ranging from providing only a short recommendation together with a

- link to the recommended website up to providing additional information as well as comprehensive information and illustrations);
- the availability and the design of the signature;
 - the format of the mail (plain text vs. HTML);
 - the layout (structure of the content, typography, and usage of graphics);
 - the kind and number of links.



Figure 3: Example of a mail including graphic elements and hyperlinks

3 A content analysis of tell-a-friend services

We conducted a comprehensive content analysis to gain insights into the design used for tell-a-friend services in several branches with regard to the above mentioned criteria (for an overview on the use of tell-a-friend services in automotive websites see Silberer and Pfrang, 2011). The selected branches are: sporting goods manufactures (e.g., Nike, adidas, Puma), software providers, and computer manufactures (e.g., Electronic Arts, Dell), durable goods manufactures (e.g. Panasonic, IKEA), retailing, financial service providers (e.g., Deutsche Bank), tourist information websites, video-sharing websites (e.g., YouTube), as well as social networks (e.g., facebook). Within each of the different branches 30 websites are analyzed.

The selection of websites within the branches was based on their website value which reflects the popularity of the website provider by taking into account the website's exposure, the number of their users as well as references of the website on others websites. In every branch we selected 30 websites having the highest website value. We also accounted for the expected internet affinity as well as the age distribution of the users. The website's interactivity, the provided opportunities to contact and to communicate with other users as well as the possibility to evaluate website content were also considered for the selection of the websites. In doing so, 240 websites were selected. In the first step the websites were analysed with regard to the provision of a tell-a-friend service by the website provider. As a first result, the findings show that only 50% of all websites provide such a service. If a tell-a-friend service was provided the activation of the starting element was analysed. After that, the tell-a-friend service was activated by clicking on the starting element. Then, the appearing web form was described and filled out. In every web form we filled in the same information concerning the sender as well as the addressee of the recommendation. After receiving the mail the mail was opened and described with regard its header, its body as well as its signature.

4 Results of the study and discussion

4.1 Sector-independent frequencies and variants

We start with the frequencies of specific forms of tell-a-friend services, referring to 120 existing and analysed tell-a-friend services. These are industry-independent frequencies (see *table 1*).

Placement and design of the starting element

38% of the starting elements can be found on the homepage, 62% on the inner sites of the web page – a majority of these elements were placed near the content. Looking at the placing on inner sites of the webpage we could identify, that 57% of the elements were placed near the content, but only 17% in the navigation bar of the website. Concerning the design of the starting button our findings show that 31% are designed as a button, about the half as hypertext and 15% as graphics.

Table 1: Description of selected tell-a-friend services

Criteria			N=120 websites		
TAF-Starting Element					
Placing	Homepage (7) (6%)	Inner site (74) (62%)		Both (39) (33%)	
Positioning	Navigation bar (21) (18%)	Near content (68) (57%)		Bottom of page (31) (26%)	
Design	Button (37) (31%)	Hyper-text (65) (54%)		Picture (18) (15%)	
Usability	High (67) (56%)		Low (53) (44%)		
Incentive	Offered (7) (6%)		Not offered (113) (94%)		
TAF-Form					
Amount of data	High (15) (13%)	Medium (67) (56%)		Low (38) (32%)	
Personalisation	High (17) (14%)	Medium (81) (68%)		Low (22) (18%)	
Support	Correcting mis- takes (17) (14%)	Indicating sending status (76) (63%)		Not offered (27) (23%)	
Usability of navigation ele- ments	High (78) (65%)		Low (42) (35%)		
Usability	High (95) (79%)		Low (25) (21%)		
Verification	Offered (21) (18%)		Not offered (99) (82%)		
TAF-Mail					
Personalisation of header	High (31) (26%)	Medium (57) (48%)		Not offered (32) (27%)	
Personalisation of body	High (33) (28%)	Medium (47) (39%)		Not offered (40) (33%)	
Sending format	Plain text (71) (59%)		HTML (49) (41%)		
Usability	High (70) (58%)		Low (50) (42%)		
Signature	Offered (54) (45%)		Not offered (66) (55%)		
Integrated con- tent	Hyper-link (75) (63%)		Picture (1) (1%)	Both (42) (35%)	Not offered (2) (2%)

About the half of the starting elements are considered user-friendly. A starting element is classified as user-friendly, if a font size bigger 10, a suitable font and typology was used. Incentives, that should encourage the user clicking the starting element, are just used occasionally (6%).

Design of the form

65% of the starting elements and 79% of the layouts are considered user-friendly. This applies particularly to designs that are designed by the rules of

web-usability, for instance virtual lines, typography and reasonable structure. The amount of personal information that should be provided by the user is limited. Only 12% of the web form requested a higher amount of personal information. A higher level of personalization was also found very seldom: 14% requested more than the name and the e-mail address of the sender and the recipient. An appropriate support for the filling of the form and the following sending process could be identified in 74% of cases. A captcha was used by 18% of the forms, in order to verify the authenticity of the user.

Design of the mail

Plain text is the most dominant sending format used by the mails (59%). A hyper-link was identified in 98% of cases. About every second mail (58%) was user-friendly. This means a reasonable text length and structure of the mail, the use of a personal salutation and an appealing, decent layout. In 55% of cases there was no signature at all. 73% of the headers of the mails were personalized. Note that just about the half of these e-mails (48%) used a personalized consignor or topic. A personalization of the text body was implemented in 67% of cases. But still there is a relatively significant amount of mails that do not use a personalization for the header (27%) or the body (33%).

4.2 Sector-dependent frequencies and variants

The sector comparison was shortened by combining some of the eight sectors. Furthermore the websites of tourist information services were excluded because of the small number of cases. The results show some significant differences between the designs of tell-a-friend services between the selected branches (see *table 2*).

The tell-a-friend-services of the sporting goods manufacturers are characterized by a large number of placements near the content on inner sites, a high level of supporting the filling the form and a mail sent with the plain-text format and a personalized body. Looking at the tell-a-friend services of the other durable goods manufacturers we see a high amount of captchas, a high degree of personalization within the mail and a signature. This also applies on the service providers. The placement of the starting element only on inner pages, right near the content and plain-text as preferred sending format was found quite often analysing video platforms.

Table 2: Interbranch comparison of the selected tell-a-friend services

Criteria				N=120 websites	
TAF-Starting Element					
Placing	Homepage (7) (6%)	Inner site (74) (62%)		Both (39) (33%)	
Positioning	Navigation bar (21) (18%)	Near content (68) (57%)		Bottom of page (31) (26%)	
Design	Button (37) (31%)	Hyper-text (65) (54%)		Picture (18) (15%)	
Usability	High (67) (56%)		Low (53) (44%)		
Incentive	Offered (7) (6%)		Not offered (113) (94%)		
TAF-Form					
Amount of data	High (15) (13%)	Medium (67) (56%)		Low (38) (32%)	
Personalisation	High (17) (14%)	Medium (81) (68%)		Low (22) (18%)	
Support	Correcting mis- takes (17) (14%)	Indicating sending status (76) (63%)		Not offered (27) (23%)	
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Usability	High (95) (79%)		Low (25) (21%)		
Verification	Offered (21) (18%)		Not offered (99) (82%)		
TAF-Mail					
Personalisation of header	High (31) (26%)	Medium (57) (48%)		Not offered (32) (27%)	
Personalisation of body	High (33) (28%)	Medium (47) (39%)		Not offered (40) (33%)	
Sending format	Plain text (71) (59%)		HTML (49) (41%)		
Usability	High (70) (58%)		Low (50) (42%)		
Signature	Offered (54) (45%)		Not offered (66) (55%)		
Integrated con- tent	Hyper-link (75) (63%)		Picture (1) (1%)	Both (42) (35%)	Not offered (2) (2%)

¹ PC hard- and software / consumer electronics, furniture, home improvement² Wine and books³ incl. tourist information

Within social networks incentives are offered and the design of the starting element is mostly hyper-text. For reasons of advertising impact especially durable goods manufacturers and service providers prefer placing the starting button near the content, supporting the user in filling out the form and the personalization of the mail.

4.3 *Types of tell-a-friend services*

In order to find relatively homogeneous groups or basic types within the population a cluster analysis was done. First of all, a similarity and distance measure had to be chosen and the distance matrix had to be calculated in order to start with the search for clusters (see also Silberer and Pfrang, 2011). The Hamming distance was chosen as the distance measure (Hamming, 1950). Based on the distance matrix the Ward-method could identify three clusters. The description of the 17 criteria can be found in table 3. The results are the following:

Cluster 1: The starting button is mainly placed in the navigation bar or the bottom of the page. The most dominant design is the user-friendly hyper text. In most cases the web form has a user-friendly layout and navigation elements. The web form also requests a small amount of data from the sender and offer few possibilities of personalisation and support. The mail is also sent almost without any personalisation. The mostly used sending format is plain-text (54%), therefore hyperlinks are the only included content in these mails.

Cluster 2: In most cases the starting button is placed near the content within the inner sites of the webpage. The starting button is a hyper-text for the most part, but buttons can be found in 33% also. Almost the half of the starting buttons is less user-friendly (47%). In addition a trend of requesting umpteen data and sending highly personalized mails. In 78% of the cases the sender gets support for filling out the form. The mail of cluster 2 is mostly sent in the HTML-format and showed a higher level of graphical illustration and usability.

Cluster 3: The starting element in this cluster is in most cases placed near the content (85%) on inner sites of the web page (93%). There is also a tendency of graphical and appealing layout. 53% of the starting elements in cluster 3 are identified to be less user-friendly. The web forms request a small amount of data and have a tendency of not allowing any personalization. Forms are designed user-friendly (navigation elements 60%, layout 75%) and the level of support consists primarily of correcting mistakes. A verification captcha is used in 35% of cases in cluster 3. The mail is quite short, impersonal, and unappealing.

Interpretation of the three clusters can incorporate the origin of the most common criteria. Up to 63% of cluster 1 consists of social networks and 43% of cluster 3 consists of video-sharing platforms.

Table 3: Cluster Solution

	Cluster 1	Cluster 2	Cluster 3
TAF-Starting Element			
Placing (homepage)	17,1%	0,0%	2,5%
Placing (inner site)	5,7%	77,8%	92,5%
Positioning (near content)	8,6%	68,9%	85,0%
Design (button)	22,9%	33,3%	35,0%
Design (hyper-text)	74,3%	53,3%	37,5%
Usability (high)	68,6%	53,3%	47,5%
Incentive (offered)	14,3%	4,4%	0,0%
TAF-Form			
Amount of data (high)	0,0%	15,6%	20,0%
Personalisation (high)	5,7%	22,2%	12,5%
Support (offered)	68,6%	77,8%	85,0%
Usability of navigation elements (high)	62,9%	71,1%	60,0%
Usability (high)	77,1%	84,4%	75,0%
Verification (offered)	2,9%	13,3%	35,0%
TAF-Mail			
Personalisation header (offered)	71,5%	80,0%	72,5%
Personalisation body (offered)	65,7%	88,9%	52,5%
Sending format (plain text)	54,2%	28,7%	100,0%
Usability (high)	48,6%	82,2%	37,5%
Signature (offered)	51,4%	66,7%	15,0%
Integrated content (hyper-link)	60,0%	35,6%	15,0%
Integrated content (hyper-link and pictures)	40,0%	62,2%	0,0%
Sectors			
Sporting goods	5,7%	13,3%	20,0%
Durable goods	0,0%	15,6%	5,0%
Software- and hardware	8,6%	15,6%	5,0%
Retailing	2,9%	11,1%	10,0%
Financial service provider	8,6%	11,1%	5,0%
Tourist information websites	8,6%	8,9%	10,0%
Video-sharing websites	2,9%	20,0%	42,5%
Social networks	62,9%	4,4%	2,5%
Total	35	45	40

The rest of the sectors are spread quite equally in cluster 2. 67% of cluster 2 consists of sporting goods manufacturers, computer and software appliances, and other consumer goods, while the corresponding number is significantly lower in cluster 1 (26%) and cluster 3 (45%). Due to the fact that cluster 1 is primarily represented through social networks and usually the network itself is offered, it is suggested that the recommendation is focused on young and technical experienced recipients. For these recipients' it is less important to give support and offer high usability. The small amount of data, which is requested when a sender is filling out the form, comes from the fact that social networks already got most of the personal information of the sender through the registration process when the sender joined the network. Also the verification of the sender through the

captcha is therefore not required. In cluster 2 the tell-a-friend services show a much higher level of promotional nature. This explains the positioning near the content especially the offered product. Maybe there is a connection between this promotional nature and the use of obvious buttons. This very customer focused design can also explain the high amount of requested data, the distinct possibilities of personalization, the support and the usability. This interpretation can also stand for the strong use of the HTML-format, which is able to implement graphics. Also for the services in cluster 3, mostly used by video platforms, it is reasonable to place the starting button near the content or the point of interest, in this case a video. The fact that in most cases just the name is requested through the form can be explained with the young target group. This could explain the great need for verification. While information about company, homepage etc. are provided through the mails in cluster 2, many mails in cluster 3 only provide the hyperlink to a specific landing page, in order to increase the traffic. Again this can be explained with the target group, which is looking for entertainment and their focus on the link with the recommended content.

5 Discussion and conclusions

The present study is one of the first systematic, broad descriptions of tell-a-friend services to point out their great variety. Nevertheless, the fact that the study is referring to chosen sectors, chosen websites and a specific time frame should be kept in mind when evaluating the representativeness of the study. Furthermore, the study is primarily descriptive, due to the fact that it spares not only a theoretically explanation of the common practice of recommendation (marketing goals, referral motives), but also a systematic impact analysis with the recipients. A next step would be to develop hypotheses for the motives of the sender and the recipient, based on marketing-, advertising- and communication theories (Silberer and Pfrang, 2011). These hypotheses could contribute explaining common recommendation practices. In this connection, the findings of a study on possible determinants of forwarding a message by Mau et al. (2008) in the context of viral marketing show that forwarding or recommending advertising content online mainly depends on the characteristics of the source – the company or the marketer – of the content, the characteristics of the content and the message itself, and the characteristics of the user.

With regard to the source and the content of the message, the results of their study imply that, if the content of the message is perceived as entertaining this will positively affect the willingness to share and recommend the content with others. Furthermore, their results show that, if the advertising is evaluated as entertaining the forwarded content is not necessarily perceived as typical advertising by the sender. In contrast to that, Hennig-Thurau et al. (2004) find empirical evidence for a positive effect on the willingness to recommend, if the message

has a specific functional value for the users of an Internet-Forum (see also Chiu et al. 2005).

Concerning the characteristics of sender, the findings of Mau et al. (2008) show that the attitude towards forwarding messages in general as well as the perceived credibility of using different opportunities to share online content could be regarded as possible determinants for using tell-a-friend services. Therefore, a thoughtful and honest use could be a crucial factor for the success of recommendation services.

Finally, it is obvious to recommend starting with a broad systematic impact analysis. Up to now, there are only some partial analyses (e.g., Schulz et al., 2007; Mau et al., 2008). But, orientations toward a simple S-O-R-Model should not lead to far because a tell-a-friend service includes too many actors with very different activities.

Furthermore, there are also some implications for the marketing practice. This practice is advised well, if it contemplates all of the different criteria, the success factors, the great variety of possible impacts and the legal framework. Looking at behavioral science, gushy promises about viral marketing should be substituted by realistic evaluations. In case of an increased use of tell-a-friend services, it will also be important to think about a possible overload or even annoyance of the addressees. Even though the tell-a-friend service has great potential for online marketing communication, after all it is an unsolicited, non-private, informal advertisement. This leads to the following advice for advertising practice: Do not just look at the promises of marketing consultants, but also on the opinion of a critical lawyer (Silberer and Pfrang, 2011). And the most important thing will be to implement a user-friendly tell-a-friend service.

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Part IV

Product Placement

Subtle Sophistry or Savvy Strategy: Ethical and Effectiveness Issues Regarding Product Placements in Mass Media

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1 Introduction

Product placement involves the introduction of a identifiable branded product into the content or background of media broadcasting formats. Placements take place in traditional media as well as newer formats such as games and social media sites. A distinguishing feature of product placement is that – unlike traditional advertising – it takes place within the context of entertainment and is shaped or scaffolded by an immersive narrative (Cowley and Barron, 2008) thus making it difficult to avoid and often difficult to detect (La Ferle and Edwards, 2006). A placement might be paid for directly, be provided as part of an exchange of goods or services, or be a part of a joint promotional package (Karrh, 1998). Placements can occur passively, for example when a product is an element of the background but is not actually used, or actively when a product is used by an actor, sometimes with verbal acknowledgement.

The increased use of product placement across entertainment media (Karrh, 1998) has been accompanied by a rising unease about its impact and questions about whether the practice should be subject to greater control (Auty and Lewis, 2004). In this chapter we provide a short overview of the history and development of product placement and touch on some of the reported impacts thereof. We discuss the implications of recent easing of restrictions on EU-originated product placement. The new product placement regulations, effective from February 2011, allow some product placement in a range of programmes. These regulations preclude the placement of tobacco, alcohol, gambling, foods or drinks that are high in fat, salt or sugar; all placements are banned during children's and news programmes (OFCOM, 2011). We highlight a number of significant issues that these new regulations fail to take into account. We also argue that a number of gaps and loopholes in regulations put in place several years ago by the UK Office of Communications to protect children from content, including product placements, deemed unsuitable (OFCOM, 2006) made them unlikely to have a significant impact on children's exposure to product placement.

2 Literature review

2.1 *History and development*

The concept of product placement in commercial media is not new. In the early years of the twentieth century, radio serials were scripted by the sponsor's advertising agency and long running programmes routinely included the sponsor's name in the title, advertisements for the sponsor's products, and product mentions by characters (Kretchmer, 2004). Funding from product placements has long been attractive to entertainment producers as it provides an opportunity to offset production costs (DeLorme and Reid, 1999). One of the first recorded product placement in the movies was the featuring of Gordon's Gin in the 1951 Humphrey Bogart and Katherine Hepburn movie *The African Queen*. According to Balasubramanian, Karrh and Patwardhan (2006) a relatively dormant period of product placement in the 20s and 30s was followed by revival in the 60s and 70s and a massive growth spurt during the 80s until today. Avery and Ferraro (2000) report that agents regularly negotiate with production staff regarding opportunities for placements, including references to products in scripts, while Popeo and Price (2004) note that all major film studios have specific product placement units. Coca-Cola is reported as having its own product placement office in Hollywood (Cassady et al., 2006). During 2009 branded entertainment spending in the United States accounted for 45.1% of total spending, with paid product place worth \$3.61 billion.

Driven by the declining effectiveness of traditional advertising, increasing clutter and the advent of new-generation video recorders that enable complete avoidance of advertising breaks; in the US, some three-quarters of films and TV programmes include product placements (Russell and Stern, 2006; Roehm, Roehm, and Boone, 2004). In addition, the level of viewer involvement in the programme content and potential longevity through re-runs makes product placement in both television programmes and movies an attractive prospect for marketers (Karrh, 1998). The 'real life' nature of reality and talent shows means that viewers are often more tolerant of carefully placed products that seem germane to the setting (Elliott, 2008).

Product placement in popular music is endemic. Songs by rappers like Flo Rida, Kanye West and Jay Z, to name but a few. In 2008 Flo Rida's song *Low* peaked at number 2 on the UK Singles Chart and mentioning brands such as Apple, Bottom, Reebok, Cadillac, Maybach, Patron, Hennessy, and Glock amongst others (American Brandstand, 2008). Music videos are, similarly, often vehicles for product placement. Lady Gaga's 9.5 minute video for her single *Telephone* includes 10 product placements and was viewed by more than 4 million people in the first 24 hours after its release (Castillo, 2010).

In newer media such as advergames – free online games that offer high quality game-play in order to promote a particular product (Moltenbrey, 2004) – the product is often an integral part of the game itself, aiming to offer entertainment that engages gamers in such a way that an emotional connection is forged between the game and the brand featured within it (Kretchmer, 2004). For example, the Chrysler Group created the *Island Rally Racing Series* in order to promote a new range of vehicles for their Chrysler, Jeep and Dodge brands (Moltenbrey, 2004).

A particular cause for concern is the popularity of games with children and how they interact with and negotiate product placement in this format (Banerjee, 2004). The repetitive exposure provided in videogames that may be played many times is also seen as an advantage for placements in newer media forms (Gunn, 2001). Finally, product placement has recently extended to social media sites with marketing companies offering cash and discount incentives to those who mention the relevant brands to their friends on social networking sites (van Buskirk, 2010).

2.2 *Impact and effectiveness of placements*

While critics claim that product placement is inherently deceptive (Banerjee, 2004), marketers argue that their inclusion in consumer media such as television and movies merely reflects reality (Balasubramanian, Karrh, and Parwardhan, 2006; Gould and Gupta, 2006; Russell and Stern, 2006).

Academic responses to product placement have consequently been concerned with the effect and impact of product placement across a variety of media formats. Two papers, La Ferle and Edwards (2006) and Balasubramanian, Karrh and Patwardhan (2006), provide different but useful overviews of the field.

La Ferle and Edwards' (2006) work provides an important set of benchmark criteria based on a content analysis of US prime-time television, while Balasubramanian, Karrh and Patwardhan (2006) argue that much of the research on product placement is laboratory based and cannot hope to capture the immersive viewing nature of television or film, and also state that many of the conclusions about the effects of product placement across studies are contradictory or not in agreement. They further argue for an integrative model that takes all dimensions (execution, individual differences, context/setting, and effects) of viewers' responses to product placement into account. Subsequently Bressoud, Lehu and Russell (2010) have tried to address some of these concerns in their research on how audience characteristics and viewing contexts impact on placement recall. While this research is laudable in that it starts to address a signifi-

cant gap in the research on product placement by taking audience characteristics into account, it nevertheless only entails a statistical analysis of questionnaire responses.

A rather dispiriting account of current levels of understanding about viewers responses to product placement suggests that “there is limited substantive empirical evidence regarding whether and how [product placement] is effective in impacting consumer responses”, and that “studies of the efficacy of product placement ... tend to be mixed” (Homer, 2009, p. 21).

Notwithstanding the above it is perhaps possible to identify a broad consensus among this work that viewers are not opposed to the subtle use of product placement where this adds to the realism of the content (DeLorme and Reid, 1999; Homer, 2009), and that product placement is at its most effective in terms of brand recall and brand attitude when it remains beneath the radar and doesn’t allow viewers to activate their persuasion knowledge (La Ferle and Edwards, 2006; Cowley and Barron, 2008).

Given the widespread use of product placement by marketers it is arguable that academics have not kept pace with this practice in a number of significant ways. Firstly, in spite of a number of different approaches and models, an in-depth and nuanced understanding of viewers’ responses to product placement is yet to be developed; secondly, an understanding of different aspects of product placement has been developed through the use of systematic content analyses however these are situated within a US media context; thirdly, a small body of work now exists on the impact of product placement within video games and advergames, however there is an absence of work dealing with product placement in social media; and finally the academic literature on product placement has not engaged with the ethics of product placement including questions concerning the audience’s right to know that media content includes product placement.

2.3 Concerns about product categories

A number of general concerns have been raised in relation to the potential impact of product placement on vulnerable groups such as children if the characters using a specific brand or product type portray the product’s use as ‘cool’ or desirable (Auty and Lewis, 2004; Sargent et al., 2001). Further concerns raised have been with specific product categories such as alcohol and tobacco (Gupta and Gould, 1997; Pechmann and Shih, 1999).

In relation to children specifically, (Kennedy, 2004) reports that, while up to half of children do recognize the commercial intent of programme placements, 72% reported that “seeing a favourite character using a certain brand makes them want to use that brand at least some of the time”. This may indicate a link between involvement in, and loyalty to, the programme and loyalty to the products the programme characters explicitly or implicitly endorse (Avery and Ferraro, 2000; Karrh, 1998; Karrh et al., 2003). While these concerns extend well beyond tobacco advertising, it must be a major concern to regulators that tobacco brands featured in 20% of movies rated as suitable for children over the period 1988 to 1997 (Sargent et al., 2001). Especially as portrayal of movie stars smoking increases the likelihood of teenagers commencing smoking (Distefan et al., 2004). Further, the incidence of smoking as portrayed in movies overstates its frequency in society (Karrh, 1998). Research has indicated that this exposure can lead to an increased tolerance of the behaviours involved, and initiation of smoking at an earlier age (Cullen et. al., 2007). This outcome is accounted for by *Social Learning Theory*, in which repeated exposure to an observed behaviour can result in actual behavioural change (Avery and Ferraro, 2000).

The tobacco industry has long been vilified for its efforts to promote its products and it has incurred strong criticism for ongoing marketing activity designed to reach young people (Lee, Taylor, and McGetrick, 2004). The *USA 1998 Master Settlement Agreement* was designed to substantially curb tobacco promotion of all forms and specifically prohibited the negotiation of paid tobacco product placements in movies. However, Hoek (2004, p. 1251) observes that “regulators had not fully appreciated the evolution of new promotion vehicles” nor “the industry’s resourcefulness in identifying and developing these”. She notes promotional devices such as music and entertainment-oriented websites that are provided by tobacco companies, as well as brand stretching tactics. Where these activities are included as part of movies, television programmes originating from outside the European Union’s sphere of influence, they will not be subject to the EU, let alone OFCOM, regulatory provisions. This also applies to the growing amount of web-based promotional activity.

Similar to the tobacco industry, the alcohol industry has been found to share promotional practice in order to circumvent advertising bans (Bond et al., 2010). This included promotions in social networks, such as Facebook (Hastings, Brooks et al., 2010), alcohol branded merchandise (McClure et al. 2009) and the usage of alcohol, tobacco and drugs related messages in popular music (Primack et al., 2008).

Children’s limited ability to understand the nature of persuasion knowledge and thus defences against persuasive communication (Friestad and Wright, 1994; Moses and Baldwin, 2005) is held by lobby groups to be justification for limit-

ing the type and amount of exposure to persuasive communication. There is, however, little specific research in this area and it remains a very difficult – and hotly contested topic (Livingstone, 2005). Recent international moves to deliver media literacy training to children represent attempts to increase knowledge of commercial persuasion forms and techniques and to help children to develop coping skills (Sargant, 2004; Tarlow, 2004). These programmes, however, focus on overt marketing communication and not on the more subtle forms of persuasive communication discussed in this paper. There is also considerable doubt regarding the effectiveness of these programmes, particularly among younger children (Moses and Baldwin, 2005; O'Sullivan, 2005). Thus, the practice of product placements raises many legislative and ethical issues, particularly in terms of growing concerns regarding the impact of persuasive communication on vulnerable groups such as children (Auty and Lewis, 2004); calls for tighter regulation of products such as alcohol (Singh, 2004) and outright bans on the promotion of tobacco products (World Tobacco, 2004).

3 OFCOM regulations

In 2006 the Office of Communications, the independent regulatory body responsible for the UK communications industry, announced “New Restrictions on the Television Advertising of Food and Drink Products to Children” (OFCOM, 2006) as part of a wider range of policy measures put in place for tackling childhood obesity. These restrictions involved a total ban on the advertising of products high in fat, salt or sugar on all programmes with a particular appeal to children under 16. These moves met with concern from many stakeholders and lobby groups (Gibson and Smithers, 2006) who suggested that the restrictions were flawed because they did not reflect the actual viewing practices of children.

More recently OFCOM have proposed a lifting of the regulations governing product placement in the UK, allowing for placement on television, films and radio in the UK (*Proposals for product placement on TV and paid-for references to brands and products on radio*, OFCOM, 2010a). These new rules came into effect from February 2011 when branded products were allowed in UK-originated television series, sports programming, soaps, films and entertainment shows (O'Reilly, 2010). Paid-for-placement of branded items and products are subject to restrictions, including a ban on any placements during children's and news programming, and the placement of items such as weapons, tobacco, alcohol, gambling, and foods high in fat, salt and sugar.

However, we argue that these restrictions are unlikely to have any influence on children's exposure to product placement for several reasons. Firstly, the *National Consumer Council* estimates that nearly 70% of children's viewing (up to 80% for 10-15 yr olds) takes place during adult programming (Gibson and

Smithers, 2006). Secondly, restrictions do not extend to product placement across a range of electronic media such as video and online games. Finally, the shift to online advertising and product placement in social networking and media sharing sites such as bebo, Facebook and You Tube are not taken into account by the restrictions.

This last point poses a significant oversight given that 16-24yr olds are estimated to spend almost as much time online than they do watching television and, as OFCOM'S own data reveals (OFCOM, 2010b). A product placement logo will appear at the beginning and end of programs for a minimum of three seconds (O'Reilly, 2010). However, the usefulness of this practice as a way of alerting and informing the audience is questionable given the increasingly fragmented (channel surfing, simultaneous use of different media formats etc.) way in which people watch television. McCarty (2004) notes that lobbying, by consumer groups, for the presence of explicit warnings when product placement occurs may be counter-productive in that they serve to enhance the memory of placed products. McCarty (2004) goes on to argue that it is important to investigate the outcomes of such warnings and the way in which consumers engage with placements in view of these warnings.

A further concern is the gap between OFCOM's restrictions on the kinds of products that can be placed and the ongoing placement of harmful products not identified by these restrictions. One example of this is the inclusion of sunbeds in several reality-format television programs airing in the UK despite legislation that bans the use of sunbeds by under 18s (Sunbed [Regulation] Act, 2010) in recognition of sunbeds' carcinogenic properties (WHO, 2010). It would appear reasonable to expect that the intent of this legislation be reflected in regulations covering mass communication tactics such as product placements.

However, over recent years a number of popular television programs have either directly featured the use of sunbeds and/or place an emphasis on getting a tan and being tanned. These include *Sunset Tan*, a reality series set in a tanning salon in Los Angeles which first aired on the US cable channel E! in 2007. Based on an existing tanning salon which received a great deal of media attention after it became popular with a number of high-profile celebrities (including Britney Spears, Paris Hilton and Kim Kardashian), the series ran for several seasons in the US. The show is no longer running, and did not air in the UK, however video clips from the series are available to watch online (<http://www.sunsettan.com>).

A reality show that has successfully crossed over from the US to the UK is MTV's *Jersey Shore*. The show features eight young people living and working in a number of resorts along the Jersey shoreline. MTV's promotional material

stated that it had gathered the "hottest, tannest, craziest guidos" for the show (Pilkington, 2010). Cast members have become minor celebrities with actresses like Nicole 'Snooki' Polizzi often appearing in *heat* magazine. A reflection of the show's popularity and influence can be seen in a recent article in the *Mirror* which cited "the distinctly mahogany cast of MTV's *Jersey Shore*" as an inspiration for this summer's 'fashion tan', "a deeper, ultra-luxe tan, which quickly spread to celebs like Victoria Beckham and Cheryl Cole" (Corfield-Smith, 2010).

Finally, a UK based reality show that has been phenomenally successful is Katie Price's ITV2 show *What Katie Did Next*. While tanning is not an explicit focus of the show, Price is a known endorser of sunbeds (Karmali, 2010) and has her own private sunbed in her home. One episode features the 'haunted sunbed' in which the sunbed alarm is triggered unexpectedly in the middle of the night (Wightmen, 2010). Celebrity role models, such as the cast members of the shows above, who maintain year-round tans and who openly endorse the use of sunbeds are known to influence the tanning behaviours of teenage girls (Rawe and Scully, 2006; Poorsattar and Hornung, 2008).

4 Conclusion

This paper provides a brief overview of product placement in order to highlight and critically address the impact of lifting the ban on product placement in UK-originated programmes from February 2011. We trace the evolution of product placement from its use in radio broadcasting in the early 20th Century to the current placement of products on social media platforms and in video and adver-gaming. A review of the current literature on product placement reveals a narrow focus on the quantitative measurement of product recall as a way of gauging how audiences might engage with, and be affected by, product placement. Moreover, many of the conclusions reached by existing studies are contradictory, underscoring the difficulty of gauging the impact and effectiveness of product placement beyond product recall. In this regard, we argue that a qualitative approach might offer an in-depth and nuanced understanding of viewers' responses to product placement.

The current dearth of research on product placement in the UK and EU may stem from the restrictions placed on this practice up until the recent past; however, there is now a significant need for research that investigates product placement in the UK and EU context. Current literature can further be extended by including a focus on product placement in social media, video and advergames, and by grappling with ethical questions concerning viewers' rights-to-know about product placement when it occurs. Having reviewed OFCOM's plans to limit potential harm stemming from product placement by restricting placement

during children's viewing times, forbidding the placement of certain products, and raising audience awareness of product placement by means of campaigns and displayed warnings, we argue that these are unlikely to be effective as they fail to address a number of significant issues.

These include: A failure to take children's actual viewing practices, which are largely focused on adult programming, into account; a neglect of product placement across electronic and social media; a failure to recognise that the fragmented nature of contemporary ways of engaging with media content mean that awareness campaigns and warnings are unlikely to be effective; and, a failure to act on the presence of a number of harmful products, such as sunbeds, that fall beyond the current list of restricted products. Finally we argue the need for academic work that not only responds to product placement as and when it happens but which is vigilant about the ever shifting terrain of formats for, and rules and restrictions about, product placement.

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The Effect of Flow on Implicit Memory of In-Game Brand Placements

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1 Introduction

The sharp increase in exposure to traditional advertising, its declining effectiveness (Jaffe, 2005), along with technological innovations such as the DVR, have forced professionals to shift their focus to alternative forms of advertising (Bernoff, 2007; Voorhoof, 2007). On a quest to successfully capture the ever more elusive attention of the consumer, advertisers have begun to rely on more subtle advertising strategies such as product placement in entertainment media. Product placement is most commonly defined as the *'paid inclusion of branded products or brand identifiers, through audio and/or visual means, within mass media programming'* (Karrh, 1998: 33). Proliferating within a wide range of traditional media formats, product placement has invariably attracted the attention of researchers in the fields of advertising and information processing (Russel and Stern, 2006). In addition, the past decade has seen a substantial growth and continued expansion of the video gaming industry. These developments have provided advertisers with a potent new medium to effectively exploit the product placement technique. In addition to large increases in both video game industry sales and the number of gamers worldwide, a strong argument in favor of in-game brand placements is their demonstrated ability to contribute to the perceived realism of the game (Kline et al., 2003). Massive Inc., a creator of dynamic video game advertisements, estimates the in-game advertising market could grow to \$1 billion globally by 2014 (Entertainment Video Software Association, 2011). It is hardly a surprise that academic interest into consumers' reactions to persuasive messages in videogames is increasing (e.g., Cauberghe and De Pelsmacker, 2010; Glass, 2007; Nelson, 2002).

1.1 Literature review

When studying the effect of brand placements in video games, the characteristics of the gaming environment should be kept in mind. Lee and Faber (2007) point out to the unique context video games provide for successfully implementing a product placement strategy. Brand placements in games differ from traditional product placements in television programs and movies primarily be-

cause of the interactive context in which they are presented (Kleeberger and Hummel, 2002). Players constantly make decisions and are actively in control of events occurring during game play. Namely, the *interactive* nature of video games, as opposed to the *passive* context of traditional media, has the capability to evoke cognitively involving experiences that result in varying levels of immersion and involvement (Escalas, 2004; Nicovich, 2005). Inherent to video-games is also their capacity to force the player into a state, which approximates a state of *flow*, an intrinsically motivated optimally enjoyable mental state (Cowley et al., 2008; Csikszentmihalyi and LeFevre 1989; Sherry, 2004; Weber et al., 2004). This state of flow can lead to a whole range of positive marketing-related outcomes, such as increased learning, perceived behavioural control, exploratory behaviour and positive subjective experiences (Hoffman and Novak, 2009). Few studies have examined the influence of game-evoked flow on the cognitive outcomes of in-game product placements (Grigorovici and Constantin, 2004; Mau et al. 2008; Nelson et al., 2006). Generally, previous research has produced mixed results, suggesting the presence of moderating variables. Moreover, in previous research flow has often been investigated by measuring telepresence (Grigorovici and Constantin, 2004; Nelson et al., 2006), while the latter incorporates only one aspect of flow.

1.2 Purpose of the study

To contribute to identifying the various factors, which play a role in the cognitive outcomes of in-game product placement exposure, the present study investigates the relationship between *game evoked flow* and *implicit brand memory of brand placements within the game*. It further looks into a potential moderating influence of two important dimensions of brand placements. First, in-game brand placements can represent either high or low involvement products. Second, brand placements can vary in terms of how they are placed within the game (prominently vs. subtly). Both moderating variables might have an influence on the attention devoted to the brand placement, making a potential interaction effect with flow interesting to investigate.

1.3 Flow

The concept of flow was originally introduced by Csikszentmihalyi (1975) who defined it as the '*process of optimal experience*', characterized by a balance between one's skills and the presented challenge, focused attention, intense enjoyment, intrinsic motivation, time distortion and loss of self-awareness. Flow is an experience in which one is so completely absorbed and engaged in an activity that nothing else seems to matter. The key element of flow is that it is an end in itself – the activity must be intrinsically rewarding and *autotelic*. This rings

true especially for video games because people play them (computer or others) for the experience itself, as there is no external reward.

An influential model of the flow theory applied to computer-mediated environments (CMEs) was introduced over a decade ago, stimulating research interest into the effects of flow in interactive media contexts (Hoffman and Novak, 1996; Novak et al., 2000). Videogames, in particular, have been identified as *'possessing the ideal characteristics to create and maintain flow experiences, because of the assumption of player control and the ease with which players' skills and game challenge can be matched'* (Sherry, 2004, p. 340; Weber et al., 2009). Several authors also suggest that the subjective experience while playing a videogame can be described using the concept of flow (Chou and Ting, 2003; Refiana et al., 2005). Cowley and Barron (2008) suggest that games can keep the player's concentration through a high workload and that tasks need to be sufficiently challenging to be enjoyable. According to the theory of flow, the sensory richness and spatial components of videogames can trigger higher levels of control and interest among users (Hoffman and Novak, 1996) especially when the player is sufficiently skilled and tasks provide clear goals and immediate feedback (Cowley et al., 2008).

The resulting feeling for players is total immersion (or absorption) in the game, which causes them to lose awareness of everyday life, concern for themselves, and alters their sense of time, which gives rise to a more intrinsically rewarding experience derived from playing the game (Chen, 2006; Hoffman and Novak, 1996). In the context of videogames, interactive and life-like objects provide an intense illusion of being present in the world created by the technology (Lee, 2007; Lombard and Ditton, 1997), which leads to enjoyment – the hedonic outcome of the flow experience (Chen, 2006).

Despite the established view that videogames can frequently lead to a state of flow, there is a lack of research on the implications of flow for product placement outcomes in a gaming context (Grigorovici and Constantin, 2004; Mau et al., 2008; Nelson et al., 2006). Telepresence, or the feeling of being part of the phenomenal environment created by a medium (Kim and Biocca, 1997), is an aspect of flow that has been shown to affect advertising outcomes of in-game advertising (Grigorovici and Constantin, 2004; Nelson et al., 2006) and outcomes of the presence of brands in virtual world environments (Fui-Hoon et al., 2011). However, in addition to telepresence, a flow experience also entails other aspects like skills, challenges, attention, enjoyment, intrinsic motivation, and time distortion (Csikszentmihalyi, 1975).

1.4 Enduring product involvement

Product category involvement has been defined as ‘an internal state variable that indicates the amount of arousal, interest or drive by a product class’ (Dholakia, 2000). Celsi and Olsen (1988) approach involvement as a motivational state that influences the amount, direction and focus of attention and suggest its implications for consumers’ processing of advertising. Namely, consumers are expected to assign more meaning to high involvement products rather than low involvement products and consequently to pay more attention to high involvement product advertisements (Zaichkowsky, 1994).

1.5 Placement prominence

One of the most researched factors that determine product placement effectiveness is placement prominence. Gupta and Lord (1998) suggested two types of placements - prominent and subtle, distinguishing them by factors such as size, position and centrality to the game action. Previous research suggests that prominent placements result in higher memory rates compared to subtle placements in traditional media (Gupta and Lord, 1998; Law and Braun, 2000). Nelson (2002) also reports higher memory rates for brands that represent a major part of game play. Several other studies show that prominent placements outperform subtle placements on both explicit and implicit brand memory in a videogame (Cauberghe and De Pelsmacker, 2010; Chaney et al., 2004; Schneider and Cornwell, 2005). In addition, Brennan et al. (1999) found that exposure duration only influenced brand recognition for placements that were conspicuously displayed.

1.6 Implicit memory

Traditional measurements of product placement effects include explicit brand memory and recognition. However, these need not always be present to render product placement effective. Implicit memory is characterized by memory effects occurring without the explicit recollection of an event or its contextual counterparts. People often report no awareness of any influence, while their behavior indicates the opposite (Law and Braun-LaTour, 2004). The more subtle effects of brand placement (e.g., familiarity, brand preference, purchase intention) frequently appear when exposure to the commercial message was incidental (Pham, 1992). Russel (1998) argues that the primary aim of product placement is not transferring factual messages, but rather tapping into consumers’ affective processing. Explicit recall is not a necessary condition for this affective transformation to occur (Krishnan and Sharipo, 1996). In fact, research shows persistent positive effects of brand placements on implicit memory (Yang

and Roskos-Ewoldsen, 2007). Implicit memory is also better preserved under conditions of divided attention (Shapiro and Krishnan, 2001; Yang et al., 2006). In addition, although incidental exposure to product placements had no influence on explicit memory, it did influence brand choice (Law and Braun, 2000; Lee, 2002) and brand attitudes (Glass, 2007).

2 Hypotheses

According to Kahneman's (1973) limited-capacity model of attention, the constant state of alertness accompanying a flow state requires a high amount of attentional resources allocated to the primary task (the game itself). Therefore, in a gaming context, the remaining attentional resources available for secondary information processing (the advertisements) will be significantly diminished. The more a player is engaged with the game, the less attentional capacity will be available for processing peripheral brand information. In a recent study, Nelson et al. (2006) found that game players recalled significantly fewer brands than bystanders who simply observed the game being played.

Under limited attentional capacity, if product placements are not perceived as integral to the primary task (the game itself), then higher focus on the primary task will lead to lower levels of attention to product placements. However, if product placements are perceived as an integral part of the primary task, higher focus is likely to lead to higher levels of attention to brand placements and consequently to higher implicit memory. We propose that, in a state of flow, brand placements are more likely to be perceived as integral parts of the primary task, adding to the realism of the holistic gaming experience. Therefore, we predict that:

H1: Participants, who experienced flow during the game, will demonstrate higher levels of implicit memory, compared to participants did not experience flow.

Felt product involvement is a prerequisite for attention capacity allocation. Since high involvement brand placements are perceived as more meaningful, they are more likely to be considered an integral part of the gaming experience. Therefore, we propose that enduring product involvement will moderate the relationship between game evoked flow and implicit memory in the following way:

H2: For high involvement brand placements, participants, who experienced flow during the game, will demonstrate higher levels of implicit memory, compared to participants did not experience flow. For low involvement brand placements, flow will have no influence on implicit memory.

In the current study, prominence is manipulated through centrality to the screen and centrality to the gaming action. Since a high state of flow causes a high level of focus on the interactive game content and brands placed prominently in a game are a central part of the game, we can expect that high flow should increase brand memory only for prominently placed brands (versus subtly placed brands). Prominent placements are more likely than subtle placements to be perceived as an integral part of the game since prominent placements are more central to the screen and the interactive game action. Conversely, subtle brand placements are background props outside the main field of visual focus. Therefore, they are not part of the interactive game experience. Hence, we propose that placement prominence will moderate the relationship between game-evoked flow and brand memory in the following way:

H3: For prominent brand placements, participants, who experienced flow during the game, will demonstrate higher levels of implicit memory, compared to participants who did not experience flow. For subtle brand placements, flow will have no influence on implicit memory.

3 Results

The results revealed that the involvement manipulation check was successful; participants were significantly more involved with the “car” ($M=4.14$) compared to the “soda” ($M=1.77$) product category ($t=24.15$, $p<.001$). To facilitate results interpretation, the flow variable was recoded into a dichotomous variable, containing two groups ($M_{\text{not in flow}}=2.61$ vs. $M_{\text{in flow}}=3.41$), ($t=15.43$, $p<.001$). To test the proposed hypotheses, chi-square nonparametric tests were used. In support of H1, the crosstab revealed a significant effect of flow on implicit memory (see Figure 1). Participants in a flow state demonstrated significantly higher implicit memory rates (32%), compared to participants not in a flow state (20%), ($\chi^2=3.903$, $p<.05$).

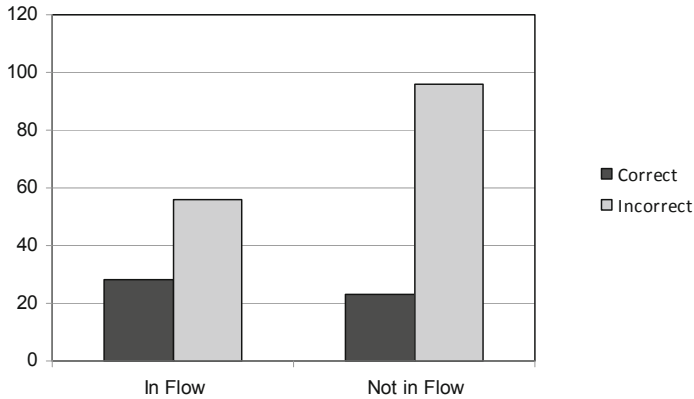


Figure 1: Main effect of flow on implicit memory (H1)

To test H2, the effect of flow on implicit memory was measured separately for the high and low involvement product categories (see Figure 2). In support of H2, participants who experienced flow demonstrated significantly higher implicit memory (42%) for placement in the high involvement category, compared to participants who did not experience flow (28%), ($\chi^2=3.956$, $p<.05$). In contrast, no significant effects were observed for placements in the low involvement category (37% vs. 36%), ($\chi^2=0.021$, $p>.05$). Enduring product involvement, therefore, moderates the relationship between flow and implicit memory of in-game brand placements, leading to higher implicit memory only for the high involvement product category.

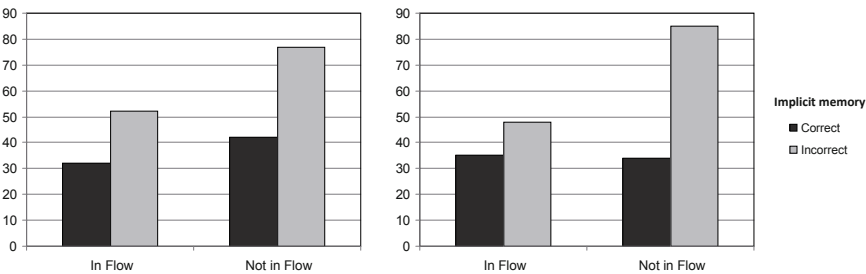


Figure 2: Interaction between flow and product involvement on implicit memory (H2)

As predicted by H3, a significant interaction effect between flow and placement prominence was revealed when investigating their influence on implicit memory (see Figure 3). Participants in a flow state demonstrated higher implicit memory rates for prominent (42%) compared to subtle brand placements (22%), ($\chi^2=5.238$, $p<.05$), while participants not in a flow state did not differ in implicit memory of prominent (20%) compared to subtle (19%) brand placements

($\chi^2=0.130$, $p>.05$). Therefore, placement prominence appears to moderate the effect of flow on the cognitive processing of in-game brand placements, leading to higher implicit memory only for prominent brand placements.

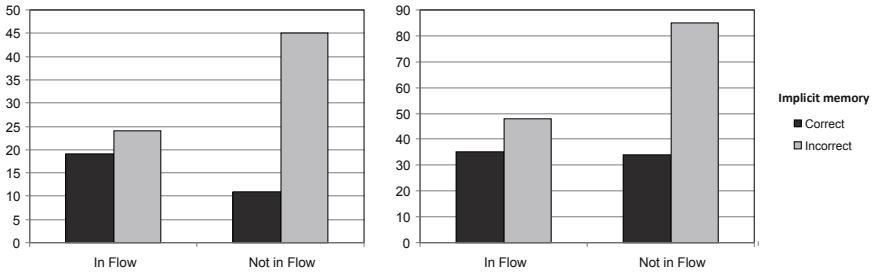


Figure 3: Interaction between flow and placement prominence on implicit memory (H3)

4 Discussion and limitations

The extant and continuously developing theory of flow, suggests that games are the perfect environment to induce flow. The present study was aimed at furthering our understanding of the cognitive outcomes of brand placement exposure in a gaming context. In particular, we investigated the effect of flow on implicit memory of in-game brand placements and identified two potential moderators of this effect – enduring product involvement and placement prominence. Our results demonstrate that experiencing a state of flow while gaming, contributes positively to the cognitive processing of in-game brand placements, leading to higher implicit memory. However, this effect is moderated by product involvement and was only found to be significant for high involvement product category. This finding supports the argument that the observed effect of flow appears to be contingent on the perceived relevance of the advertised product (Zaichowsky, 1994). Results further showed a main effect of flow on implicit memory, significant only for prominently displayed brand placements, which are central to the game action. Due to their centrality, prominent placements are intrinsically more likely to be perceived as integral part of the game. Thus, placement prominence appears to interact with flow in enhancing players' perceptions of brand placements as stimuli that add realism to the gaming experience. Therefore, it can be argued that placement prominence acts as a moderator of the relationship between flow and implicit memory in a gaming context. As predicted, participants who did not experience flow also did not show higher levels of implicit memory for prominent compared to subtle brand placements.

Flow is defined as a complex, multidimensional construct, characterized primarily by focused attention and a state of intrinsic enjoyment. The present experiment confirms that experiencing flow while playing an interactive computer

game can have a positive effect on implicit memory for brand placements presented during game play. More specifically, flow appears to facilitate the integration of certain types of brand placements with the primary task at hand. While in a state of flow, players are intrinsically more motivated to attend to brand placements that belong to a high involvement product category, since they are perceived as more relevant to the primary task. Similarly, while in flow, prominent brand placements are perceived more often as integral to the gaming experience because of their centrality to the game action. In both situations, this results in higher implicit memory.

In the present study, a measure of implicit memory was used to test the proposed hypotheses, since it has been suggested as a more sensitive and long lasting indicator of the effectiveness of product placements (Yang et al., 2006). However, it has also been demonstrated that the nature of product placements has less influence on implicit memory compared to explicit memory (Krishnan and Shapiro, 2001). It would, therefore, be interesting to explore whether the demonstrated interaction effect will remain significant with traditional tests of explicit recall and recognition. The study was conducted using a common racing game format. In order to draw more reliable conclusions, the observed effects need to first be replicated for different game formats. Future studies might also look into the effect of flow on implicit attitude change, since it has been demonstrated that implicit attitudes tend to be good behavioral indicators (Fazio and Olson, 2003). In addition, studies of game-product congruity effects on recall suggest that highly incongruent brands are recalled better than highly congruent brands or moderately incongruent brands (Lee and Faber, 2007). Further research directions might include comparing the effects of flow for different congruency conditions.

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Brand Placement in Television Shows: Exploring the Role of Program-Induced Moods

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1 Introduction

In order to thrill saturated and fragmented advertising markets, firms are increasingly challenged to create innovative advertising strategies and campaigns that allow them to meaningfully connect with their target audiences (Gupta and Lord, 1998). One recent trend in advertising indicates firms' efforts in tackling this problem. Firms to an increasing degree focus on brand placement to reach target customers. According to Karrh (1998: 33), brand placement is defined as "the paid inclusion of branded products or brand identifiers, through audio and/or visual means, within mass media programming". In 2009, American companies spent 3.61 billion US-Dollars for paid placements (PQ Media, 2010). Branded products are placed in movies, television shows, novels, music CDs/videos, computer and online-games, blogs, and even live shows (e.g., Brennan, 2008; Chang et al., 2009; Delattre and Colovic, 2009; Lee and Faber, 2007; Mau et al., 2008).

Driven in part by the intense industry interest, scholars have explored a number of different product and brand placement-related topics in recent years, covering issues such as the effects of executional, individual, and context factors on the effectiveness of placements (Balasubramanian et al., 2006). Several empirical studies have examined the effects of brand placement on factors such as brand awareness and brand attitude (e.g., Gupta and Lord, 1998; Karrh, 1998; Law and Braun, 2000). Although there is a rich body of empirical research on the effectiveness of brand placement, several questions remain unanswered.

Taking into account that branded products are to an increasing degree placed in daily television shows, such as telenovelas or soap operas (Stern et al., 2007), a profound understanding of how placements affect audiences becomes essential (Law and Braun, 2000). The question of how brand placements appear on television has emerged as a major field of interest in advertising research (e.g., La Ferle and Edwards, 2006). The present study aims to contribute to prior research on television brand placement by empirically exploring the effects of brand placement on brand memory, considering the key role of program-induced moods. As the literature reveals, prior research on the relationship

between brand placement and brand memory predominantly relies on explicit measures of brand memory such as recall and recognition (d'Astous and Chartier, 2000; Gupta and Lord, 1998). This research extends previous knowledge by examining the effects of brand placements on explicit and implicit brand memory. Furthermore, the present research provides contributions to brand placement research by exploring how program-induced moods influence the effect of brand placement on explicit and implicit brand memory. Previous studies show that moods elicited by specific program types are important factors that condition the manner in which audiences process advertising messages (e.g., Goldberg and Gorn, 1987; Karrh et al., 2003; Newell et al., 2001). Within this study, we explore how brand placement exposure works in positive and negative emotion-laden conditions. In addition, we examine how viewers' liking of the program influences the effect of brand placement on brand memory in positive and negative emotion-laden scenes. Knowledge of these factors improves understanding of how brand placement works in consumer minds and helps managers develop placement executional strategies that improve consumers' brand information processing.

The rest of the study is organized as follows. The next section discusses the conceptual background of this study. After that attention turns toward methodological aspects with an emphasis on the experimental design, stimulus and procedure, and data analysis. Finally, the study concludes with a discussion of implications for researchers and managers.

2 Hypotheses development

2.1 *How does brand placement influence brand memory?*

Brand memory is a key variable in product and brand placement research (Russell, 2002). A central shortcoming of previous studies on brand placement is that they primarily focus on explicit brand memory measures, but neglect consequences for implicit brand memory (Lehu and Bressoud, 2008; Matthes et al., 2007; Nelson and Devanathan, 2006). Broadly defined, *explicit memory* reflects an individual's conscious recollection of a prior stimulus exposure event and refers to what the person consciously remembers about the event (Lee, 2002). Explicit memory is indicated when a consumer consciously thinks back to a prior exposure episode (Shapiro and Krishnan, 2001). Given the fact that consumers' judgments oftentimes follow a single exposure to a stimulus without consumers' awareness of the prior exposure (Law and Braun, 2000) the examination of implicit memory becomes important. As Gray (1994) notes, the conscious part of individuals' knowledge is the explicit memory that assigns conscious thinking and behaviour; however, the major part of individuals' knowl-

edge is located in the unconscious (implicit) memory. Within this study, we conceptualize brand memory to comprise two components, namely explicit and implicit brand memory. *Implicit memory* refers to an individual's enhanced performance achieved on a task as the result of prior stimulus exposure event, even though the person may not consciously remember the event (Lee, 2002). In contrast to explicit memory retrieval, implicit memory retrieval occurs automatically. Commonly used measures for implicit memory include word fragment completion tests, perceptual identification, category exemplar generation, and general knowledge questions (Lee, 2002; Schacter et al., 1993). Whether brand placement works at an explicit or implicit level is important because factors such as depth of processing, which enhance explicit memory, have no effect on implicit memory (Schacter, 1987). For example, Law and Braun (2000) show that prominent placements, while well recalled, had no effect on choice, but visual placements, while least recalled, had the most influence on choice. In line with these findings, Auty and Lewis (2004) identify a similar effect for children whose age had no effect on choice because of the importance of implicit memory compared to explicit recall. Further evidence for the relevance of implicit memory stems from the fact that it has been shown to correlate strongly with judgments, even when explicit memory does not (Kardes, 1986). In sum, we put forward hypothesis H1 as outlined below.

H1: The exposure of brand placement positively influences brand memory (i.e., explicit and implicit brand memory).

2.2 How do program-induced moods influence the effect of brand placement on brand memory?

In addition to exploring the relationship between brand placement exposure and brand memory, this research examines the question of how this effect differs contingent on program-induced moods. *Program-induced moods* refer to general, reactive, and acute feeling states engendered by the scene of a television program (Aylesworth and MacKenzie, 1998). They are general in that they are not directed at any specific target, reactive in that they involve a response to environmental factors as opposed to being goal-directed, and they are more acute (i.e., short lived) than personality traits (Aylesworth and MacKenzie, 1998). According to the literature, program-induced moods have been identified as important stimuli-based parameters of brand placements (Balasubramanian et al., 2006). They can either be positive emotion-laden (e.g., love scene) or negative emotion-laden (e.g., murder scene) (Balasubramanian et al., 2006; Karrh et al., 2003). Within this study, we assume that brand placements in emotionally positive scenes have a greater effect on brand memory than brand placements in emotionally negative scenes. This notion is in line with prior research by How-

ard and Barry (1994), who show that moods have an effect on how consumers process ad information. This notion finds further support in prior research from Goldberg and Gorn (1987), who show that television programs coded as happier in tone produce happier moods, more positive cognitive responses, and greater advertising effectiveness. Based on the research presented above, we put forward hypothesis H2 as follows.

H2: The effect of brand placement on brand memory (i.e., explicit and implicit brand memory) differs contingent on program-induced moods such that brand placements in positive emotion-laden scenes have a greater effect on brand memory than brand placements in negative emotion-laden scenes.

2.3 *How does program liking impact the effect of program-induced moods on the effect of brand placement on brand memory?*

In addition to program-induced moods, liking for the program has been identified as a relevant program-context variable. In contrast to program-elicited feelings (such as program-induced moods), *program liking* refers to “a summary evaluation of the experience of viewing a television program” (Murry et al., 1992: 442). Advertising research has shown that both program-elicited feeling states for and liking of a television program influence viewers’ responses toward the advertising and their brand evaluations (Madden et al., 1988; Murry et al., 1992). Within this study, we predict that the impact of program-induced moods on the effect of brand placement on brand memory differs contingent on viewers’ levels of program liking. More specifically, we assume that higher levels of program liking strengthen the influence of program-induced moods on the effect of brand placement on brand memory. As prior research from Zillmann (1988) has shown, viewers reject those programs that do not feel right and keep on trying until they find something to their liking. Thus, the selection of a program and viewers’ involvement with a program depend on whether viewers anticipate liking the viewing experience (Murry et al., 1992). In this respect, viewers who like a TV show will be more attentive to the show, its dramaturgy, and the emotional character of particular scenes. In contrast, viewers who dislike a show will spend less attention to the show, which in turn decreases the relevance of program-induced moods. Following this line of reasoning, we assume that the effect of program-induced moods on the impact of brand placement on brand memory will be stronger when viewers like a show than when they dislike a show. These considerations lead to hypothesis H3 as follows.

H3: The impact program-induced moods on the effect of brand placement on brand memory (i.e., explicit and implicit brand memory) will be greater when viewers like a show than when they dislike a show.

3 Research approach

3.1 *Design*

The study involved an experiment with a sample of 232 undergraduate students of a major German university. Participants were recruited from an introductory marketing course. While exposure to a brand placement (i.e., placement vs. no placement) represents the independent variables, explicit and implicit brand memory represent the dependent variables. Moderator variables are program-induced moods (i.e., positive emotion-laden vs. negative emotion-laden), and program liking. Participants were randomly assigned to one of the experimental conditions: (1) brand placement in a positive emotion-laden scene ($n = 77$), (2) brand placement in a negative emotional-laden scene ($n = 80$), and (3) control condition (i.e., no brand placement) ($n = 75$). The ages of the total sample ranged from 18 to 32 years (mean 21 years). Approximately 53 % of the participants were male.

3.2 *Stimulus and procedure*

The stimulus in the experiment was the German telenovela “Anna und die Liebe”. We selected this telenovela for several reasons. First, the TV series was one of the first German TV productions including a brand placement (“McCafé”). Second, the brand placement in the series is integrated in the plot and therefore easily and clearly recognizable (Russell, 2002). Third, the target consumer groups of both, the telenovela and the brand “McCafé”, cover people in the age between 18 and 35 years.

Participants watched three short movies with original scenes from the aforementioned telenovela in on-campus studios. Each of the short movies lasted approximately ten minutes. The first short movie was a love story (brand placement in a positive emotional-laden condition). The second short movie was a murder story (brand placement in a negative emotional-laden condition). In both short movies a plot was integrated including the brand placement. For each of the short movies, this plot remained constant pertaining to executional factors: the brand name was acoustically mentioned four times, the brand logo was shown on the screen two times, and the brand was highly integrated in the plot. The third short movie involved scenes of the love story, the murder story, as well as the brand placement plot in which the brand was cut off so that it could not be seen or heard. The manipulation was pretested.

3.3 Measures

To capture explicit brand memory participants were asked to recall all brands they have seen or heard in the short movie (Gupta and Lord, 1998; Russell, 2002). As the brand was placed clearly recognizable, recall instead of recognition measurements were used. Implicit brand memory was captured using a picture fragment completion test (Chung and Szymanski, 1997; Shapiro and Krishnan, 2001). To this end, subjects were presented a fragmented version of the “McCafé” brand logo and they were asked to identify it. Program liking was measured using three items that were presented on a five-point scale (like/dislike, favorable/unfavorable, and good/bad) (Homer, 2009; Russell, 2002).

4 Results

4.1 *Results with regard to the effect of brand placement exposure on brand memory*

Hypothesis H1 predicts that brand placement exposure has a positive effect on viewers’ explicit and implicit brand memory. For explicit brand memory the results show that in the control group no participant (0 %) recalled the brand placement. In the experimental group 67.5 % of the respondents recalled the brand placement. For implicit brand memory the results reveal that in the control group 54.7 % of the participants accurately attached the brand placement to the picture fragment completion test. In the experimental group, 83.4 % of the participants accurately attached the brand placement to the picture fragment completion test (see Figure 1). In respect of the comparison of the recall values ($\chi^2(1) = 93.236, p < .001$), as well as the picture fragment completion test values ($\chi^2(1) = 21.915, p < .001$), the data find significant support for hypothesis H1.

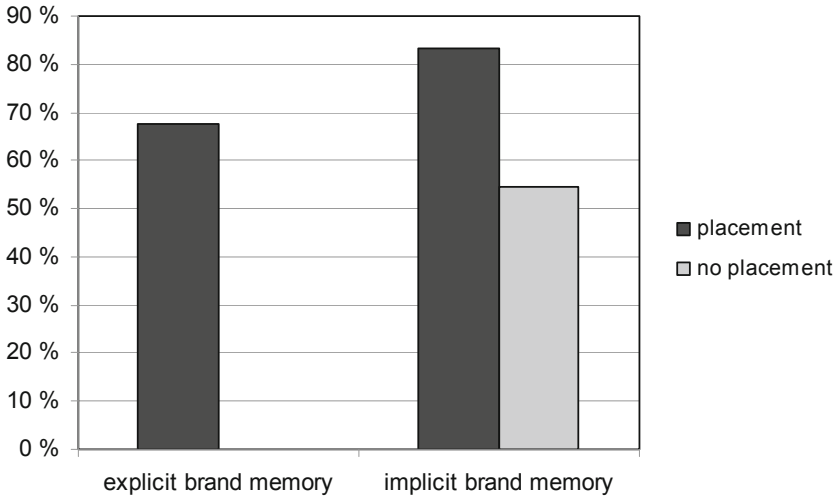


Figure 1: Effects of brand placement on brand memory

4.2 Results with regard to the influence of program-induced moods on the effect of brand placement on brand memory

Hypothesis H2 proposes that brand placements in positive emotion-laden scenes have a greater effect on viewers' explicit and implicit brand memory than brand placements in negative emotion-laden scenes. Focusing on the effect of brand placement exposure on explicit brand memory in the positive emotion-laden condition, the results show that 72.7 % recalled the brand placement, whereas 62.5 % of the respondents recalled the brand placement in the negative emotion-laden condition. Even though there is a difference between the groups, it is not significant. Focusing on the effect of brand placement exposure on implicit brand memory in the positive emotion-laden condition, the results reveal that 92.2 % of the participants correctly attached the brand to the picture fragment completion test. In the negative emotion-laden condition 75.0 % of the participants correctly attached the brand placement to the picture fragment completion test (see Figure 2). With regard to the comparison of the recall values ($\chi^2(1) = 1.871$, $p > .1$) and the picture fragment completion test values ($\chi^2(1) = 8.408$, $p < .01$), the results partly support hypothesis H2.

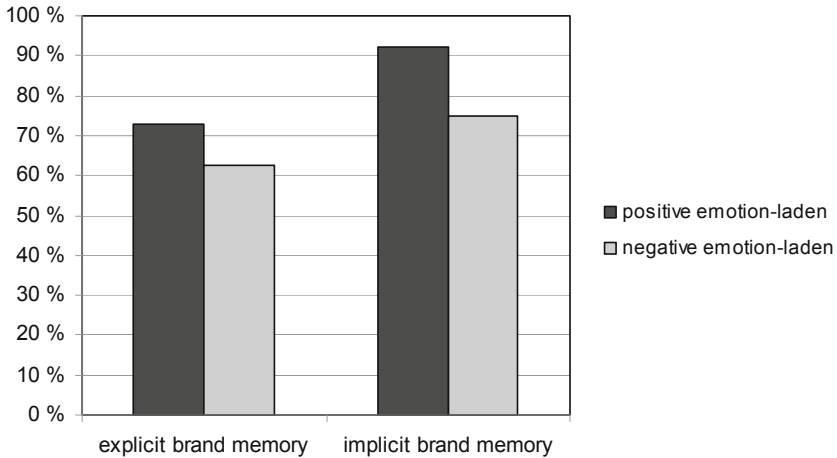


Figure 2: Influence of program-induced mood on the effect of brand placement on brand memory

4.3 Results with regard to the influence of program liking on the effects of program-induced moods on the brand placement-brand memory relationship

To analyze the moderator effects of program liking, the 157 participants of the experimental groups were median-split into two sub-groups, one group high on program liking and another group low on program liking. To analyze the effect of brand placement exposure on brand memory in positive emotion-laden and negative emotion-laden scenes for participants who like and those who do not like the program, chi-square tests were conducted (Figure 3).

Hypothesis H3 assumes that the impact of program-induced moods on the effect of brand placement on explicit and implicit brand memory will be greater when viewers like a program than when they dislike it. Focusing on the effect of brand placement exposure on explicit brand memory in the positive emotion-laden condition, the results showed that 72.5 % of the respondents who like the program recalled the brand placement, whereas 75.8 % of the respondents who dislike the program recalled the brand placement. The results of a chi-square test revealed that this difference was insignificant ($\chi^2(1) = .100, p > .05$). Pertaining to the effect of brand placement exposure on implicit brand memory in the positive emotion-laden condition, the results showed that 87.5 % of the respondents who like the program correctly attached the brand placement to the picture fragment completion test, whereas 97.0 % of the respondents who dislike the program completed the same test successfully. The results of a chi-square test

showed that this difference was significant ($\chi^2(1) = 2.152, p < .05$). With regard to the effect of brand placement exposure on explicit brand memory in the negative emotion-laden condition, the results showed that 63.3 % of the respondents who like the program recalled the brand placement and the same percentage of the respondents who dislike the program recalled the brand placement. Thus, a chi-square test showed no significant difference ($\chi^2(1) = .00, p > .05$). Pertaining to the effect of brand placement exposure on implicit brand memory in the negative emotion-laden condition, the results showed that 83.3 % of the respondents who like the program correctly attached the brand placement to the picture fragment completion test, whereas 71.4 % of the respondents who dislike the program completed the same test successfully. The results of a chi-square test showed a nonsignificant effect ($\chi^2(1) = 1.444, p > .05$). In sum, the findings of this study found partial support for hypothesis H3.

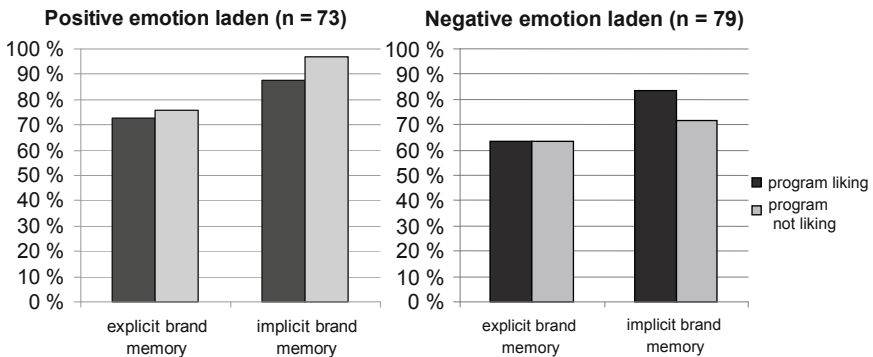


Figure 3: Moderating effects of program liking

5 Discussion

The question of how brand placements appear on television has emerged as a major field of interest in advertising research (e.g., La Ferle and Edwards, 2006). The present study aims to contribute to research on television brand placement by empirically exploring the effects of brand placement exposure on explicit and implicit brand memory, considering the influence of program-induced moods. Based on the findings of this study we will now derive implications for research and managers. Discussion begins with research-related implications.

Prior research predominantly concentrated on explicit measures of brand memory when exploring consumers' cognitive responses toward brand placements. As the findings of this study show, brand placements not only materialize in explicit, but also in implicit brand memory traces in consumers' minds. In

addition to exploring the effects of brand placement exposure on brand memory, this study shows that program-induced moods represent crucial determinants of viewers' brand information processing. The findings of this study found (partial) support for the notion that brand placements in scenes that evoke positive feelings exhibit greater effects on brand memory than scenes that elicit negative emotions. According the results, program-induced moods show a significant effect on the unconscious processing of brand-related information and the development of implicit brand memory. Brand placements in positive emotion-laden scenes have a significant greater effect on the development of implicit brand memory than in negative scenes. Based on this finding, we draw the conclusion that the affective value of a scene has an impact on how viewers unconsciously process brand-related information in brand placement contexts. Focusing on hypothesis H3, which predicts that the impact of program-induced moods on the effect of brand placement on brand memory (i.e., explicit and implicit brand memory) will be greater when viewers like a show than when they dislike a show, we found that this notion holds true only for the effect of brand placement exposure on implicit brand memory in a positive emotion-laden scene. Thus, when viewers like a program, brand placement in scenes that elicit positive moods has a greater effect on implicit brand memory than when viewers dislike the program. In sum, the findings of this research support the view that brand placement not only influences conscious brand information processing, but also unconscious processing. While this finding might be highly interesting for advertisers, it might be controversially discussed from a public policy standpoint (Law and Braun, 2000). Marketers might be encouraged to deliberately blurring the distinction between advertising and programming to stimulate consumer response in an implicit manner. Here, future research on television brand placement needs to integrate further individual-related variables to identify brand placement prone audiences and in turn better understand the mechanisms of how brand television placement works for this consumer groups.

In addition to contributions to brand placement research, the findings of this study allow us to derive several managerial implications. First and foremost, the findings show that television brand placement does have an effect on consumers' cognitive responses in terms of brand memory. Thus, this study affirms advertisers' beliefs in the efficacy of television brand placement as an advertising instrument. Second, the findings show that brand placement exposure affects explicit and implicit brand memory. Consequently, television brand placement appears to be an appropriate instrument to stand out in saturated advertising markets and to meaningfully connect with consumers. A third lesson for managers is that program-induced mood has an impact on how consumers cognitively process brand placements. Program-induced moods have been defined as a general, reactive, and acute feeling state an individual perceives caused by the scene

of a television program. Consequently advertisers should consider the emotional value of a scene when planning and arranging television brand placements.

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Part V

Gender, Children and Advertising

Masculinity Representations in Men's Lifestyle Magazine Ads: A Cross-Ccultural and Cross-Racial Comparison

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1 Introduction

It is possible to identify two clearly distinct international advertising strategies: standardisation and specialisation (Mueller, 2010). Standardisation operates on the assumption that as lifestyle and consumer needs are homogenised around the world, it becomes more cost effective to develop a universal advertising theme to ensure a multinational product penetrates the global market. When international advertising agencies standardise their campaigns for different markets around the world, they will be based on Western assumptions and values and this will be reflected in the advertisements they create. Consequently, Euro/American culture redefines masculinity outside the North Atlantic World (Connell, 1993).

Specialisation impels advertisers to identify their target audience in terms of a set of social norms, cultural values and needs. Cultural differences tend to crosscut countries and ethnic groups. For example, Hofstede (2001) proposed five dimensions of national culture: power distance, individualism, masculinity, uncertainty avoidance, and long-term orientation, whereas Tsao (1997) identified significant differences between the temporal orientation and communication styles of Taiwanese and American advertising.

Frith and Sengupta (1991) found that Hofstede's (1980) individualism dimension could account for the different advertising techniques used in the United States (U.S.), the United Kingdom (UK) and India. Individualism has since become a key cultural variable in many follow-up studies, which have extended the analysis to alternative operational measurements of individualism, in a larger number of countries (Cutler et al., 1997), and political advertising (Chang, 2000). However, no study to date has considered how individualistic and collective conceptions of nationhood may find expression in different types of masculinity, which could be usefully contextualised with respect to the relationships among masculinity types, racial groups and the social group background that the models are placed in.

There are significant differences between Western and Asian countries in terms of their respective conceptions of individualism. The U.S., the largest advertising market in the world, is located at the highest end of the individualism scale (Hofstede, 2001). Asia, home for many of the most rapidly growing advertising markets in the world today, has an affinity with the lowest end of the individualism scale (Frith and Sengupta, 1991). Therefore, it is necessary to examine how the representations of masculinity in advertising are influenced by conceptions of individualism.

Masculinities and male bodies are socially and historically constructed, created and reinforced by social expectations based on shared meanings, especially by gender display in the mass media (Craig, 1992; Goffman, 1976). Different societies (culture) and different eras (history) construct different types of masculinities. Since the images of masculinity are commodified, exported and consumed in a variety of cultural environments, it is necessary to make cross-cultural comparisons of masculinity in the context of the increasingly global, postmodern cultural environment to understand the various types of masculinity that are constructed in different societies (Darling-Wolf, 2004). However, prior research on types of masculinity in terms of the mass media's visual and textual codes has hitherto been limited to case studies of the representation of masculinity in the U.S. and the UK. (Ricciardelli et al., 2010).

Furthermore, a society has multiple competing masculinities – some are hegemonic, while others are marginalised (Connell, 2000). Multiple masculinities vary by class, race, social division, generation, region and institution (Nixon, 1997). Given consumers can distinguish the multiple types of idealised images of masculinity featured in the ads, and the congruence between the types of ideal gender images and product images that increases the effectiveness of advertising, it becomes necessary to systematically classify the visual codes of these masculinity ideals (Solomon et al., 1992). Theoretically speaking, the development of such a typology would be the first step toward comparing the representation of masculinity across cultures and understanding how social factors such as individualism and masculine cultures influence the construction of masculinity. Previous studies have not developed an exhaustive and mutually exclusive typology of masculinity types.

To redress the lack of a comprehensive understanding of masculinity types in men's lifestyle magazines in non-Western countries, this study addresses three questions. First, in light of Connell's (1998, 2005) conceptions of hegemonic masculinity, it explores how masculinities are currently portrayed in men's lifestyle magazine ads. In particular, what are the multiple kinds of masculinity types represented in men's lifestyle magazines in Taiwan, the U.S. and China? The second research question examines the cross-cultural differences in

the portrayals of masculinities in Taiwan, the U.S. and China. Specifically, what are the differences between the ads of individualistic (or feminine) countries and collectivistic (or masculine) countries in terms of the representation of masculinity? Which cultural factor - individualism or masculinity - is more important in the construction of masculinity within the magazine ads? The third question tests the relationships among masculinity types, racial groups and the social group background of the ads. Will models portrayed in different masculinity types be shown in different kinds of social groups? Will male models from different racial groups be placed in different kinds of social groups? To answer these three questions, we analysed the content of 636 ads from the three most popular men's lifestyle magazines in Taiwan, the U.S. and China between 2008 and 2010.

2 Literature review

2.1 *Masculinity types*

The burgeoning market in men's products has stimulated the rapid growth of men's lifestyle magazines. Besides representing, these magazines produce, circulate, negotiate and contest the meaning of masculinity (Edwards, 2003). Advertisements in men's lifestyle magazines emphasise the idealised images of masculinity in a society, which Connell refers to as hegemonic masculinities (1993). There are multiple types of masculinities in a society, the attributes of which are determined by the historical period, sexuality, class, race and generation (Nixon, 1997).

Based on the visual categories for masculinity defined by Nixon (1997), and after carefully and repeatedly reading the visual images of the male models, Yuan and Shaw (2011) classified masculinity into eight different types: Tough and Macho, Refined and Gentle, Stern and Sophisticated, Vigorous and Sunny, Trendy and Cool, Sensual and Sexy, Androgynous and Others. We reviewed the literature on each type as below:

Tough and Macho models have a muscular physique and a determined facial expression. The muscular man constitutes a cultural ideal (Wienke, 1998) by embodying desirable masculine characteristics such as production, work and responsibility (Kimmel, 1996; Osgerby, 2003). Western cultures place a greater emphasis on fitness and muscularity as a measure of masculinity than Chinese culture (Yang et al., 2005). When Asian men are defining their masculinities, they will value mental abilities over their physical qualities (Pompper, 2010).

Stern and Sophisticated men often appear mature and reliable because of their formal attire and neat hairstyle. Exemplary in these respects are successful

businessmen, who are characterised by ego-centrism, libertarian sexuality and calculative rationality (Connell, 1998; Connell and Wood, 2005).

The Trendy and Cool style originated from African American male street culture (Majors and Billson, 1992). These models are often clothed and accessorized in the latest fashions. They adopt provocative postures and display a freedom-loving and rebellious temperament. The cool personality has three traits: narcissism, ironic detachment and hedonism (Pountain and Robins, 2000).

Refined and Gentle models appear cultured, polite, graceful and well mannered. The best examples are learned intellectuals. In Confucian thought, men with literary and cultural achievements are regarded as superior to men with physical and martial accomplishments (Louie, 2002).

Androgyny is found an essential component of traditional Japanese masculinity. Androgynous stars have become more and more salient in Asian popular culture because Japanese popular culture is taking over the leading role of Western popular culture in Asia (Darling-Wolf, 2003). Androgynous male stars wear makeup and strike delicate, meek and dependent poses.

Vigorous and Sunny models are cute in contrast to the stoic, distant and manly idols of the past (Darling-Wolf, 2004). They look amiable and easy-going with a mixture of coyness and innocence. These charismatic figures resemble the boy next door and are therefore marked as being close to the audience.

Sensual and Sexy models are dressed provocatively in revealing and tight-fitting clothes. Sexually explicit imagery of males has become more common in film, television and print ads since the late 1990s (Connell and Wood, 2005; Coupland, 2007). Representations of masculinity previously focused on the face (Archer et al., 1983). The success of the gay movement and the growing interest in the “gay dollar” has contributed to the proliferation of sexualized images of masculinity in men’s magazines (Rohlinger, 2002). The movement of imagery of the male body to the centre stage has undermined the traditional conception of masculinity because it encourages men to take pleasure in themselves and other men (Crewe, 2003).

2.2 *The culture of individualism and masculinity types*

Courtney and Lockeretz (1971) were among the first researchers to situate gender differences in relation to social groups in U.S. magazine advertisements; women were more likely than men to be shown in the company of the other gender. They interpreted this finding as demonstrating how “women are depend-

ent and need men's protection" (p. 95). Men were more than twice as likely to be shown interacting with members of their own sex, which may be construed as signifying their independence. The ads which exclusively featured men only, 81% were portrayed alone. When in company, men were most often depicted with their co-workers. Other researchers have reported similar findings. For example, Furnham and Mak (1999) as well as Furnham and Paltzer (2010) reviewed 44 comparative studies and found significant cross-cultural differences in terms of the social groupings featured in TV commercials. The majority of the central characters referred to in most of these studies were shown alone. There are large cross-cultural variations that shape how central characters are depicted in relation to either male or female social grouping backgrounds. Men were rarely shown in the company of children. Eisend (2010) reviewed 64 studies of gender roles in TV and radio advertisements and found that men were less likely to be represented with predominantly female characters. The above studies provide useful aggregate data; however, their analyses emphasised gender differences rather than the uniqueness of masculinities.

According to Kolbe and Albanese (1996), individuality is a defining attribute of the American man. In individualistic cultures, people are self-conscious and this obliges them to engage in self-reflexive examinations continuously. Hofstede (2001) situated the U.S. at the extreme end of his individualism scale. The emphasis on individualism can be traced back to the industrial revolution, which separated American men from their homes and their nurturing responsibilities (i.e., fatherhood, interpersonal supportiveness) (Bly, 1990). Since the 1970s, the definition of the so-called new man has begun to include the caring and nurturing traits in men's roles as fathers and mentors (Chapman, 1988).

In contrast, in collectivistic cultures, people's identities are based on the social system they belong to and are defined by their relationships. In Confucian cultures, such as in China, Taiwan and Korea, collectivism is usually valued over individualism. Asian countries are clustered near the collectivism end of Hofstede's individualism scale (1984). However, the findings of more recent research complicate this view. For example, research shows that Americans are not less collectivistic than Japanese or Koreans (Oyserman et al., 2002). Asians from Mainland China, Hong Kong and Singapore heavily emphasise individualistic values, and thereby demonstrate no distinct collectivistic pattern that can be contrasted with American subjects – the notion of collectivism is only a means to individualistic ends in Chinese society (Lau, 1992). Chung and Mallery (1999) attribute this to the shift in China from communist control to private enterprise. In contrast, people who belong to a collectivistic social system expect it to look after them in exchange for their loyalty (De Mooij and Hofstede, 2010).

However, marketers have readily accepted the existence of cross-cultural differences in individualism (Cutler et al., 1997). Previous researchers have suggested that there is a link between the degree of individualism in a country and the social group backgrounds of consumer advertisements most commonly used in that country (Frith and Sengupta, 1991). In particular, countries with a high score on the individualism index tend to have a large percentage of ads containing only a single person, while a low score is associated with a large percentage of individuals portrayed within group settings (Frith and Sengupta, 1991; Alden et al., 1993). In content analysis of advertisements, imagery of a family is assumed to be a reflection of collectivism (De Mooij and Hofstede, 2010). Frith and Sengupta (1991) chose to connect the degree of individualism with the number of people portrayed in each print ad. Therefore, the first hypothesis in this study is:

H1a: Ads in Asian men's lifestyle magazines are more likely to show male models with other people than ads in U.S. men's lifestyle magazines.

Besides individualism, Hofstede's masculinity dimension has also been used to explain variation of social groups. Whereas modesty and interpersonal relationships (including family values) are esteemed in feminine cultures, masculine cultures tend to favour self and achievement. Milner and Collins (2000) examined the frequency of characters depicted in relationships with others by analysing the TV commercials broadcast in four nations (Sweden, Russian, Japan, and the U.S.) and found that feminine countries featured a greater proportion of characters in relationship than did the masculine countries. An and Kim (2007) confirmed this finding in their analysis of Korean (a feminine country) and U.S. online ads. However, contrary to the expectations of Hofstede's framework, characters in US commercials (a masculine society) are as likely to be portrayed in relationships with others as characters in Korean commercials (a feminine society) (Moon and Chan, 2002). Moon and Chan accounted for this discrepancy in terms of the emerging homogeneous youth market using a standardised advertising strategy, as well as the growing support for women's rights in Korea. Because Taiwan is considered a feminine country and both China and the U.S. are considered masculine countries (Hofstede, 2001), the alternative hypothesis of H1a is:

H1b: Ads in Taiwanese men's lifestyle magazines are more likely to show male models with other people than ads in U.S. and Chinese men's lifestyle magazines.

If H1a is supported, the influence of Hofstede's individualism dimension would be interpreted as stronger than the impact of his masculinity dimension on men's images represented in men's lifestyle magazine ads. In contrast, H1b sup-

ports the impact of masculinity over the impact of individualism. If the comparison fails to show any significant difference between any pair of the three societies, it implies that both the individualistic and the masculinity dimensions exert a weak influence on the representation of masculinity.

2.3 *Masculinity types and social group backgrounds*

Overall, fashion magazine advertising emphasises idealised images of masculinity. An ideal gender image is an overall "look" that incorporates both physical features and a variety of products, services and activities (Englis et al., 1994). In these ads, advertisers attached a set of desirable human characteristics to their product brand, which is called brand image or brand personality. Aaker (1997) classified these characteristics into five dimensions: sincerity, excitement, competence, sophistication and ruggedness. Advertisers attempt to match the models with the cultural values (collectivism vs. individualism) and needs of the target audience and advertising takes effect through the process of readers' identification with the appearance (or masculinity types) of the advertising models. Hence, it is important to make a match-up between a model's images and a brand's image. Solomon et al. (1992) proposed the Beauty match-up hypothesis, which states that certain types of beauty are more congruent with, or are a better match with, certain products than others are. If the "look" of the model is congruent with the product, the effectiveness of the advertisement may be enhanced. Thus, consumers are more likely to purchase those products.

The social group background setting of an effective advertisement needs to be congruent with the model's masculinity type to create a gestalt in which the product is a natural and necessary component of the whole (Englis et al., 1994). Using an argument exactly analogous to the match-up hypothesis, we suggest that particular social group characteristics would be associated with specific types of masculinity images. For example, Tough and Macho is characterised as "a masculinity type of individualism" (Nyman, 1997), by which men fight to achieve their own goals. Therefore, the second hypothesis of this study is:

H2: Models with Western-oriented masculinity types (e.g., Tough & Macho) would tend to appear alone, and models with Asian-oriented masculinity types (e.g., Refined & Gentle) would tend to be shown with others.

In addition, advertisers' choices of different types of social group backgrounds may be moderated by the ethnicities of the models used in the advertisements. Consistent with the match-up hypothesis, people may tailor different cultural values (individualism vs. collectivism) to different racial groups. Previous research found that African models rarely interact with Caucasian models

(Bowen and Schmid, 1997). African Americans were less likely than Caucasians to be shown as passive/emotional, in cross-gender interaction, as sex objects, as spouses, or in a home setting (Coltrane and Messineo, 2000; Larson, 2002). In prime time television commercials, Asian models were overrepresented in business set-tings and relationships, and underrepresented in home settings and family or social relationships (Taylor and Stern, 1997). This study will examine how male models from different racial groups are used by advertisers in different social groups in men's lifestyle magazine advertisements within the three societies. Hence, the last hypothesis concerns the relationships between ethnicity and social groups.

H3: Western models would be portrayed alone more often while Asian models would be shown with their partners, co-workers and families more frequently, regardless of the origins of men's lifestyle magazines.

3 Method

This study selects Taiwan, the U.S. and China for a cross-cultural comparison to examine the impact of two cultural factors - individualism and masculinity (Hofstede, 1980) - on men's image in men's lifestyle magazine ads. The selection of these countries allows a simultaneous examination of these two societal factors (Zhu et al., 1997). As posited in H1a and H1b, in operationalisation of these two variables, China serves as a case of both a collectivistic and masculine culture, whereas Taiwan and the U.S. serve as the reference for comparison. Although their collectivistic cultures are similar, Taiwan has a different feminine culture than China. At the same time, the U.S. shares the same masculine culture but has a different individualistic culture than China.

We chose to study men's lifestyle magazines where new visual coding of masculinity occurs initially and most extensively (Nixon, 1997). The advertisements featured in three issues from 2008 to 2010 of the three most popular magazines in each country were subjected to content analysis. In the U.S, GQ, Esquire, and Men's Health, Esquire, Men's Health and FHM in China, and GQ, Cool and Men's UNO in Taiwan were selected because of their circulation figures and sales figures. The visibility of the seven types of masculinity described in the literature review was examined to determine if these magazines promoted their own culturally distinct forms of masculinity.

One issue of each magazine was chosen at random from each year during 2008 to 2010. The 27 issues included 636 ads, all of which were analysed. Holidays (i.e., Valentine's Day, Christmas or New Year's Day) were avoided by substituting the most recent months, because holiday ads tend to portray certain types of masculinity. The unit of analysis was a full-page ad. For each ad, only

the main male model - the one occupying the most space overall or dominating the foreground - was coded. If the same ad appeared in different magazine issues, it was included each time in the coding process.

The masculinity categories were identified by Yuan (2007) as well as Yuan and Shaw (2011), who adapted the method of classification for types of female beauty, employed by Englis et al. (1994), Solomon et al. (1992) and Firth et al. (2005). The operationalizations used for each type of masculinity are presented in Appendix A. Besides masculinity types each male model in the ads was coded for his race and social group background. Social group background refers to the number of persons who appeared in the ads and their relationships with the main male models.

Two graduate students, who were fluent in both Chinese and English, coded all the variables for the selected ads. The coders were trained on a separate Taiwanese sample in order to familiarise them with the coding scheme used in this study as a means of categorising masculinity. After the formal coding, 149 ads (15.1% of the total) were randomly selected for an inter-coder reliability check. The inter-coder reliabilities for masculinity type, race, product type and social group were satisfactory (Scott's $\pi = .86, .96, 1, \text{ and } 1$, respectively) (Scott, 1955).

Besides presenting cross tabulation tables, chi-square tests were employed to test the relationships stated in the hypotheses. In addition, the adjusted standardised residuals (the standard deviation units above or below the mean) for each cell were also calculated to test sub group differences (Gilpatric, 2010).

If crosstabs contained more than 20% of cells with a frequency less than five, some categories were combined in order to obtain reliable chi-square results. With regards to race, Caucasian and African models were combined into Western models. Mixed and other races were excluded. In the case of social groups, being with a female partner, family members, friends and co-workers were recoded into a new category named "more than two people".

4 Findings

Most male models (76.7%) appeared individually in the advertisements. About one fourth of the male models (23.3%) in the sample were accompanied by other people. Of these, 76 (52%) are presented with a woman as a couple, 59 (40.4%) were with their friends or co-workers and only 11 (7.5%) were with their family members. These descriptive findings are consistent with the previous findings (Furnham and Mak, 1999; Furnham and Paltzer, 2010) that men tend to be alone and rarely appear with children. In addition, in men's lifestyle magazine ads,

men are more likely to be shown in the company of the other sex than in the company of co-workers. One possible reason is that the purpose of the ideal male body marketed to men is to make men more attractive to women (Frederick et al., 2005). Being alone with a woman implies an intimate relationship and a strong attraction between them.

As shown in Table 1, the social groups that the male models were advertised with in the men's magazines differed significantly across cultures, $\chi^2=17.01$, $df=6$, $p<.01$. There were similar proportions of models appearing alone, with their friends, co-workers and families among the ads of the three societies. Male models in Taiwan (Std. Resid. = 3.6, 18.6%) were more often accompanied by a woman than were their counterparts in the U.S. (Std. Resid. =-1.6, 9.9%) and China (Std. Resid. =-2.4, 5.5%). Hence, H1a is not supported. However, H1b, which predicted that the social groups used in Taiwanese men's lifestyle magazines advertising would differ from those used in U.S. and Chinese men's magazine advertising, is largely confirmed.

Table 1: Social group backgrounds by country

	<i>Taiwan</i>	<i>China</i>	<i>US</i>	<i>Total</i>
Individual	158 (73.5%)	90 (81.8%)	233 (77.2%)	481 (76.7%)
A couple	40 (18.6%)	6 (5.5%)	30 (9.9%)	76 (12.1%)
Family	2 (0.9%)	3 (2.7%)	6 (2%)	11 (1.8%)
Friends/co-workers	15 (7.0%)	11 (10%)	33 (10.9%)	59 (9.4%)
Total	215 (100.0%)	110 (100.0%)	302 (100.0%)	627 (100.0%)

$\chi^2=17.01$, $df=6$, $p<.01$; Cramer's $V=.12$, $p<.01$

H2 concerned the differences in the types of masculinity portrayed between ads with sole-male images and ads with a background group of more than two people. As shown in Table 2, there was a significant relationship between types of masculinity and the social groups portrayed in the advertisements ($\chi^2=19.44$, $df=7$, $p<.01$). Compared with other masculinity types, Tough and Macho models were more likely to be alone (Std. Resid. =2.4, 11.9%) than in company (Std. Resid. =-2.4, 5.2%). Vigorous and Sunny models were more likely to be placed in a background of more than two people (Std. Resid. =3.1, 18.7%) than individuals (Std. Resid. =-3.1, 9.6%). Therefore, H2 is supported.

Table 2: Comparison of masculinity types for individual and multiple models

	<i>Individual (n=129)</i>	<i>More than two people (n=505)</i>
Tough and Macho	57 (11.9%)	8 (5.2%)
Refined and Gentle	141 (29.3%)	38 (24.5%)
Stern and Sophisticated	63 (13.1%)	21 (13.5%)
Vigorous and Sunny	46 (9.6%)	29 (18.7%)
Trendy and Cool	133 (27.7%)	39 (25.2%)
Sensual and Sexy	28 (5.8%)	14 (9%)
Androgynous	12 (2.5%)	4 (2.6%)
Others	1 (0.2%)	2 (1.3%)

$$\chi^2=19.44, df=7, p<.01; \text{Cramer's } V=.18, p<.01$$

Both Western and Asian models were most likely to appear individually, less likely to be accompanied by a female partner or with their friends or co-workers, and least likely to be with their family members. It was hypothesised (H3) that due to cultural differences, Western models would tend to be alone and Asian models would tend to be shown with their partners, co-workers and families. As shown in Table 3, group differences in social groups among racial groups were significant at a p value of 0.8 ($\chi^2=6.77, df=3, p=.08$), which is higher than the conventional p value of 0.5. As the chi-square test is marginally significant ($p=.08$), a sub group comparison was calculated. Western models (Std. Resid. =2.2, 83.6%) were more likely to be portrayed as individuals than Asian models (Std. Resid. =-2.2, 74.5%), and Western models (Std. Resid. =-2.4, 3.9%) were less likely to be shown with their friends and co-workers than Asian models (Std. Resid. =2.4, 11%). Therefore, H3 is also supported.

Table 3: Comparison of social group backgrounds for Asian and Western models

<i>Social groups</i>	<i>Asian (n=128)</i>	<i>Western (n=490)</i>
Individual	107 (83.6%)	365 (74.5%)
A couple	14 (10.9%)	62 (12.7%)
Family	2 (1.6%)	9 (1.8%)
Friends/co-workers	5 (3.9%)	54 (11%)

$$\chi^2=6.77, df=3, p=.08; \text{Cramer's } V=.11, p=.08.$$

5 Discussion and conclusions

Male models, regardless of their nationality and ethnicity, tend to appear individually. This result has two implications. First, it supports the findings of Gryphon et al. (1994) that the proliferation of branded advertising has provided standardised image of masculinity in the increasingly open markets of nations such as China. Individualism, which originated in the West, has become a dominant characteristic of men, even in traditionally collectivistic societies such as China and Taiwan. These countries are now using Western photographic conventions to express their desires for independence in opposition to external interference by society, the family, or any other group or institution. The Western conventions embedded in advertising production are influencing cultural changes as an unintended consequence of globalisation.

The only cross-cultural difference found in this study is that when a woman accompanies the male models, it is most likely to be in Taiwan magazine ads, rather than in the U.S. and Chinese magazine ads. This finding supports the influence of the masculinity dimension on social groups in ads. The Taiwanese ideal of masculinity emphasises a man's harmonious relationship with a woman because Taiwan is a feminine society with a smaller gender gap where men and women are expected to be modest, tender and value relationships (Hofstede, 2001). In contrast, the dimension of individualism appears to only minimally influence ads' social group background in the three countries. Culter et al. (1997) also warned that the cross-cultural differences were not proportional to the differences in Hofstede's (2001) individualism indices and that one should avoid a strict application of the index to specific countries.

It is noteworthy that the small cross-cultural differences among masculinity types may result from our sampling of the magazines. In a newly developing market such as China, local Chinese men's lifestyle magazines have not been popular yet. All the Chinese men's lifestyle magazines that we used are foreign titles. These foreign titles aim to introduce international products and consumption-based lifestyle to Chinese male consumers. They tend to use the same standardised formats and conventions as their counterparts in the U.S. In contrast, two of the Taiwanese magazines were local, and as such may contain more local cultural elements than foreign titles. Thus, this sampling may artificially decrease the differences between the American and Chinese ads and highlight the unique features of the Taiwanese ads, which made it harder to detect cross-cultural differences.

The masculinity types correlate with social group backgrounds. In particular, tough and macho models are more likely to be alone, while vigorous and sunny models are more likely to be placed in a background of more than two people. These two types of masculinity are very different from each other. On the one

hand, tough and macho men are standardised American men whose defining attributes are individualistic, insensible, cold and implacable (Kolbe and Albanese, 1996). As an early form of manhood, tough and macho reflect the ideals of an economy based on a pre-modern mode of production, namely, agriculture (Kimmel, 1996). By the late 19th century, production, work and responsibility were perceived as the defining attributes of masculine identities (Osgerby, 2003). Once men's work no longer required physical strength in more modern times, working out at the gym became the means of becoming more muscular (Pope et al., 2000). Within the American context, the muscular body constitutes a cultural ideal that symbolises stereotypical notions of masculinity (Wienke, 1998).

On the other hand, vigorous and sunny is a new type of masculinity in popular cultural texts identified by Darling-Wolf (2004) in Japan. In contrast to the stoic, distant and manlier idols of the past, today's celebrities are young and cute. Vigorous and sunny models are younger than before as men's lifestyle magazines are now targeting young men. Their look, attitude and posture are amiable and easy-going. These gentle characteristics coincide with the nurturing aspect of the new Western man (Chapman, 1988).

A mixture of coyness and innocence, capped off with a brilliant smile, these charismatic figures have become highly visible in popular culture. They are marketed as being "close to the audience" which exerts less pressure on male media consumers. According to social comparison theory, human beings are intrinsically driven to search for their own likeness in the mass media, so they can evaluate their own abilities and opinions (Festinger, 1954). Compared with other types of masculinity, the image of "the boy next door" are relatively familiar and therefore potentially more attainable, so comparisons may generate less personal dissatisfaction and consequently better self-images (Richins, 1991). Hence, advertisers may like to use models that their consumers find easier to identify with and emulate.

Even though vigorous and sunny is a masculinity type that is used frequently in the ads in all three countries, its presence is not so well established within the literature on masculinity. Further research therefore needs to be conducted that focuses on when and how this masculinity type was originally constructed and developed, and its corresponding effect on the audience.

The relationship between race and social group background is marginally significant ($p=.08$). That is, Western models are more likely to be portrayed as individuals, and less likely to be shown with their friends and co-workers than Asian models. This finding suggests that advertisers tailor more individualistic characteristics to Western models than to Asian models. It is interesting that the choice of social group background in the ads of men's lifestyle magazines is not

only determined by the host country's cultural tradition, but is also influenced by a global hierarchy of racial archetypes. Further research needs to be undertaken to evaluate the potential difference between Caucasians and African Americans, as well as the distinction between being with friends (or co-workers) and being with families.

6 References

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7 Appendix

Tough and macho: With a traditional cowboy look and temperament, the model has a muscular physique and determined facial expression. The sharp, angular lines of his face speak of toughness and resolution. With tanned skin, and dressed in leather or cowboy clothes, the model appears – in either expression or posture – nomadically unkempt, strong-willed and lion-hearted.

Refined and gentle: With the look of a learned intellectual, the model appears cultured, polite, graceful and well mannered. He is often dressed in a preppy style (e.g., shirts, argyle jumpers etc.) and wears glasses. His hair is always neat and tidy; his appearance is always clean-cut.

Stern and sophisticated: With a confident and firm look, the model impresses the viewers as mature and reliable. He is dressed in formal attire (usually suits) and has a neat, sleek hairstyle. He is a mature man, with some character lines on his face. His gaze is focused. He often has a successful career.

Vigorous and sunny: Like a boy next door, the model often radiates coyness and innocence, capped with a brilliant smile. His skin is tanned. His clothing is sporty and casual. His look and posture are those of someone who is amiable and easy-going.

Trendy and cool: Clothed and accessorized in the latest fashion, the model is likely to stand in a provocative posture and displays a freedom-loving and rebellious temperament. His facial expression is either expressionless or aloof, thereby creating a sense of distance between him and his viewers. He often leers at people and assumes an indifferent and scornful attitude.

Sensual and sexy: Often dressed in sexually arousing revealing, tight-fitting clothes, such as a swimming suit or underwear, the model usually looks away from the camera and refrains from appearing smart and sophisticated or springy and sunny. His facial expression and posture – such as caressing his own body – often seem unnatural because they are contrived to seduce his viewers and arouse their sexual desire.

Androgynous: With exquisite features, the model dresses and behaves in a more feminine way or wears makeup. He appears in a more delicate, meek and dependent posture.

Others: Types that cannot fit into any of the above categories.

Gender and Age as Factors Influencing Consumer Responses to Soft-sell Ads – A Multi-country Comparison

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1 Introduction

Gender role norms for men and women can vary significantly from one culture to the next. A critical question for marketers and advertisers is whether gender differences translate into differences in consumer evaluations of marketing communications. In contrast with the disciplines of psychology and sociology, there has been a significantly more limited examination of sex differences in the area of consumer responses to advertising. The focus of this investigation is to address three key questions: (1) are certain ad appeals more effective with males vs. females? (2) do such preferences vary by culture? (3) are there age-related differences in the perception of soft-sell ads? This research examines gender and age differences in responses toward soft-sell ads in four different cultures. Specifically, it tests whether men and women and older and younger individuals differ in terms of attitude toward the ad, message credibility, irritation experienced, and ultimate purchase intention in the U.S, France, Germany and Italy. With regard to ad appeals, this study focuses specifically on soft-sell appeals (closely related to emotional appeals), which have been employed in advertising messages for more than a century. Soft-sell appeals are often contrasted with hard-sell appeals. Soft-sell appeals employ more visual imagery and are more subtle and ambiguous than hard-sell ones. Ads employing soft-sell appeals seek to make the audience feel good about the product by creating a likeable or friendly brand; human emotional sentiments are emphasized for effectiveness. Hard-sell appeals instead emphasize a product's benefits - for example by showing a product's quality, economy, value or performance, and often compare the featured brand with its competition (Mueller, 1987; Homer, 2008). In general, the use of soft-sell (and hard-sell) appeals has been found to vary across cultures (Mueller, 1987; Lin, 2001). No research to date has examined the differences in preference for soft-sell appeals among males and females and between younger and older individuals.

2 Background

2.1 *Advertising and the role of gender*

That men and women are different is commonly accepted in most societies, and a host of both biological and social factors appear to drive these differences. An important question is whether gender differences influence the processing and evaluation of marketing communications. Surprisingly, there has been a limited examination of sex differences in the area of advertising. The bulk of such research focuses on gender role portrayals (Zhang et al., 2009; Khairullah and Khairullah, 2009; Hovland et al., 2005) and on the use of sex appeals (Liu et al. 2009; Liu et al., 2006; Jones et al., 1998). Among the remaining studies that have examined sex differences in the processing of ads, researchers have focused on relational vs. item-specific information processing (Putrevu, 2004), preference for subjective vs. objective information (Darley and Smith, 1995), preference for lexical complexity (Putrevu et al., 2004), and recall and recognition of the ad sponsor (McDaniel and Kinney, 1998). Fewer yet have examined gender as a moderator of the effectiveness of specific types of advertising appeals. A rare investigation by Fisher and Dube (2005), examined gender differences in responses to emotional advertising. The researchers found no significant gender differences for responses to emotional advertising except for instances where men viewed an ad in which a low-agency (stereotype incongruent) emotion was displayed along with another male. When men viewed the same ad individually or when a high-agency emotion (stereotype congruent) was shown in the ad, no significant gender differences were found. A second study by Chang (2007) explored preferences among males and females for ads containing comparative vs. non-comparative appeals. This investigation revealed that comparative advertising encouraged greater levels of brand-evaluation involvement among men, but not among women. Instead, for women, attention-gaining comparative appeals encouraged inferences regarding the ad's manipulative intent. These gender differences in processing lead to evaluative consequences. For men, comparative appeals led to more favorable ad and brand evaluations and greater purchase intentions. For women, the heightened perceptions of manipulative intent brought about by the comparative appeals resulted in negative ad and brand evaluations and reduced purchase intentions. Thus, gender plays no role in response to some appeal categories and a very significant response in others. Clearly, there is both a need for as well as a dearth of research in this area.

2.2 *Gender-based schema and self-construals*

The social roles of males and females are the most fundamental behavioral patterns in society (Prakash and Flores, 1985). Gender roles are learned primarily

during childhood, in which we acquire sex-specific self-concepts and personality attributes that enable us to feel masculine or feminine as defined by a given culture (Barry et al., 1957). Gender schema theory explains that our behavior is a result of gender-based schematic processing (Bem, 1981). A schema is a set of cognitive associations that guide one's perception. Here, information is encoded and assimilated into gender-linked associations itemizing appropriate gender-based behaviors. These behaviors become a gender schema against which individuals evaluate their own behaviors to regulate their attitudes and behaviors (Bem, 1981). According to this theory, male schemas are associated with success and achievement to a higher degree than females (Firat and Dholakia, 1998). By relating self-construals to gender, Cross and Madson (1997) theorize that gender based information processing differences result from one's perception of their self-system. According to their theory, the self is largely a social product, from which individuals' cognitions and emotions form on the basis of cultural values. In their theory, females tend to construct their self as interdependent with others or "interdependent self-construals", whereas males are likely to develop self-construals that are independent from others. The goals of those with an interdependent self-construal (i.e., females) are to develop self-defining relations to maintain a connectedness with others via interpersonal affiliations, affiliations to groups, and to a community. They are more concerned with harmony and implicit communication is more important. In contrast, males are prone toward an independent self-construal and thus are less concerned with these types of affiliations (Cross and Madson, 1997). These concepts can be translated into a preference for soft-sell (implicit and indirect) versus hard-sell (explicit and direct) sales appeals, which may vary by gender. It seems reasonable to predict that females will tend to prefer more implicit, harmonious and non-competitive appeals, while the success, competition and achievement orientation related to hard-sell appeals will be preferred by males. More formally:

H1: In general, females are more likely to perceive soft-sell ads more favorably, compared with males.

2.3 High and low-context cultures

Hall proposed the concept of high vs. low context cultures (1976). Members of high context societies see themselves as part of a large and complicated world with many relations, and as a result, tend to direct their attention outside themselves and toward the whole social environment. On the other hand, those living in low context societies, with fewer and less significant social relations, direct their attention toward themselves and their unique internal attributes. It appears quite likely that different social orientations may have a direct influence on

communication. For example, non-verbal forms of communication tend to dominate in high context cultures. Hall (1984) notes that “a high context communication or message is one in which most of the information is already either in the physical context or internalized in the person and very little is in the coded, explicit, transmitted part of the message. In contrast, a low context communication is just the opposite, i.e., the mass of the information is vested in the explicit code,” (p. 91). Messages in high context cultures are conveyed in an implicit and indirect manner, whereas communications in low-context cultures tend to be more explicit and direct. Hall (1976) proposed a rough classification to help situate countries along a continuum ranging from high context to low context cultures. Mediterranean countries (Greece, Spain, Italy, and France), as well as Japan and Arab cultures fall along the high context end of the continuum, whereas North America, Scandinavian Countries, and Germany fall along the low context end of the continuum. This classification has been widely used in empirical research (Würtz, 2005).

Individuals living in high context cultures are thought to respect harmony and value implicit communication more than people with a low context cultural background. Thus we expect that both women and men in high context cultures evaluate soft-sell ads (which are implicit and indirect) more positively than women and men in low context cultures. More formally:

H2: Females in high context cultures are more likely to perceive soft-sell appeals more favorably, compared with those in low context cultures.

H3: Males in high context cultures are more likely to perceive soft-sell appeals more favorably, compared with those in low context cultures.

2.4 Age-related differences in the perception of soft-sell appeals among males and females

A good deal of research has focused on changes in information processing related to aging. Growing older has been associated with an increase in the motivation to attend to emotional versus factual information (Isaacowitz et al. 2000). Maturation may, in part, be responsible for older adults' increased focus on emotional information. Labouvie-Vief (1998) notes that as individuals age, they develop a more complex understanding of emotions and endeavor more to integrate emotions and cognitions.

In addition, it appears that the increased focus on emotions may be due to older folks perception of time as limited, a tendency which has been termed “limited time horizon perspective” (Carstensen, 1992). When time is viewed as limited, people tend to be present-oriented, seeking satisfaction in the moment

and devoting greater attention to social connectedness, feeling states, and deriving emotional meaning (Carstensen et al., 1999). In contrast, younger individuals are more likely to view time as expansive. When time is viewed in this manner, people tend to be future-oriented, which is associated with a focus on planning, being analytical, and pursuing knowledge in order to be better prepared for the future. Indeed, some research has supported a preference for emotional advertisements by older individuals, while those who are younger tend to prefer more rationally-oriented ads. Williams and Drolet (2005) reported both increased liking and recall of emotional ads among older consumers and confirmed that time horizon perspective (limited vs. expansive) moderates age-related differences. Drolet et al. (2007) investigated the moderating role of product category type (hedonic vs. utilitarian) on age related differences in responses to affective vs. rational ads. Their experiment showed elderly consumers had more favorable attitudes toward affective ads, regardless of product category. Young adults, on the other hand, favored affective ads only for hedonic goods and preferred rational ads for utilitarian products.

Based on the above investigations, when addressing an older target group, it appears advertisers would be well advised to employ emotional appeals as these are most likely to resonate with this segment. And, rational appeals may be more appropriate for younger consumers. De Pelsmacker et al. (2002) tested an emotional and a rational ad for a new product in a positive and negative newspaper context amongst a sample of young Polish consumers. They found that overall for both emotional and rational ads, a positive context (a newspaper page filled with only positive headlines) led to more positive attitudes and to better ad content recall. However, rational ad messages resulted in significantly more positive attitudes among these young consumers, in addition to a higher purchase intention and better ad content recall than emotional ad messages. Attitudes toward an emotional ad and ad content recall were significantly more positive in a positive context than in a negative context. Purchase intention and content recall as a result of rational ads were higher in a negative context (news of crime and accidents). However, other researchers report conflicting findings. McKay-Nesbitt, Manchanda et al. (2011) distinguished between negative vs. positive emotional appeal ads. They found older adults had significantly more positive attitudes toward rational appeal ads than they did toward negative-emotional appeal ads, but no differences were found in attitudes for rational versus positive-emotional appeal ads for older adults. No significant differences in the effects of emotional versus rational appeal ads on attitudes were found for younger adults. Younger adults recalled more of the content of emotionally versus rationally oriented ads but emotional ads did not generate more positive attitudes. Such findings draw attention to the importance of taking the target audience's age into account when incorporating appeals (emotional vs. rational, soft sell vs. hard sell) in advertising messages. As our paper focuses specifically on soft-sell appeals, we limit our

analysis to influence of age on the perception of emotionally-oriented ad appeals. Based on the above literature review, one might expect older consumers to evaluate soft-sell ads more favorably than younger consumers. No study to date has analyzed whether there are also gender-related differences in the influence of age on the perception of soft-sell ads. Therefore we postulate that both older females and older males will evaluate an ad employing a soft-sell appeal more positively than younger females and younger males.

H4: In general, older females are more likely to perceive soft-sell appeals more favorably, as compared with younger females.

H5: In general, older males are more likely to perceive soft-sell appeals more favorably, as compared with younger males.

3 Methodology

To test the above stated hypotheses, four countries were chosen: Germany, the U.S.A., Italy and France. Among these countries are two low context countries (Germany and the U.S.A.) and two high context countries (Italy and France). These countries also represent four of the G8, important markets with regard to advertising expenditures. The first step was the development of a fictitious ad employing a soft-sell appeal (cf. also Okazaki et al., 2011; Diehl et al., 2011). The ad was developed in Austria, a country not included in the main investigation via class assignments, content analysis, focus group discussions, brain storming and free association tests. First, a content analysis of major general interest magazines was conducted and wristwatches were found to be one of the most frequently advertised product categories.

Watches were also deemed to be equally important to both sexes as well as for different age groups. As an ad theme, sports was identified via rigorous focus groups to be most appropriate, and within the different sports, skiing was selected as the optimum sport. Finally, free association tasks confirmed the following components to be most appropriate for the fictitious ad: a wristwatch brand called "Chronier," the highlighted product feature of "endurance," and the following slogans: "Wherever you are, whatever you do" and "Stands the test of time." The fictitious ad was created by a professional agency. The same ad was used in all four countries, except the slogans were translated into the local language. The soft-sell ad featured a single skier going down a slope at sunset. The ad was executed in black and white in order to eliminate the potential color preferences. The variables tested in this study were ad credibility, ad irritation, attitude toward the ad and purchase intention. All measures were adopted from prior research (Bruner et al., 2005; Bhat et al., 1998; Mitchell and Olson, 1981; Terlutter et al., 2006). In addition, this study applied the instruments developed in previous research (Okazaki et al., 2010) to measure the strength of soft-sell ad

appeals. A translation-back-translation procedure was applied in the development of the questionnaires. The final sample size used for the analysis was 392 in the U.S., 369 in France, 424 in Germany, and 400 in Italy. For the age-related hypotheses, a mean-split was used. The mean was 34.6 years, so the younger group ranged from 16 to 34 years and the older group from 35 to 82 years. The younger group consists of 475 participants (225 males and 250 females) and the older group of 329 subjects (178 males and 151 females).

4 Hypotheses testing

Our hypotheses fundamentally posit that there will be greater ad credibility, less ad irritation, more positive attitudes toward the ad, and increased purchase intention, in response to ads employing a soft-sell appeal for the female respondents as compared to males and for females and males in high context countries compared to low context countries. First we tested a measurement model consisting of these constructs using AMOS 17.0 with the maximum likelihood estimation. The overall model with our full sample resulted in an acceptable fit: $\chi^2_{71} = 567.93$ ($p < 0.001$), CFI = 0.95, IFI = 0.95 for the soft-sell model. Next, we tested cross-country measurement invariance of this measurement model across the countries, using the method that Steenkamp and Baumgartner (1998) suggest. The results provide partial metric invariance for the soft-sell model ($p = 0.10$). This justifies the subsequent cross-country comparison. Next, to test our hypotheses, we computed the mean values for each construct and applied ANOVA. For the sake of simplicity, it was accepted that an equal weight was applied for all constructs. For H1, which examines the evaluation of the soft-sell ad by females vs. males, though the results pointed in the direction predicted, ANOVA found no significant differences between male and female respondents. Thus, H1 was not supported (Table 1). The interaction effect with regard to gender and country was not significant ($F = 1.428$; $p = 0.15$).

With regard to H2, females in high context cultures perceived the soft-sell ad significantly more positively than females in low context cultures. This was true for all variables examined in this investigation: the attitude toward the ad (5.04 vs. 4.77), ad credibility (4.76 vs. 4.45) and purchase intention (3.70 vs. 3.11) were higher, whereas ad irritation (2.54 vs. 2.85) was lower in high context cultures than in low context cultures (Table 2). Thus, H2 was fully supported.

H3 postulates that males in high context cultures perceive the soft-sell ad more favorably than males in low context cultures. As ANOVA shows, men in high context cultures indeed evaluated the soft-sell ad more positively than the men in low context cultures for all four variables included in this study, but not all differences were significant. Men in high context cultures had a significantly more favorable attitude (5.04 vs. 4.57) toward the soft-sell ad and expressed a

significantly higher purchase intention (3.77 vs. 3.42), whereas the differences for irritation (2.72 vs. 3.01) and credibility (4.64 vs. 4.40) were only significant at a 10%-level (Table 2). Thus, H3 was partially supported. Whereas the main effect for the independent variable high/low context culture revealed a highly significant difference ($F = 5.823$; $p < 0.001$), the interaction effect high/low context culture * gender was not significant ($F = 1.345$; $p = 0.25$), as the results for males and females in high vs. low context cultures pointed in the same direction. The main effect for the independent variable gender only ($F = 2.224$; $p = 0.07$) was also not significant (see also hypothesis 1).

With regard to the age-related hypotheses, only one significant difference (for the variable irritation) was found, but here, contrary to our assumptions, younger females were less irritated than the older females, thus H4 was rejected (see Table 3). H5 was also not supported. Here, again, it was the younger subjects who evaluated two out of four variables (attitude toward the ad and irritation) more favorably than the older subjects, thus H5 was rejected as well (see Table 3). Contrary to the previous research, young men appear to evaluate an emotional soft-sell ad more favorably than older men.

The interaction effect gender * age was not significant ($F = 1.579$, $p = 0.18$) (as the results for younger men and women pointed in the same direction), but the main effect for the independent variable age alone was highly significant ($F = 5.351$, $p < 0.001$).

5 Discussion and directions for further research

Our study adds to the body of research in international advertising. Contrary to our expectations, the investigation revealed no significant sex-related differences in the evaluation of soft-sell ads. One possible reason might be that female and male gender based schemata and self-construals have increasingly converged over the last years, thus no longer reflecting the research of Cross and Malden (1997) and Firat and Dholakia (1998), which was conducted in the late nineties. Females do not prefer harmonious or non-competitive appeals more so than males. Soft-sell appeals are equally attractive to men and women and thus can be effectively employed in international advertising addressing both sexes. Whereas there appear to be no significant differences between men and women in their evaluation of soft-sell ads, there are, in fact, differences in the evaluation of the soft-sell ad by women in high versus low context cultures. Hall's concept of low and high context cultures proves yet again to be of value in international advertising research. Consistent with our theoretical proposition, soft-sell appeals were more favorably perceived by females in high context cultures, as compared with females in low context cultures, in terms of attitude toward the ad, ad irritation, credibility and purchase intention. If advertisers hope to address females in

high context cultures, soft-sell appeals seem to be particularly suitable. The same is true for males in high context cultures, they also evaluate soft-sell appeals more positively than their counterparts in low context cultures. In short, soft-sell ads appear to be especially advantageous in high context cultures. Future research should include additional countries considered to be high versus low context cultures in order to validate the results for a larger number of markets.

With regard to age, there were only limited differences between younger and older subjects. But in all cases, it was the younger subjects who evaluated the soft-sell ad more favorably as compared to the older subjects. In particular, younger men perceived the soft-sell ad more favorably than did older men. A long term study in Germany (Shell youth study, 2010), which compares the years 2002 to 2010, revealed that young people are developing an increasingly hedonistic attitude toward life. The value "enjoy one's life" gained importance during the period under analysis. An Austrian investigation (Jugendkultur, 2011) examining 16-29 year old women points in a similar direction and highlights that one of the most important values for young females is to enjoy life. Perhaps the growing wish to enjoy one's life correlates with a desire for emotional experiences conveyed by media messages – such as advertisements employing soft-sell appeals – but this of course would have to be validated by future research. Future investigations should also examine responses to hard-sell appeals. The current study should be expanded to include additional product categories as well. Finally, a greater number of both high and low context countries should be incorporated.

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7 Appendix

Table 1: ANOVA results: Gender-related differences

Country	Ad credibility			Ad irritation			Attitude toward the ad			Purchase intention		
	Male	Female	p	Male	Female	P	Male	Female	p	Male	Female	p
All countries	4.50	4.62	,14	2.88	2.68	,20	4.78	4.92	,07	3.58	3.43	,21

Table 2: ANOVA results: Differences between high and low context cultures for men and women

Country	Ad credibility			Ad irritation			Attitude toward the ad			Purchase intention		
	High	Low	P	High	Low	p	High	Low	p	High	Low	p
Females	4.76	4.45	,03	2.54	2.85	,01	5.04	4.77	,04	3.70	3.11	,00
Males	4.64	4.40	,06	2.72	3.01	,06	5.04	4.57	,00	3.77	3.42	,03

Table 3: ANOVA results: Differences between younger and older men younger and older women

Age	Ad credibility			Ad irritation			Attitude toward the ad			Purchase intention		
	Younger	Older	P	Younger	Older	p	Younger	Older	p	Younger	Older	p
Females	4.59	4.66	,61	2.51	2.97	,00	4.98	4.81	,20	3.34	3.58	,15
Males	4.60	4.38	,08	2.70	3.10	,01	4.97	4.54	,00	3.66	3.47	,26

When Xmas Wishes are Brands: Wishing Behavior of Children

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1 Purpose of the study

“It’s Christmas time!” and every year millions of children eagerly await Christmas Eve. Beyond the spiritual aspect of the holiday, children are especially looking forward to getting their presents. Gift-giving is one of the most important rituals associated with this holiday all over the developed, Christian world (Schori, 2008; Storey, 2008; Waldfogel, 2009). Parents, on the other hand, are engaged in selecting the right presents for their kids and therefore are very sensitive to children’s consumption habits during the run-up to Christmas because gift-giving is very important for both parents and children (Schori, 2008). As parents use the children’s letters to Santa or, in the southern-German world, to the *Christkind* (Baby Jesus) to get ideas for Christmas shopping (Clarke and McAuley, 2010), knowing more about children’s wishing behavior is an important subject for marketing and advertising.

2 Literature review: What we know about letters to Santa & Co.

Analyzing children’s Christmas requests is not new. However, the research questions, the results, and the procedures used differ significantly: One of the first studies was conducted by Caron and Ward (1975), who researched the influence of mass media on children. To do this, they collected requests announced either to parents or in letters to Santa Claus. This early study reveals that television and friends are the most common sources of information. In some product categories age-related differences were found. Social class had a strong influence as well. Robertson and Rossiter (1977) used survey data to analyze the impact of peers, parental education and TV advertising on boys, finding that TV advertising had the strongest impact on young boys’ requests. Boys request on average fewer toys than girls and they are more likely to request “male” or “neutral” toys (Downs, 1983). In addition to gender, social class also influenced the requested product categories (Richardson and Simpson, 1982). On analyzing letters to Santa, Otnes and colleagues observed gender differences in the structure and number of requests as well as in the writing style in terms of the length and politeness of the letters (Otnes et al., 1994). However these findings were contradicted by a similarly conducted study in Australia which found a difference be-

tween boys and girls only in the use of politeness and illustrative drawings (O'Cass and Clarke, 2002). The influence of television advertising on the number of requests featuring advertised products yielded different findings: Buijzen and Valkenburg (2000) found that television viewing habits influence the number of requests and that age and gender influence the amount of advertised products requested. A content analysis of a Saturday morning TV viewing was used to determine whether or not a brand was advertised. A replication study by Jennings (2009) found differences based on age and gender. Girls, especially, were more likely to ask for advertised products, and the number of advertised products requested decreased with age (Jennings, 2009). Pine and colleagues found similar results for the influence of TV-viewing habits, which also confirmed a one-tail significant correlation between brands appearing in TV advertising and in letters, and between the TV viewing score and requests for advertised brands (Pine and Nash, 2002; Pine et al., 2007). The role of the Christmas spirit and how it is reflected in writing up letters to Santa was researched in a Finnish sample of letters, revealing that there are 5 different types of letters: paradise of presents, the one that I want, Christmas miracle, dreams come true and Santa's choice presents (Halkoaho and Laaksonen, 2009). This was the first study that also takes involvement with Christmas into account.

Although most of the studies counted the number of wishes, only two studies so far have concentrated on how many requests were branded and how many were unbranded (O'Cass and Clarke, 2002; Otnes et al., 1994) and on how gender influences the branded and generic requests. Interestingly, the studies yielded contradictory results. Finally, an interesting question arises as to which factors contribute to a request being branded or not and how this is related to the style of the letter as this implies requesting behavior of children.

3 Research propositions when analyzing children's requests

3.1 Style and structure of the letters

We aim to provide a comprehensive insight into children's wishing behavior. Therefore, in our first stage we identify the style and content of the letter (number of requests and whether branded or not branded) as well as the monetary value of requests. In the second stage we discuss whether these variables influence each other and which additional influencers should be taken into account.

Letter style: In the Austrian tradition of writing and sending letters to the *Christkind*, children write or illustrate the letter and leave it on the windowsill, from where it is collected by the *Christkind* (the parents). However it can be assumed that there are a number of different styles of letters, as already observed

by O'Cass and Clarke (2002) such as the classic letter format, or letters with lists, drawings or illustrations. The choice of style also interacts with the nature of the requests: If children illustrate the letter with cut-outs from brochures and print media, it is very likely that they will make more requests as they are under direct exposure to advertising. Furthermore, if children write list-like letters they will be more likely to make more wishes as already the format encourages them to make more requests. Thus the style of the letter may also be an influencer for the wishing behavior. Additionally, in voicing their gift preferences children might also include non-gift-related content, like referring to the Christmas spirit or their own involvement with Christmas (Clarke, 2007; Halkoaho and Laaksonen, 2009). Involvement with Christmas may also be related to wishing behavior as more involved children will take the ritual and the religious festival into account, as opposed to merely voicing material wishes. Hence we propose the following research question:

RQ1: Which styles and contents of letters are used by Austrian children?

The number and structure of requests: To get an insight into Austrian children's wishing behavior we analyze the number and the content of individual requests. We analyze the product categories appearing in the letters, whether requests are branded and for which product categories the naming of brands is most likely. Another neglected topic in researching children's Christmas requests is the monetary value of the individual request as well as of the entire letter.

RQ2: What is the number of requests in total and of branded requests and what is the monetary value of an average letter and an average wish?

3.2 *Factors influencing the content of the letters*

The role of gender: It is evident that gender might influence the requesting of presents and the writing style. We assume gender differences in the style of the letter as girls tend to communicate more, while boys usually write more detailed and in a bulleted list style (Otnes, Kyungseung, et al., 1994). In addition, girls will be more likely to use drawings and additional Christmas-spirit related content (O'Cass and Clarke, 2002) in their letters than boys do. Finally we also assume that the number of requests will be affected by gender as previous studies showed girls making a higher number of requests than boys (Otnes et al., 1994). However, as boys are more confident in requesting and pestering (Cherney and London, 2006) and also care more about what peers think, there might be additional differences in asking for presents and naming brands (Otnes et al., 1994).

The role of cognitive development: With regard to the cognitive development of children (Piaget, 1982), children go through various stages of cognitive development and socialization (Roedder John, 1999, 2008; Valkenburg and Cantor, 2001). Raeder John (1999, 2008) differentiates between three stages of childhood and consumption socialization: (1) the perceptual stage (3-7), (2) the analytical stage (7-11), and (3) the reflective stage (11-14). Similarly, Valkenburg and Cantor (2001) describe four stages: (1) infants and toddlers (0-2), (2) pre-school children (3-6), (3) early elementary school (7-8) and (4) late elementary school (9-11). Children in the perceptual or pre-school stage are likely to be one-dimensional and egocentric. Their primary goal as consumers is to own more and more as children at this age do not understand the nature of monetary value. Early elementary school children are more likely to take more product attributes into account and they will start to understand the relationship between price and value/quality. In addition, they use more complex negotiation strategies. Late elementary school children have gained a fuller understanding of the value of products and also take social or emotional value into account. They start using complex negotiation strategies and peer influence decreases (Roedder John, 2008; Valkenburg and Cantor, 2001). These factors, as well as differences in making use of product information (Roedder John and Sujan, 1990) and the building of brand awareness and brand relationships (Nairn, 2010; Valkenburg and Buijzen, 2005), suggest that, in addition to gender and writing style, the cognitive development stage might also influence children's wishing behavior.

Taking all the above factors into account, we assume that there are many different interactions at work which make an overall proposition difficult. As Downs (1983) already states: "*there were wide individual differences in the number of toys children requested*" (Downs, 1983, p. 161). This indicates that the data is rather heterogeneous and that it depends on the combination or configuration of several influencing factors as some interactions might be observable in one group but not in the other. We thus try to analyze how the proposed variables predict the number of requests and branded requests, as well as the monetary value.

RQ3: Which combination of writing style, age, and gender leads to differences in the total number of requests, the number of branded requests, and the monetary value of the requests and letters?

4 Study

4.1 *Data collection and coding*

To collect data, we advertised a prize draw with 3 gift cards worth 150, 100 and 50 Euros as prizes. To take part in the lottery, either the original letter to Baby Jesus or a copy had to be sent in. The draw was promoted in newspapers and at schools. After receiving the letters, the address and any personal data which could identify the child was separated or excluded. We also discarded letters obviously written by adults. The letters were then coded for the structure of the requests and for writing style. Each request was then coded individually. To calculate the cash value of the wishes/letters, the following procedure was applied: If the children provided sufficient and plausible hints about the item's price (e.g., by naming catalog prices) this value was chosen. In cases where products could be exactly identified and prices were not indicated by the children themselves, the items' values were taken from two catalogs (namely Muel-ler and Toys "R" Us) and various internet sources (Thalia – www.thalia.at, Amazon – www.amazon.de, Toys "R" Us, www.toysrus.at). If different prices for the same item were found, the average of these prices was used. If the wishes were indefinite (e.g., "a cell phone" or "a book") average prices for these product categories were estimated based on the additional information provided by the child and on current pricing. If neither product nor price could be reliably derived from the children's wishes, we excluded it from our calculations.

4.2 *Prediction-based classification procedure*

As we propose that there exist several interaction effects within subgroups, we applied a classification tree approach: Classification trees split the overall sample into sub-samples (nodes) using split variables but, different to classical cluster analysis, a dependent variable (which could be categorical as well as metric) was also used. The tree algorithm (usually the CHAID or CRT) searches for the strongest split variable, which explains the dependent variable and this is repeated for the sub-nodes as long as no significant split variable remains (Cooil et al., 2008). An advantage of using classification techniques is that they offer an insight into interaction effects in sub-samples which might not be observable when analyzing the entire sample (Haughton and Oulabi, 1993). The literature suggests different types of classification techniques whereas the classification trees usually use either the CHAID (Chi-Square-Automatic-Interaction-Detector) or the Classification and Regression Tree (CRT).

As our dependent metric variables show rather high values in skewness and kurtosis and also differ significantly from a normal distribution according to a Kolmogorov-Smirnov Test, we applied the Classification and Regression Tree procedure suggested by Breiman et al. (1984). This procedure is based on an improvement in the Gini-coefficient of unequal distributions. Hence the binary classification procedure searches for the independent variable, which leads to the highest improvement when used for splitting. As a result the CRT method classifies nodes which are more homogenous than the parent nodes. The CRT method is also robust for outliers and allows the inclusion of metric and categorical independent variables. However, tree optimization is always only for each split, not for the total tree (Breiman et al., 1984; Haughton and Oulabi, 1993; Mehrotra and Agarwal, 2009). For all our classification trees, we used the following criteria: minimum improvement in the Gini-coefficient of .005, minimum size of the node 15 resp. 50 (for analyzing the requests individually) observations, cross-validation with 10 folds.

4.3 Results

In total 250 letters were collected. 9 letters had to be discarded as they contained unreadable content. The majority of the 241 usable letters were collected from early elementary school children (61.4%). 11.6% came from pre-school children and 27.0% from late elementary school and early junior high school children. 123 (51.0%) boys and 114 (47.3%) girls participated in the study, for 4 letters (1.7%) no gender specification could be established.

Analysis of the letters: While previous studies only focused on the number of branded items featured in the letters and on how polite the letter was, we identified five different types of writing styles:

(1) **The traditional letter**, which contains at least a salutation, full sentences and a complementary closing. 97 (40.2%) of the letters followed this style. (2) **The simple list**, which is like a shopping list. It contains only a bulleted list of requests and nothing else. 82 (34.0%) of the letters were written in that style. (3) 32 (19.5%) letters only contained **drawings of the wishes**. (4) **Collages** of cut outs from brochures and catalogs were sent in by 15 children (6.2%). (5) A **mixed list of drawings with additional textual explanations** was identified for 15 (6.2%) letters. A check for gender differences did not reveal any significant results. Collages and pure drawings were more likely sent in by pre-school children (Chi-square=101.889, $p=.000$) whereas the other forms do not indicate differences.

In addition, we checked whether detailed information on the requests was featured. 103 (42.7%) letters did not contain any further product description, 86 (35.7%) included only very little information, 38 (15.8%) provided a medium amount of information and 14 (5.8%) very detailed information. Here there were no significant differences between boys and girls, nor for cognitive development or writing style.

132 (54.8%) letters also contained non-request-related content, indicating a **higher involvement with Christmas** like drawings of the *Christkind*, Christmas trees, rhymes, Christmas carol lyrics. A chi-square test revealed that a significantly ($\chi^2=8.977$, $p=.003$) higher percentage of girls (56.9%) than boys (43.1%) included such content in their letters. A closer analysis revealed that there were also differences based on developmental stage and the previously identified writing style (Table 1). Interestingly, early elementary school children use less Christmas-spirit content than the others. This might be a result of a persuasion strategy applied by older children. By using Christmas-related content, the children might be attempting to make their letters more appealing to their parents.

Table 1: Christmas-spirit content

	none		drawing		rhymes, text		combination	
	N	%	n	%	n	%	n	%
Total	109	45.2	109	45.2	10	4.1	13	5.4
Gender ($\chi^2=9.064$, $p=0.028$)								
Boys	67	54.5	46	37.4	4	3.3	6	4.9
Girls	40	35.1	61	53.5	6	5.3	7	6.1
Developmental Stage ($\chi^2=13.536$, $p=0.035$)								
pre-school	14	50.0	13	46.4	0	0	1	3.6
early elementary	64	43.2	74	50.0	3	2	7	4.7
late elementary	31	47.7	22	33.8	7	10.8	5	7.7
Writing style ($\chi^2=23.528$, $p=.024$)								
Letter	37	38.1	42	43.3	6	6.2	12	12.4
List	37	45.1	41	50.0	3	3.7	1	1.2
Drawing	21	65.6	11	34.4	0	0.0	0	0.0
Collage	7	46.7	7	46.7	1	6.7	0	0.0
mixed list (drawing-text)	7	46.7	8	53.3	0	0.0	0	0.0

Analysis of requests: The letters contain in total 1025 requests ($M=4.25$). The range of the number of wishes was, as expected, quite individual (range: 1-32, std. dev.: 4.50). 499 requests (48.7%) included a brand. Table 1 shows the distribution of the different product categories which were requested. The number of specific brands named in the product categories parlor games, trading card games, toys and electronics is rather high, whereas for food, school supplies, and fashion items, the percentage is low. The differences in naming brands within product categories (Table 2) were significant ($\chi^2=258.972$, $p=.000$). Furthermore,

as shown in Table 2, there were also differences in product categories for boys and girls ($\chi^2=257.111$, $p=.000$) and for developmental stage ($\chi^2=155.100$, $p=.000$). For 142 letters we were able to calculate a monetary total value for the requests made. The average cash value of a letter was €210.74 ($sd=323.13$, min: 3.99, max: 2831.87). €61.91 was the average value of individual requests ($n=758$, $sd=87.52$, min: 1.99, max: 698.00).

Table 2: Product category and branded requests

Product category	Total Wishes			Gender		Developmental Stage		
	no. re-quests	% of total requests	% of branded requests	% of products for boys	% of products for girls	Pre-school	Early school	Late school
Electronics	245	23.9	66.5	24.3	23.0	15.7	22.2	30.9
Toys	171	16.7	67.8	28.5	4.1	22.3	17.8	12.0
Dolls / figures	142	13.9	50.0	2.3	26.5	36.4	14.5	3.1
Other	105	10.2	10.5	8.1	12.6	11.6	9.0	12.4
Books / DVDs / CDs	76	7.4	52.6	6.8	8.1	1.7	7.8	8.9
Board games	61	6.0	90.2	8.9	2.9	1.7	7.8	3.8
Foods	52	5.1	.0	2.0	8.0	.8	2.9	1.3
Craft supplies	47	4.6	38.3	5.1	4.1	.8	5.9	3.4
Clothing	42	4.1	31.0	4.3	3.9	2.5	4.2	4.5
Sporting goods	38	3.7	26.3	5.8	1.4	1.7	3.6	4.8
Pets	21	2.0	.0	1.3	2.9	0.8	1.8	3.1
Musical instruments	12	1.2	.0	1.1	1.2	2.5	1.3	.3
School supplies	9	.9	11.1	0.8	1.0	1.7	.8	.7
Trading card games	4	.4	75.0	.6	.2	.0	.3	.7
Total	1025	100.0	49.0	100.0	100.0	100.0	100.0	100.0

Product category x brand named $\chi^2=258.972$ $p=.000$

Product category x gender $\chi^2= 257,111$ $p=.000$

Product category x developmental stage $\chi^2=155,100$ $p=.000$

In addition to product-related requests, there were also immaterial/altruistic requests like wishing for snow for Christmas, or that someone should recover from an illness, or a wish for a little sister/brother etc. ($n=54$, 5.2%). We checked whether there were differences in terms of gender, writing style and cognitive development for altruistic wishes. As Table 3 reports, girls were more likely to express altruistic wishes than boys, also the percentage of altruistic wishes increases with the developmental stage. Finally, non-gift-related requests are more

likely to be observed for children who wrote a traditional letter rather than creating lists, drawings or collages.

Table 3: Altruistic wishes by children

Altruistic Wishes				
	N	% of requests (n=1025)	Chi-square	p
Total	54	5.3		
Gender			16.789	.000
Boys	13	2.5		
Girls	40	8.1		
Developmental Stage			31.221	.000
pre-school	11	0.8		
early elementary	20	3.3		
late elementary	33	11.3		
Writing style			23.816	.000
Letter	37	9.2		
List	15	4.0		
Drawing	2	2.0		
Collage	0	0.0		
mixed list (drawing-text)	0	0.0		

Interacting and influencing factors on the structure and value of requests: Gender, developmental stage and the writing style were checked for their influence on the number of requests, the number of branded requests, as well as the monetary value of the sum of requests in the letters overall and of the individual requests. As the skewness, kurtosis and standard deviation of the variables were quite high we conducted a Kolmogorov-Smirnov Test, which revealed a significant difference to a normal distribution. Also, Levene Tests of homogeneity revealed significant heterogeneous data. Hence, we used the non-parametric Kruskal-Wallis Test to check for differences. The test revealed no differences for the overall sample for gender in terms of the **number of requests and branded requests**. The developmental stage was significantly related ($H=7.372$, $p=.025$) to the number of branded requests. Pre-school children were less likely ($M=1.04$, $\text{rank}=88.57$) than early elementary school ($M=1.91$, $\text{rank}=124.28$) and late elementary school children ($M=1.92$, $\text{rank}=127.27$) to request explicit brands. The writing style impacts both the total number of requests ($H=15.323$, $p=.004$) as well as the number of branded requests ($H=32.149$, $p=.000$). Table 4 shows the mean scores and the ranks for the different writing styles. Paired comparisons made using the Kruskal-Wallis Test revealed that both the written lists and drawings differ significantly from collages for the number of wishes. The low number of branded requests expressed through drawings differs significantly from all other forms.

Table 4: Number of requests and branded requests and writing style

	letter			list (written)			drawing			collage			mixed list		
	M	N	rank	M	n	rank	M	n	rank	M	N	Rank	M	n	rank
total requests	4.14	97	126.9	4.18	82	113.7	2.91	32	93.0	8.07	15	171.1	4.40	15	132.1
branded requests	1.60	97	125.1	2.10	82	130.3	.42	33	63.2	3.67	15	161.7	2.73	15	138.2

The total monetary value of requests for entire letters was not affected by the proposed influencing variables. Moreover, no difference between boys and girls was found. However, the Kruskal-Wallis Test revealed a significant difference by developmental stage ($H=8.786$, $p=.012$) in the average value of individual requests. The average value of the wishes increases with age: pre-school children ($M=44.11$, $rank=373.79$), early elementary school ($M=61.52$, $rank=364.21$), late elementary school ($M=72.60$, $rank=419.85$). As proposed in RQ1, we tested for an influence of the writing styles, but the test reveals no significant differences although the average value of the collages ($M=38.13$) was quite low compared to every other writing style which ranges between €60.25 and €73.01.

However, testing the overall sample has some major pitfalls. As children differ a great deal, it is very likely that different wishing behavior is observable for different sub-groups. For instance, testing the overall sample implies that letters and lists are not distinct. However, in combination with other factors, e.g. gender, there might be significant differences. Therefore we ran the classification-tree method described above. For the first classification, we wanted to research whether there are differences in the total number of requests, given that the total number of individual requests per letter ranges from 1 to 32. Therefore we ran a cross-validated CRT with the number of requests as the dependent variable and gender, developmental-stage, writing style and the inclusion of Christmas involvement as independent variables (Figure 1, Appendix). The tree model suggests that there are 8 different end-nodes. The most important split variable is the writing style (importance: 1.468): in the first two splits, collages ($M=8.07$, Node 2) and drawings ($M=2.91$, Node 3) are identified as the formats indicating the highest and lowest numbers of wishes. The reason why children making collages show the highest number of wishes is two tailed: Frist they are younger and younger children are more pleased by owning many belongings than belongings with high values. Furthermore when cutting out of brochures children under direct exposure of advertising which activates stored needs and wants and therefore engages to announce the wish. For both, lists and letters, involvement with Christmas (importance: .251) is important as a high involvement tended to reduce the number of requests in Node 5 and 6, and this is also related to gender differences (importance: .209) and again the writing style. Thereby, we observed that boys with low Christmas involvement make more requests ($M=5.65$) when

writing lists, whereas girls with high Christmas involvement express more wishes in letter form ($M=4.68$). Hence we are able to conclude that there are many interactions working in different directions, sometimes even asymmetric.

To analyze the number of branded requests, we discarded the letters in the collage category as it is self-evident that if children use cut-outs this can only be a branded request. On average, 1.8 requests per letter featured a brand, with the tree model suggesting six different end-nodes. For this analysis, the writing style was the most important split variable (importance: 3.40), with letters consisting entirely of drawings had the lowest number of branded requests ($M=.88$) (Figure 2, Appendix). The combination of a written letters and low Christmas involvement yielded a below average number of branded requests. This tree also indicates that lists showed the highest number of branded requests, especially when no additional Christmas-related content was included ($M=3.04$).

A similar picture was also observed for analyzing the monetary value of the total wishes expressed in a letter. List-like letters and collages showed the highest total value ($M=€256.99$). For the other letter forms gender interacts, indicating that girls who write letters or do drawings are more likely to make requests with a higher monetary value in their letters ($M=€194.14$) than boys do ($M=€148.66$). Both of the latter are below average (Figure 3, Appendix).

Comparing this to the average value of the individual requests (Figure 4, Appendix), we found an interesting distribution. The highest average value was observed for pre- and late elementary school boys who created lists ($M=€91.37$), followed by early elementary school boys who wrote letters and mixed (text and drawing) lists. The lowest average value ($M=33.82$) was observed for requests expressed in collages with additional Christmas content (high Christmas involvement). This example in particular shows the heterogeneity of the data, as these children showed the highest number of total requests but the lowest average value per request.

5 Discussion

This paper contributes in several ways to the existing literature. For the first time, research has been conducted into layout and writing style and their relationships to the nature of requests and their monetary value. Furthermore, we showed that there is not one sole pre-dominant factor like gender or age which influences wishing behavior. Also, the fact that the study was carried out in the context of another cultural setting – in Austria – offered new results. Compared to similar studies, the letters differ especially from the findings of Otnes et al. (1994) and O’Cass and Clarke (2002), as about one third of the Austrian children in the sample were more likely to express their requests in a list form resembling

a shopping list (either as a written list, or as a collage, or as a mixture of drawings and text) without any non-request- related content, whereas most of the American and Australian letters were letter-like. Interestingly, list-like structures are positive for the number of requests as well as for naming brands. Thus, we might conclude that children who have strong brand associations and brand knowledge reflect this in just drawing up itemized lists of products and brands, and are less likely to write real letters. This seems to be truer for boys than for girls. On the other hand, if a real letter is written, additional content is sometimes included. Results suggest that those children who are involved with Christmas ask for fewer presents than the less-involved do - with the exception that girls with high involvement and who write letters also ask for more presents than the average high-involvement kids. This offers two implications for advertisers. On the one hand, for those children who are more likely to write shopping- list letters, short but detailed information has to be provided, as these children are more consumption-oriented. On the other hand, including Christmas spirit and the meaning of the holy day might be a promising advertising tactic for the high-involvement group, as this would engage children to write letters even although they do not ask for as many presents as the others do.

This paper reports results on factors that influence the number of requests, the number of branded requests and the monetary values of requests in Christmas letters. Applying a prediction-based classification procedure, we received insights into those variables that strongly contribute to the variance in the dependent variables mentioned. Future research will address the influence of advertising on children's requests in the letters. Future research might also take into account the role of schooling, peer influence and parental education; and several additional social variables, like social status, rural or urban location, the role of siblings etc., might also influence the structure and number of requests.

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7 Appendix

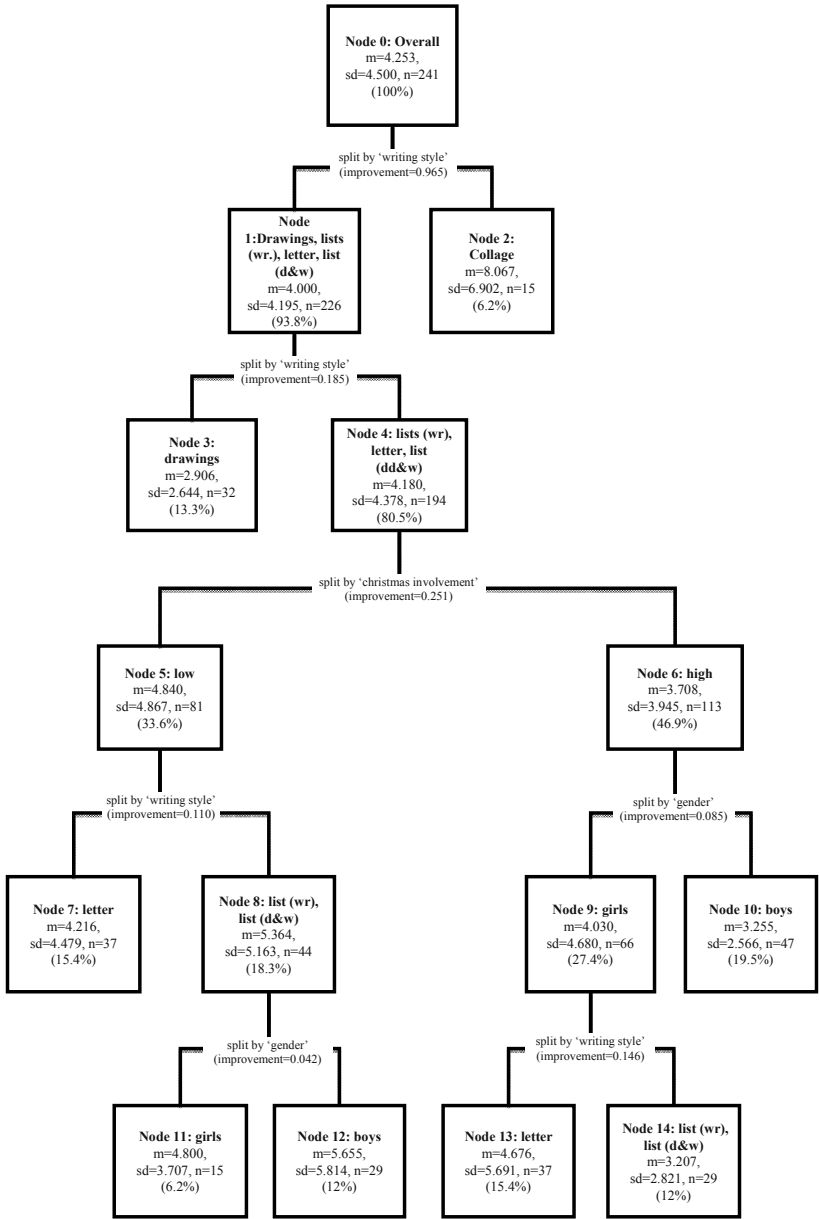


Figure 1: Classification tree for the number of requests

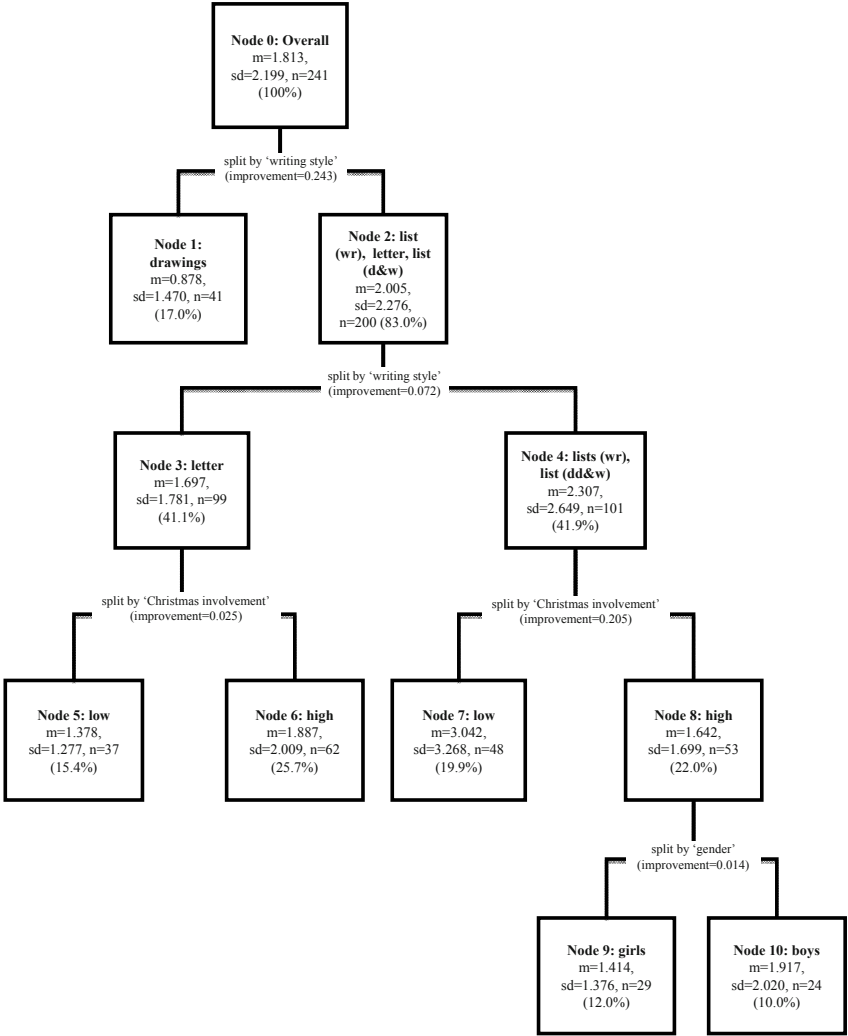


Figure 2: Classification tree for the number of branded requests

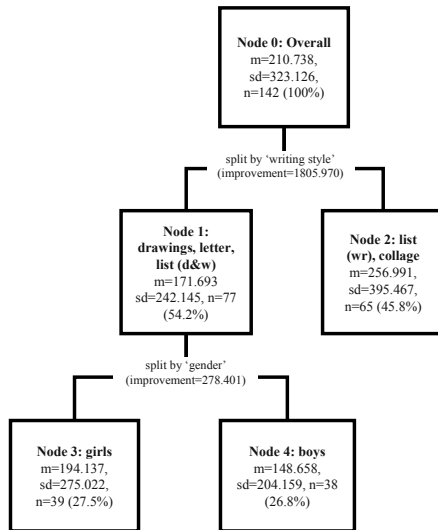


Figure 3: Classification tree for the monetary value of the letters

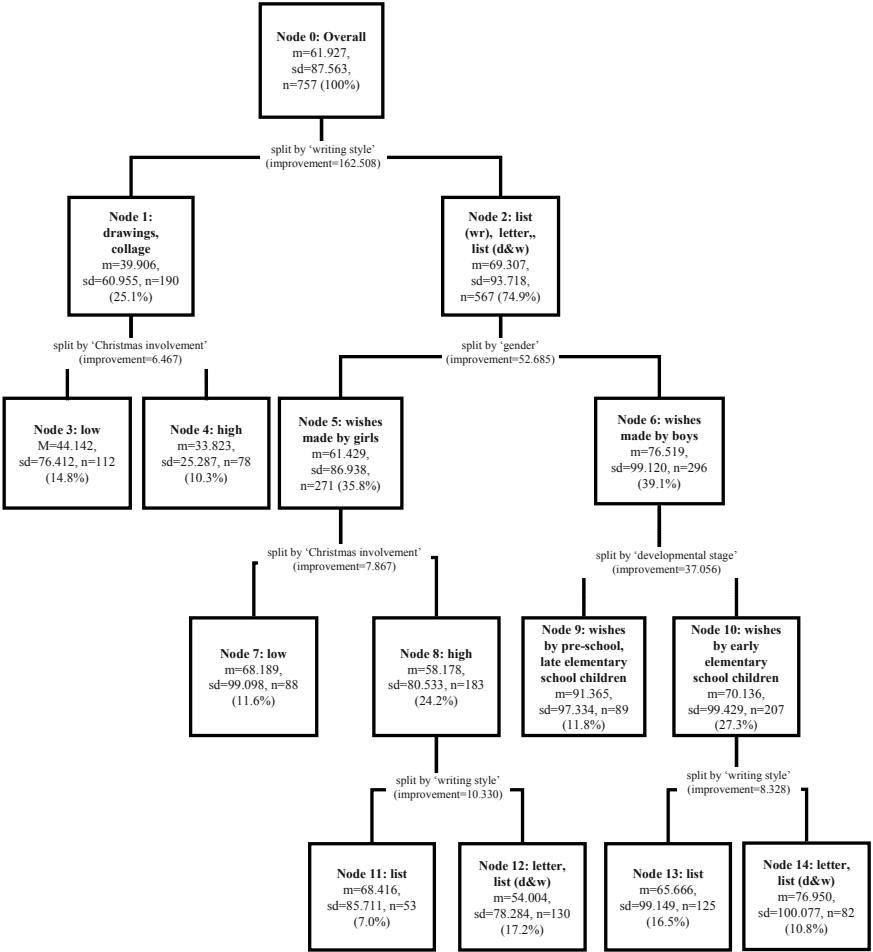


Figure 4: Classification tree for the average monetary value of the requests

Brand Prominence in Advergames: Effects on Children's Explicit and Implicit Memory

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1 Introduction

Increasingly, advertisers use techniques that integrate persuasive messages into editorial content, resulting in blurred boundaries between advertising, entertainment, and information (Raney et al., 2003). Many of these techniques aim to reach children: Advergames, branded websites, and brand placements have invaded media targeted toward children (Calvert, 2008; Moore, 2004).

This study focuses on advergames, a popular form of non-traditional marketing. An advergame is a custom-built online game designed to promote a company's brand (Lee et al., 2009; Lee and Youn, 2008). Content analysis of the top 100 advertisers' websites showed that 29 of these companies had a total of 294 advergames on their websites (Lee and Youn, 2008).

It is generally assumed that children have difficulty recognizing the commercial nature of advergames, which may make them more susceptible to persuasion (Livingstone, 2009; Nairn and Fine, 2008; Rozendaal et al., 2011). Moreover, these games are often highly entertaining, interactive and immersive, which makes them very attractive. Children spend a lot of time playing online advergames (Kaiser Family Foundation, 2006). During game play, they are constantly exposed to the integrated brands. Advergames are therefore assumed to be very effective in increasing explicit brand memory.

In addition, children's immersion in the game is likely to trigger automatic processing. This type of processing is characterized by a minimal level of cognitive elaboration. It occurs automatically and without active attention (Auty and Lewis, 2004; Buijzen et al., 2010; Yang et al., 2006). Advergames may thus be effective, also when children may not be devoting their full attention to the (subtly) embedded brands.

Some studies have shown that advergames and brand placement in movies are indeed effective among children. Exposure to these advertising formats increased children's brand awareness and preferences (Auty and Lewis, 2004;

Mallinckrodt and Mizerski, 2007; Van Reijmersdal et al., 2010). However, very little is known about the effects of these marketing techniques on children's brand memory. Insights are lacking as to how a defining characteristic of these techniques - that is the prominence of brands within the game - affects children's processing. These insights are important for our theoretical understanding of this increasingly popular phenomenon. Therefore, the present study examined the effects of brand prominence in an advergame on children's (7-12 years old) explicit and implicit brand memory.

2 Effects of brand prominence

A brand is prominently placed in a game when it is made highly visible by virtue of size or position on the screen or its centrality to the action in the scene (Gupta and Lord, 1998). Thus, the size or position of the brand, or its importance for the story determines its prominence, which may determine its effects. The brand is placed subtly when it is small in size or provides a background prop outside the main field of visual focus (Gupta and Lord, 1998). The effects of brand prominence on children's brand memory of non-traditional marketing techniques, such as advergames, have not yet been studied.

Borrowing from the adult literature may help predict the effects of prominence on children's brand memory. Adult research has shown that prominence of placements positively affects explicit memory of both the placement and the brand. Prominent placements capture audience attention, providing an information processing advantage for prominent compared to subtle placements, making the brand more likely to be seen, stored, and retrieved from memory (Nelson, 2002; Schneider and Cornwell, 2005; Yang and Roskos-Ewoldsen, 2007).

The effects of prominence in terms of the brand's importance to the narrative can be explained using the landscape model (Van den Broek et al., 1999; Yang and Roskos-Ewoldsen, 2007). Audiences are continually trying to understand the narrative by focusing on information that is central to the story. In order to comprehend the narrative, this information is activated in the brain and processed. Due to limited attentional resources, other information receives less attention. This means that not all information is processed and activated to the same extent. If the brand is central to the scene, this information is activated and elaborated at the highest level, resulting in greater brand memory. Other information in the scene receives a lower level of activation as it is not necessary to comprehend the narrative.

The landscape model has been applied to adults' processing of brand placements in movies (Yang and Roskos-Ewoldsen, 2007), but it may also explain the effects of brand prominence in advergames. Similar to movies, advergames con-

tain a narrative. Moreover, when playing an advergame, the child must take action to achieve certain goals. If the brand is an integral part of this action, game comprehension can be achieved only via a strong focus on the brand, leading to the activation of brand information in the brain.

The question remains whether brand prominence has the same effect on children as adults. From the extensive literature on the effects of traditional advertising targeted at children, it is apparent that children process persuasive information fundamentally different than adults, on account of their immature social and cognitive development (John, 1999; Rozendaal et al., 2010). The landscape model assumes an adult level of cognitive abilities. However, children's limited working memory capacities and attention directing skills may affect the way they process prominent placements. Keeping track of the narrative by focusing on relevant information assumes that attention is deliberately directed toward important information. But, children may lack the ability to distinguish between relevant and irrelevant information. When playing an advergame, children may be so distracted by the game itself that even prominent placements go unnoticed.

Further, if prominent placements do successfully attract their attention, children's limited working memory capacity may prevent the brand from being processed while simultaneously playing the game (Luciana and Nelson, 1998). The game play may take up all available mental resources leaving little cognitive capacity remaining to process and store brand information (Buijzen et al., 2010). Therefore, prominence may exert differential effects on children than adults.

As the effect of brand prominence in advergames on explicit brand memory has not been studied among children, we base our expectation on adults' processing of brand placement. We expect the prominence of brands in advergames to have a positive effect on children's explicit brand memory.

With respect to implicit memory of the brand, prominence is not expected to play a role. Implicit memory relates to unintentional and unconscious recollection of an event (Schacter, 1987; Yoo, 2008). Implicit memory is not affected by variations in the level or type of processing. Whereas explicit memory increases when the level of processing increases, for example due to the prominence of the brand, implicit memory remains unaffected. For example, Jacoby and Dallas (1981) showed that explicit memory of words that were elaborately processed was better than explicit memory of words that were not elaborately studied. However, implicit memory was equal in both conditions. Similarly, Yang and Roskos-Ewoldsen (2007) showed that students' explicit memory was positively affected by the brand's prominence in a movie, whereas their implicit memory, measured with a word fragment completion task, was the same for prominently and subtly placed brands. As implicit memory is independent of information

processing capacities and skills, the functioning of this memory system is alike among adults and children. Therefore, we presume to find the same effects as Yang and Roskos-Ewoldsen (2007) found on adults for advergames on children. Thus, we expect that prominence does not influence implicit memory, as implicit memory is not affected by the level of processing.

3 Method

3.1 *Participants and procedure*

A total of 105 children of 7 to 12 years old ($M = 9.49$, $SD = 1.65$) participated in the research. Children were recruited from three elementary schools in different urban and suburban areas. Prior to participating, institutional approval, parental consent, and children's informed consent were obtained. Children were informed that they would be playing a game and that they could stop participating at any time they wished. A female researcher escorted the children to the school's computer room. The children played the advergame twice which took about 3 minutes. Then the researcher completed a computer-assisted online survey with the child.

Demographic questions were asked initially, followed by implicit brand memory, and brand recognition. The children were told not to talk to any other children in their class about the research.

3.2 *Stimulus materials*

Two versions of an advergame were designed by professional game designers based on existing online games. The aim of both games was to catch falling bags of chips and cans of soft drink in a basket. The speed with which these fell increased during the game. The brands in the game were Lays and Pepsi. In the prominent condition, bags of Lays chips and Pepsi cans were to be caught. Next to the falling branded products, large logos of both brands were displayed centrally in the background. Thus, in line with the definition of prominence, the brands were both highly visible by virtue of size and position and by their centrality to the action in the scene (Gupta and Lord, 1998). In the subtle placement version, the chips bags and soft drink cans contained no logos or brand identifiers. Instead, the words 'chips' and 'cola' were written on them. In the Netherlands, 'chips' and 'cola' are the generic terms used to describe salty potato snacks and cola type soft drinks. A small Lays logo was displayed on the left side and a small Pepsi logo was displayed on the right side of the screen. The

brands were small in size and outside the main field of visual focus, thus adhering to the definition of subtle brand portrayal (Gupta and Lord, 1998).

3.3 Measures

Explicit brand recognition was measured by presenting the children with the logos for Pepsi and Lays and four other cola and chips brands (Russell, 2002; Van Reijmersdal et al., 2007). Children were asked to indicate, for each brand, whether they remembered it from the game. The recognition measure was coded as 2 (*both Pepsi and Lays recognized*), 1 (*recognition of either Pepsi or Lays*), 0 (*no recognition of Pepsi and Lays*) $M = 1.17$, $SD = .78$).

Implicit recognition was measured based on the fragmented logo implicit recognition task (Owen, 2008; Snodgrass et al., 1987). The children were shown a series of six increasingly less blurred Pepsi and Lays logos and were asked to identify the brand. In addition, children were asked to identify logos of competing brands (Coca Cola and Pringles) to be able to conclude that the implicit memory was really a result of exposure. Ease of recognition was taken as a measure of implicit memory on a scale ranging from 6 (correct recognition from the first (most blurred) picture) to 0 (no correct recognition after the sixth (not blurred) picture). Higher scores mean better implicit memory. The logos were blurred using Photoshop with scores 45, 36, 27, 18, 9 or 0 in the box blur function.

In addition, children's age, gender and game playing experience were ascertained. Game playing experience was measured with the question "How often do you play games on the Internet?" on a scale ranging from 1 (*never*) to 4 (*very often*) ($M = 2.48$, $SD = .70$).

4 Results

The experimental groups did not differ with respect to age, sex, or their game playing experience ($p > .10$). To test the hypotheses, a MANCOVA was conducted with prominence as independent variable, explicit and implicit memory as dependent variables, and age as a covariate.

The analysis yielded a significant overall effect of prominence, $F(3, 100) = 8.56$, $p < .01$, $\eta^2 = .20$, and showed that prominence influenced explicit brand memory, $F(1, 102) = 21.33$, $p < .01$, $\eta^2 = .17$. Children's explicit memory of prominently placed brands was significantly higher ($M = 1.47$; $SD = 0.70$) than of subtly placed brands ($M = 0.84$, $SD = .73$). Prominence had no significant

effect on implicit memory of Pepsi, $F(1, 102) = 0.42, p = .52, \eta^2 < .01$, or implicit memory of Lays, $F(1, 102) = 2.40, p = .13, \eta^2 = .02$.

To check whether implicit memory was affected by exposure to the game, the implicit memory scores of Pepsi and Lays were compared to implicit memory of similar brands, Coca Cola and Pringles. Repeated measures analyses showed that children's implicit memory was indeed affected by the game. Their implicit memory of Pepsi ($M = 4.82; SD = 1.80$) was better than their implicit memory of Coca Cola ($M = 3.90; SD = 1.59$), $F(1, 104) = 23.27, p < .01, \eta^2 = .18$. Similarly, children's implicit memory of Lays ($M = 4.54, SD = 1.78$) was better than of Pringles ($M = 3.23; SD = 2.03$), $F(1, 104) = 56.71, p < .01, \eta^2 = .35$.

5 Discussion

The aim of this study was to examine how brand prominence influences children's explicit and implicit memory of brands in an advergame. The first conclusion that can be drawn is that brand prominence within the game positively influences children's explicit recognition of the advertised brand. These findings are in line with adult studies showing that the more prominently a brand is placed, the better the brand is recalled explicitly (Gupta and Lord, 1998; Lee and Faber, 2007; Yang and Roskos-Ewoldsen, 2007). These effects can be explained by information processing theory and the landscape model. Prominently placed brands attract visual attention, which increases the change of processing the brand, which leads to better storage and thus memory of the brand. Similarly, the landscape model explains that if the brand is central to the scene (prominent condition), brand information is activated and elaborated at the highest level. This results in greater brand memory. Other information in the scene that is not central to the 'story' (subtle condition) receives a lower level of activation as it is not necessary to comprehend the narrative.

The second conclusion that can be drawn is that prominence of brands within an advergame does not influence children's implicit brand memory. However, children's implicit memory was affected by exposure to brands in the game. Previous research on brand placement in movies among adults did not find a relation between prominence and implicit memory either (Yang and Roskos-Ewoldsen, 2007). Implicit memory is not affected by the amount of attention that is paid to the brand. Based on the effects on explicit memory, we conclude that children did not direct their attention to the subtly placed brand as it was in the peripheral visual field. However, their implicit memory for the subtly placed brand was as good as their implicit memory for the prominent brand, which confirms that this memory mode is independent of attention. This finding implies that even when brands are subtly placed in advergames, that is when the brand is

small in size, in the background outside the main field of visual focus or not central to the action, they can evoke implicit memory in children.

More research on the effects of advergames on children is needed. Children are spending large amounts of their time playing these games. Therefore, it is vital to understand the impact of advergames on children. Especially the implicit effects need further attention as these effects are established without awareness. Future research should focus on implicit and explicit attitude change and on (implicit) behavioral effects to gain better understanding of advergence effectiveness among children.

Our study shows that advergames influence children's brand memory. For advertisers this means that advergames can be used to heighten brand awareness among children. Prominently placed brands are in particular effective to increase explicit brand recognition. Our study shows that on a less elaborate level advergimes can have an impact as well. Brands that were integrated into the game were more easily recognized in an implicit memory task than brands that were not present in the game. This effect held for both prominent and subtle brand portrayals. Thus to affect implicit memory, just the presence of the brand, regardless of its prominence is enough.

For child advocates and legislators, this study implies that children are vulnerable to commercial effects of seemingly innocent and entertaining games. Previous research has shown that children have difficulty understanding the commercial nature of advergimes as brands are embedded within an entertaining and interactive context (Mallinckrodt and Mizerski, 2007; Van Reijmersdal et al., 2011). It is widely assumed that exactly this characteristic of new embedded advertising techniques makes children highly susceptible to persuasion. Our study confirms that integrating brands into an entertaining and interactive game impacts upon children's explicit and implicit brand responses. To increase the fairness of these techniques, policies should focus on enhancing children's understanding and also stimulating and facilitating children's ability and motivation to use (i.e., retrieve and apply) this knowledge to critically process an advertising message (Rozendaal et al., 2011).

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Promoting Dental Care to Children Using Traditional and Interactive Media Following Threat Appeals

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1 Introduction

In recent years, computer games have become an important part of children's lives. Gaming is not only one of their favorite pastime activities, but games are also increasingly used by marketers in an attempt to influence children's purchase behavior. Today, almost every food and beverage brand targeting children has an advergame on its website. Advergames are "*computer games specifically created to function as advertisements to promote brands*", containing brand identifiers such as logos and brand characters (Kretchmer, 2005: 7). Games can also be powerful learning tools. Several authors (e.g., Gee, 2003; Prensky, 2001) argue that computer games can be more enjoyable, more interesting and thus more effective than traditional learning modes to increase children's knowledge. Empirical studies that evaluated the impact of the use of games within disciplines such as mathematics, science, language, geography and computer science show positive outcomes in terms of learning effectiveness in relation to curricular objectives (e.g., Papastergiou, 2009; Rosas et al., 2003). However, these authors mainly focus on the learning ability of games rather than their persuasive impact for social marketing purposes. In the area of health education, playing computer games has often been seen with skepticism (e.g., Bale, 1994; Funk and Buchman, 1995).

Previous research shows that playing advergames can indeed affect children's food preferences and eating patterns (e.g., Mallinckrodt and Mizerski, 2007). However, the advergames in these studies generally market products of low nutritional value (Moore, 2006). An exception is the study by Pempek and Calvert (2009), showing that playing games which promote the consumption of healthy food has a positive influence on the selection of higher-quality snacks among children. Therefore, the question in the present study is whether computer games can also be useful to promote other health related behavior, for example concerning dental hygiene. Until now, social marketing campaigns mainly targeted children using traditional media (like information brochures and narrative stories told by parents, teachers...). However, little is known about the effectiveness of computer games in increasing health related knowledge and, as

a consequence, desirable health behavior with children between 7 and 9 years old.

Within the domain of social marketing, a common persuasive strategy is the use of threat appeals. However, threat appeals have mainly been investigated in traditional advertising media (print & TV), neglecting their impact in an interactive environment. In addition, there is little research concerning the effect of threat appeals on 7 to 9 years old children.

Besides warning them about the dangers of undesired behavior, it is also important to provide children with additional health related information. Children need to learn why it is important to keep their teeth clean and healthy, since more and more primary school children experience tooth decay caused by bad diet and bad dental hygiene. To date, health information was mainly communicated to children through traditional media. The question arises whether computer games may also be used to increase health related knowledge, and whether this medium is more effective than others for this purpose. Therefore, the impact of interactive games as medium to transfer health related knowledge should be compared to the impact of other media types, such as a traditional information brochure and a narrative story (for instance, told by parents or in a classroom).

The present study investigates the effect of high and low threat messages concerning the importance of dental hygiene on children's behavioral outcome (healthy/unhealthy snack choice). Further, we investigate how these effects are moderated by the type of medium used to communicate dental health information after this threat appeal. The main contribution of the present study is to investigate which medium used to convey this additional information following a message evoking either a low or a high level of threat leads to the best adaptive behavioral results.

2 Conceptual framework and hypothesis development

2.1 Threat appeals

Threat appeals are "*persuasive messages designed to scare people by describing the terrible things that can happen to them if they do not do what the message recommends.*" (Witte, 1992: 329). One of the most comprehensive frameworks on how these threat appeals work is the Extended Parallel Processing Model (EPPM; Witte, 1992). According to the EPPM, threat appeals may evoke a danger or a fear control process, depending on perceived threat and perceived efficacy (the perception that the threat is reduced when the recommended behavior is adopted). When the threat is not perceived as severe, individuals will not be

motivated to process the threat appeal. When the threat is perceived as severe in combination with a high level of perceived efficacy, the threat appeal leads to a danger control process, which motivates individuals to process the message, and is likely to lead to message acceptance and adaptive behavior. When the perceived threat is high, but the perceived efficacy is low, individuals are not motivated to process the threat appeal and try to reduce the unpleasant fear experience by maladaptive responses (such as avoidance, denial and counter argumentation). This process is called fear control (Rippetoe and Rogers, 1987).

In other words, only a combination of a perceived threat that is high enough and a high perceived efficacy will motivate people to adapt their behavior following the recommendation in the message (Blumberg, 2000). The fact that, given a sufficiently high level of efficacy perception, a higher level of threat leads to significantly higher intention to adopt the recommendation in the message and to more adaptive behavior, is well-established (Cauberghe et al., 2009), as is the fact that children are very susceptible to threat-related information (e.g., Field and Lawson, 2003). This leads to the hypothesis that children's consumption of healthy (vs. unhealthy) food can be influenced by manipulating their feeling of perceived threat, when perceived efficacy is sufficiently high. In this study, children are either exposed to a high or a low threat message warning them about the dangers of unhealthy teeth. Since children may have difficulty to understand the relationship between consuming low-quality food and ugly, unhealthy teeth (which is portrayed as one of the undesirable consequences in the high threat condition), perceived efficacy is controlled for. All the children are told that they can avoid this threat by brushing their teeth regularly and eating healthy food. Effects are measured on children's behavior, making them choose between a healthy and an unhealthy snack. Hence, we expect:

H1: When the perceived threat is high, there will be significantly more children who adapt their behavior (choosing a healthy snack) than in the low threat condition.

2.2 Threat appeals in a traditional and an interactive context

Before we investigate whether the traditional theoretical insights with respect to threat appeals can also be effective in combination with an interactive, digital media context, it is important to take a look at the characteristics of each medium type studied. Contrary to traditional media (like brochures), computer games are digital, interactive and highly vivid (visually and auditory stimulating) (Prensky, 2001). Games do not only give players a sense of active control over what is happening in the game, they also provide challenge and competition. Due to the embedded interactivity, games can also induce an experience of fun and escap-

ism (Refiana et al., 2005). As a result, games can encompass and capture a player's full attention, as if the player were actually part of the game environment. This has to do with the *immersion* effect of games (Ryan et al., 2006). Immersion is a feeling of being absorbed by the environment. Therefore, we can expect that attention devoted to the game will be high.

Similarly, reading a textual brochure is a complex process for 7-9 year olds (Shepardson and Pizzini, 1991). According to Maibodi (2008: 42) "*reading requires the reader to focus attention on the reading materials and integrate previously acquired knowledge and skills to comprehend what someone else has written.*" Consequently, both playing a computer game and reading a brochure allows self-pacing, which can enhance the attention devoted to this activity.

Listening to a narrative story, on the contrary, is an activity that children cannot do at their own speed or pace. Also, previous research found that listening to stories requires less active processing and a smaller set of cognitive demands, compared to reading (Berl et al., 2010). Although narrative stories have proven to be valuable learning tools (e.g., in a classroom), we expect that they require less focused attention to process:

H2: Children devote more attention to a game and an information brochure than to a narrative story.

When a threat message is followed by additional information, conveyed through a medium to which children devote a great deal of attention, this can lead to interference with the preceding threat information. This interference effect, defined as "*the process by which our ability to recollect information is hindered by our exposure to some other information*" (Kumar, 2000: 155) can decrease the effectiveness of the strong threat appeal preceding the additional health information. In other words, when children devote a great amount of attention to the medium following the threat appeal, they may 'forget' about the threatening message. Therefore, the effect of the strong threat message on children's adaptive behavior will be stronger after hearing the narrative story than after playing the game or reading the brochure:

H3: Contrary to children who played a game or read a brochure, children who were exposed to a narrative story show more adaptive behavior (chose more healthy snacks) after previous exposure to a strong than to a weak threat appeal.

3 Materials and method

A 2 (low threat vs. high threat) x 3 (medium to convey extra health information: computer game – information brochure - narrative story) between subjects factorial design was used to test the hypotheses. For the interactive game condition, we used an existing computer game that was developed to teach children the importance of regular teeth brushing, eating healthy food and going to the dentist through interactive game play. The information brochure and narrative story were developed in such a way that both contained the same information as the computer game, only presented in a different way. In all three media, a beaver named Ben was introduced to explain the importance of dental hygiene, eating healthy food and going to the dentist to the children. In the computer games, the children were challenged to, for example, brush teeth using the mouse and distinguish healthy from unhealthy food, receiving bonus points when succeeding. The same information was incorporated in the story, but this time it was told in a more narrative, descriptive way (*“once there was a beaver named Ben”* etc.). For the brochure, the same format was followed as in a traditional classroom textbook.

The respondents were all third grade pupils, recruited from 10 different primary schools across Flanders (Belgium). The schools were selected across the five Flemish provinces, using quota reflecting the population of the provinces. Children of the age seven to nine were chosen because at this age children are capable to read information brochures and they also have the skills to play the computer game properly. In total, 190 children participated (50 % male, average age of 8.13 years). The children were randomly exposed to one of the six conditions. After receiving some basic information about the study, the children were either exposed to a weak or a strong threat message. In the high threat condition, children were informed about the consequences of untended teeth, stressing the related dangers and risks. To stress the manipulation, children also saw a picture of affected teeth with caries (see figure 1). In the low threat condition, the consequences were described as less severe. In this condition, children saw a picture of healthy teeth (see figure 2).



Figure 1: strong threat stimulus



Figure 2: weak threat stimulus

All children were told that they could avoid these negative consequences by brushing their teeth regularly and eating healthy food in the same way in all experimental conditions, hereby controlling for perceived efficacy. Following the threat message, the respondents were randomly assigned to one of the three media, i.e. they played the computer game, read the brochure or listened to the narrative story. Also, a control group was included in which children were not exposed to any stimuli. Afterwards, each participant was asked to fill in a standardized questionnaire and to choose a snack as a reward for participating. By making them choose between a piece of fruit (0) or a candy (1), (non) adaptive behavior was measured. The snack choices were the same foods that were used as an example in the computer game, the brochure and the story. Children from the control group received a shorter version of the survey, after which they could also choose between the two snacks. Following previous research (e.g., Pempek and Calvert, 2009) and given the young age and limited reading skills of the target audience, we adjusted existing scales, simplifying them into one item, 4 point Likert scales. Self-reported attention (Hart and Staveland, 1988), perceived threat and perceived efficacy (Witte, 1992) were measured.

To assess the success of our manipulation, a pre-test was conducted. 18 children (50 % male, mean age 8.11 years) were either exposed to the high or the low threat message and picture, after which they were asked to indicate the level of perceived threat on a 4-point Likert scale. Results confirm that the level of threat experienced by the low threat group was significantly lower than the threat experienced by the high threat group ($M_{\text{low threat}} = 1.5$ vs. $M_{\text{high threat}} = 2.4$, $t(16) = 2.155$, $p = .047$). As expected, perceived efficacy was high and did not differ between the low ($M = 3.86$) and the high threat group ($M = 3.80$, $t(139) = .770$, $p = .443$). Finally, the time necessary to play the game and read the brochure was examined, as well as the duration of the narrative story. Results show no significant differences between the three exposure times ($M_{\text{game}} = 339\text{sec}$, $M_{\text{brochure}} = 377\text{sec}$, $M_{\text{narrative story}} = 360\text{sec}$, $F(152) = 2.403$, $p = .094$).

4 Results

The results of the manipulation check in the main study confirm that the perceived threat was significantly higher in the high threat condition than in the low threat condition ($M_{\text{low threat}} = 1.88$; $M_{\text{high threat}} = 3.22$, $t(139) = 10.481$, $p < .001$).

The results show a main effect of the level of threat on choice behavior. After receiving the high threat message, significantly more children chose a healthy snack (59%) than the children from the low threat condition (41 %; $\chi^2 = 5.487$, $p = .019$). This supports H1. Also, compared to the children from the control group, children who were exposed to a high threat message chose significantly

more healthy snacks ($\chi^2 = 7,687$; $p = .006$). The difference between the children from the control group and the low threat condition, however, did not appear significant ($\chi^2 = .792$; $p = .373$, see figure 3).

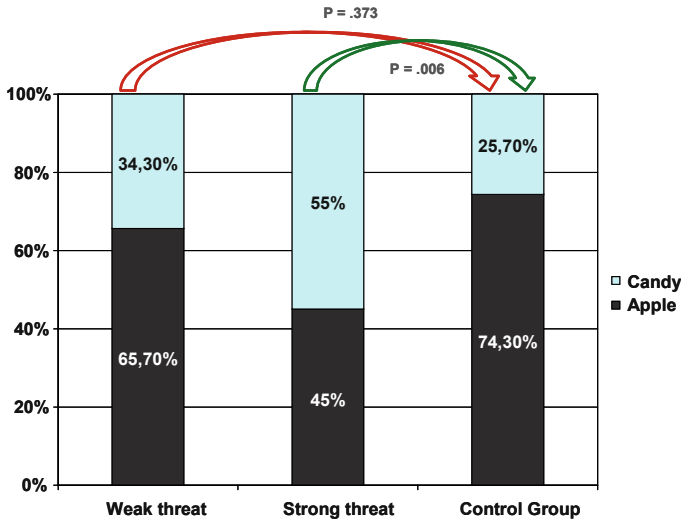


Figure 3: Children's healthy versus unhealthy snack choice

The main effect of medium type on self-reported attention was analyzed using ANOVA. The main effect of medium type on self-reported attention is significant ($F(152) = 4.890$, $p = .009$). As expected, the children paid significantly more attention to the game ($M = 3.57$) than the narrative story ($M = 3.23$, $t(103) = 2.643$, $p = .009$). The same can be said for the brochure ($M = 3.56$, $t(99) = 2.461$, $p = .016$). H_2 is supported.

The effect of the medium used to convey extra information on snack choice was tested by means of χ^2 analyses. The main effect of medium type on choice behavior was not significant ($\chi^2 = 3.324$, $p = .190$). However, the interaction effect of threat appeal and medium type on choice behavior was. When looking at the snack choice after using the different media, χ^2 tests show that the children who played the computer game and read the brochure showed no significant difference in snack choice after being exposed to either the low or the high threat condition. After playing the computer game, 24 % of the children choose a healthy snack in the low threat condition versus 46 % of the children from the high threat condition. (Fisher's exact test $p = .330$). After reading the brochure, 52 % of the children choose a healthy snack in low threat condition versus 57 % in the high threat condition (Fisher's exact test $p = .782$). However, after being ex-

posed to the narrative story, 19 % of the children in the low threat condition choose a healthy snack, while in the high threat condition 67 % preferred the healthy snack over the candy (Fisher's exact test $p=.006$). These results support H3. Figure 4 shows the share of healthy snacks chosen by the children in both the weak and the strong threat condition, relative to the total amount of children in both conditions.

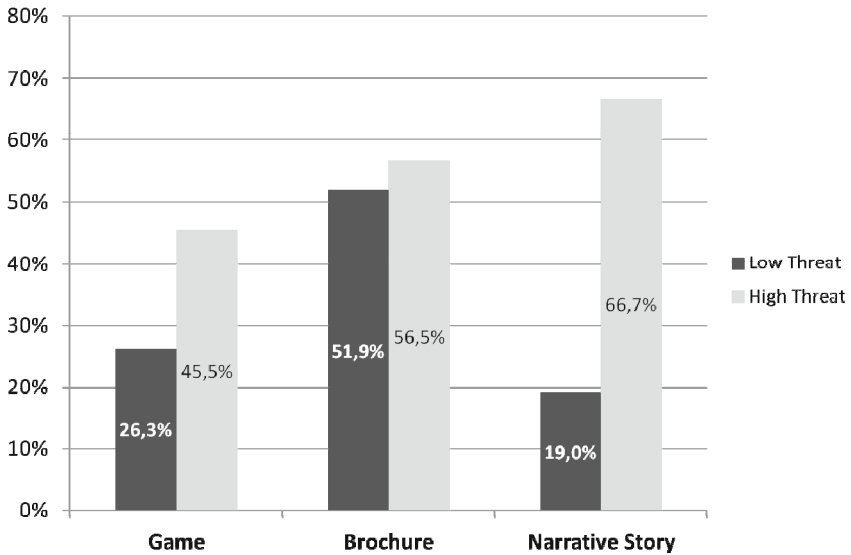


Figure 4: Percent of healthy snacks chosen by children

5 Discussion, conclusion and further research

The results of the present study show that the effect of threat appeals on adaptive behavior of 7 to 9 years old children is not different from their effect on adults. Under high levels of efficacy, a high threat appeal leads to more adaptive behavior than a low threat appeal. However, when children are provided with additional health-related information after the threat message, the effectiveness of this threat message appears to depend on the medium used to communicate this extra health information. The results only show a positive effect of a stronger threat appeal on adaptive behavior when the children listened to a story. For children who played the game or read the brochure, the level of perceived threat had no effect on their snack choice. This can be explained by the attention demanding task of playing a game and reading a brochure. Games are immersive and interactive, and children devote a lot of attention to them. Reading a brochure also requires the reader to focus attention on the reading material, certainly

for children within the age category 7-9 years. Indeed, the results show that active reading or game playing leads to high focused attention. This interference with the preceding threat message weakens its effect. Listening to a story, however, is a rather passive activity which requires less attention, therefore allowing the threat appeal to 'stay in' better. In sum, when a threat message is followed by additional health information, the medium through which this information is presented influences the effectiveness of the preceding threat message. This study implicates that for children who are afraid for dental caries, the combination of a strong threat appeal and a supplementary narrative story is the best communication strategy amongst the ones tested. Games, pleasant and attention-getting as they may be, are not the most effective medium to reinforce a strong threat appeal.

The limitations of the current study suggest directions for further research. First, only one social topic, namely dental hygiene and the related importance of healthy food was examined. Future research should compare the effect of threat appeals for different topics in the domain of social marketing. In addition, the computer game, the brochure and the narrative story were only played, read or heard once. It would be interesting to investigate the effect of these media after repeated exposure to the stimuli. Also, we measured attention allocation with self-reported measures. Although this might give a good indication, further research could use, for example, eye-tracking or recall methods to measure attention allocation more validly. Finally, the effects of threat messages were only tested on 7-9 year olds. Further research should incorporate additional age categories.

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Part VI

Media and Agency

Creative Media Choice as a Marketing Signal

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1 Introduction

Over the past decade, the practice of creative media choice, in which non-traditional media are creatively employed to implicitly communicate a target message, has grown rapidly (e.g., Dahlén, 2009; Dahlén et al. 2009a). Most likely, this trend will continue as marketers face ever higher levels of advertising clutter in traditional media, and need to find new ways to stand out (Elliott and Speck, 1998; Rosengren, 2008). In addition, marketers are facing advertising-fatigued and highly “marketing savvy” consumers, who have learned to avoid advertising in traditional media and who expect and demand the advertising that they attend to be worth the while (Ducoffe, 1995; Ducoffe and Curlo, 2000).

So far, most research on creative media has focused on its ability to stand out from the clutter by employing media that are not used by other brands (Dahlén, 2005; 2009). However, there seem to be additional advantages of advertising creativity:

- First, research has shown that creativity in itself is noticed and appreciated by consumers. More specifically, consumers perceive creative ads to be more interesting, entertaining, and likable than less creative ads (e.g., Smith et al., 2008). A higher level of advertising creativity offer consumers a higher advertising value (Rosengren, 2011), thereby making them more willing to pay attention to such ads.
- Second, recent research on creative advertising executions suggests that advertising creativity functions as a marketing signal. More specifically, Dahlén et al. (2008a) find that creative advertising executions are seen as a sign of fitness or ability on behalf of the sender, and that this, in turn, affects their perceptions of the brand.

In this paper, we set out to extend current understanding on creative media choice by merging the literatures on creative media choice (e.g., Dahlén, 2005) with research on advertising value (e.g., Ducoffe, 1995) and marketing signals (e.g., Kirmani and Rao, 2000). In doing so, we not only contribute a novel perspective to creative media choice, but also replicate recent findings with regards to the signaling effects of advertising creativity in a novel setting.

2 The creativity imperative

Advertising creativity is at the heart of the advertising industry and consequently there is ample research into the topic. It should be noted that this research has covered a broad range of topics. Creativity in advertising can refer to many different things: the outcome of creative behavior, the creative process, the creative personality, and environmental and cultural influences on creativity (cf. White and Smith, 2001).

In the current study, we are interested in the effects of creative outcomes. In advertising effectiveness studies, the creative outcome studied has typically been the level of creativity of specific ads or commercials. However, creative outcomes in advertising are not limited to ad executions. They could just as well be creative media placements, such as advertising on eggs or elevator panels (e.g., Dahlén, 2005), or placing ads in unexpended media vehicles, such as advertising cars in a fashion magazine (e.g., Dahlén et al., 2008b).

A contribution of the current study is that we broaden the scope of creative outcome by focusing on creative media choice rather than creative ad executions.

3 Effects of advertising creativity

The effects of advertising creativity on brands are fairly well documented (for a review, see Sasser and Koslow, 2008). By creating novel yet relevant advertising, marketers can increase advertising effectiveness. Typically these effects are attributed to enhanced ad processing and studied within a traditional hierarchy-of-effects framework (e.g., Smith et al., 2008). This research has also shown that consumers appreciate creative ads. For example, advertising creativity boosts ad attitudes (Smith et al., 2008), willingness to be exposed to an ad again (Yang and Smith, 2009) as well as perceptions of advertising value (Rosengren, 2011).

Recently, however, research has shown creativity to have benefits that are not exclusively related to ad processing. Dahlén et al. (2008a) show that advertising creativity can function as a marketing signal. More specifically, they show that a creative ad is seen as a sign of smartness and innovativeness on behalf of the sender and this, in turn, spills over on perceptions of brand quality.

In the current study we extend this latter line of research by investigating the signaling effects of creative media choice. Furthermore, we test whether the perception of brand ability might, indeed, be a reason for the higher advertising value of creativity found by Rosengren (2011).

4 Advertising creativity as a marketing signal

Research on marketing signals shows that the very employment of various marketing elements, such as warranties (indicator of long-lasting) or price (quality) sends signals that consumers use in evaluating and selecting brands (for a review, see Kirmani and Rao, 2000). The fundamental logic is that consumers implicitly associate certain marketing behaviors with a corresponding level of quality.

Advertising can function as such a marketing signal. More specifically, studies have found that expensive advertising signals greater confidence on behalf of the sender, which consumers associate with a higher quality product (e.g., Kirmani, 1990). Similarly, creative advertising signals that the sender is smarter than average, which consumers also associate with a higher quality product (Dahlén et al., 2008a). Dahlén et al. (2008a) refers to this signal as perceived brand ability, and argues that it is a highly relevant source of competitive advantage.

5 Hypotheses

We expect that creative media choice will have the same signaling effects as creative ad executions, meaning that they will influence perceptions about the brand, its advertising and its products.

As suggested above Dahlén et al. (2008a) find that consumers are apt judges of advertising creativity and that they see creative ads as indicators of able brands. Similarly, we propose that today's marketing-savvy consumers know that placing advertising in traditional media is routine to most companies. A creative media choice, on the other hand, requires a sender who is able to both identify a suitable non-traditional medium and make all the necessary arrangements for the brand to be exposed in it. To find a medium that implicitly communicates the message requires skills such as smartness and innovativeness on behalf of the sender. Thus, we expect creative media to be seen as sign of brand that is able:

H1: Creative media choice increases perceived brand ability

We also expect creative media choice to generate higher perceived advertising value (cf. Rosengren, 2011). The fact that creative media choice requires certain abilities should make consumers see it as more valuable than traditional advertising that relies on routine decisions and skills. An ad in a newspaper is just one ad amongst many, whereas an ad in a creative medium is more likely to be seen as informative, entertaining, and, even, something worth talking about (Dahlén et al., 2009b). We therefore hypothesize:

H2: Creative media choice increases perceived advertising value

As indicated by previous research on advertising as a marketing signal, the way a brand advertises is seen as an indicator of performance in other areas as well. The fact that the brand is creative in its advertising is taken as a sign of a sender who is more able not only when in terms of its advertising, but also in terms of the products it produces (Dahlén et al., 2008a; Kirmani and Rao, 2000). Creative media choice should thus have the potential to influence perceptions about the brand. More specifically, and in line with previous research on marketing signals, we hypothesize that it should increase perceived product quality:

H3: Creative media choice increases perceived brand quality

We also expect that consumers see the brand more favorably and are more prone to buy its product:

H4: Creative media choice increases brand evaluations

6 Method

Participants were exposed to the same ad in either a creative media choice or a traditional medium. Participants ($n=293$) were recruited in the waiting lounge of a large metropolitan train station. 58% were female and the average age was 40 years. Participants were randomly allocated to one of the media conditions. After exposure, they filled out a questionnaire.

6.1 Stimuli

The stimuli were developed similar to Dahlén (2005; 2009). Pretests were employed to find suitable candidates for creative media choice, in which pairs of (mock) brands and non-traditional media were rated. We chose the highest-rated pair, a coffee brand advertised on a shaded area of a big clock (implicitly communicating a coffee break). This combination rated $M > 5$ on measures of creativity and congruity between the ad and the medium ($n = 40$). A newspaper print ad was used for the traditional medium condition. The ad placements were photographed and used as stimuli.

6.2 Measures

Perceived ability was measured with two items inspired by Dahlén et al. (2008a): “X is smart” and “X is innovative” (1 = do not agree / 7 = agree completely, $r = .74$).

Perceived advertising value was measured similarly with three items: “The advertising is of value to me”, “The advertising is interesting”, “The advertising is worth my attention” ($\alpha = .91$). The measure was adapted from Dahlén et al. (2009b).

Perceived product quality was measured with the question, “what is your opinion of the product’s quality?” and three-item, seven-point semantic differential: high/low quality, better/worse than average quality, satisfactory/unsatisfactory ($\alpha = .91$). The measure was taken from Dahlén et al. (2008a).

Brand evaluations employed two measures. Brand attitude used a three-item, seven-point semantic differential: good/bad, positive/negative, favorable/unfavorable ($\alpha = .94$). Purchase intentions used a seven-point Likert scale and three items: “I want to try this product”, “I want to buy this product”, “I would consider buying this product” ($\alpha = .94$).

As a manipulation check, we also included a measure of *perceived advertising creativity*. This was measured by asking: “To what extent do you think that the advertising you just saw is creative?” (1=not at all creative / 7 = very creative). This measure was taken from Dahlén et al. (2008a).

7 Results

A manipulation check showed, participants perceived the creative media choice as more creative than the traditional media choice ($M_{\text{creative media}} = 4.11$ vs. $M_{\text{traditional media}} = 3.39$, $p < .01$).

An initial MANOVA produced significant effects of our manipulation on all the dependents ($F(5,283) = 5.03$, $p < .01$, *Wilks’ Lambda* = .918, *eta*² = .082). Planned contrasts were used to test the hypotheses individually (Table 1).

In support of H1, the creative media choice produced significantly greater ratings of the brand’s perceived ability ($M_{\text{creative media}} = 4.06$ vs. $M_{\text{traditional media}} = 3.23$, $p < .01$). This suggests that creative media choice is interpreted as a sign of a brand smartness and innovativeness.

Table 1: Mean comparison – creative media choice vs. traditional media choice

	<i>Creative media choice</i>	<i>Traditional media choice</i>
Perceived ability	4.06	3.23**
Advertising value	3.31	2.67**
Perceived quality	3.73	3.39**
Brand attitude	3.95	3.30**
Purchase intention	3.17	2.80*

Notes: ** $p < .01$, * $p < .05$

Similarly, and in support of H2, the creative media choice generated significantly higher perceptions of advertising value compared to the traditional medium ($M_{\text{creative media}} = 3.31$ vs. $M_{\text{traditional media}} = 2.67$, $p < .01$). To test our reasoning that the higher advertising value was due to creative media choice stimulating perceptions of brand ability, we performed a mediation analysis (Sobel, 1982). Sobel's test supported the notion that the effects of creative media choice on advertising value was mediated by perceived ability ($z = 4.25$, $p < .01$).

In support of H3 and H4, the creative media choice generated higher ratings of perceived product quality ($M_{\text{creative media}} = 3.73$ vs. $M_{\text{traditional media}} = 3.39$, $p < .01$), brand attitudes ($M_{\text{creative media}} = 3.95$ vs. $M_{\text{traditional media}} = 3.30$, $p < .01$) and purchase intentions ($M_{\text{creative media}} = 3.17$ vs. $M_{\text{traditional media}} = 2.80$, $p < .05$). Again, mediation analyses using Sobel's test supported our reasoning that the effects on brand quality perception ($z = 4.20$, $p < .01$), brand attitude ($z = 4.21$, $p < .01$), and purchase intention ($z = 3.38$, $p < .01$) were due to the creative media choice signaling brand ability.

The results thus support all our hypotheses and show that creative media choice can function as a marketing signal. To further contribute to our understanding of advertising creativity as a marketing signal we also re-ran the analyses using perceived creativity as the independent variable. This is in line with Dahlén et al. (2008a) and provides a direct test of our underlying assumption that consumers are 1) able to judge advertising creativity and 2) use this judgment in their assessment of advertising and brands featured in them.

To get an overview of the effects of perceived advertising creativity, we first ran a MANOVA comparing the lower and upper thirds of perceived creativity (below 3 versus above 4) as the factor. Perceived creativity had significant effect on all the dependents ($F(5,193) = 208.63$, $p < .01$, *Wilks' Lambda* = .156,

$\eta^2 = .844$). Planned comparisons showed the effects of perceived advertising creativity to be substantial and greater than for manipulated creativity (Table 2).

Similarly to Dahlén et al. (2008a), we also ran a mediation analysis showing that the effects of creative media choice on perceived ability ($z = 3.49$, $p < .01$) was indeed mediated by perceived advertising creativity. This suggests that the signaling effects of advertising creativity are caused by consumers' perceptions of creativity.

Table 2: Mean comparison – perceived creativity high vs. low

	<i>Perceived creativity high</i>	<i>Perceived creativity low</i>
Perceived ability	5.18	1.82**
Advertising value	3.68	1.81**
Perceived quality	4.14	2.80**
Brand attitude	4.31	2.67**
Purchase intention	3.75	2.04**

Notes: ** $p < .01$, * $p < .05$

8 Discussion

Our findings suggest that consumers perceive brands using creative media choice to be more able, meaning that the brand is seen as smart and innovative. They also show that creative media choice is seen as offering higher advertising value and has a positive impact on brand quality perceptions and brand evaluations. Mediation analyses show that the latter effects are driven by brand ability; the perception of the brand as more able translates into a signal that has a positive influence on perceptions of advertising value, product quality, and brand evaluations. Furthermore, additional analyses show that the effects are driven primarily by consumers' perceptions of creativity, as suggested by the fact that the results were stronger when using perceptions of creativity rather than our manipulation.

Theoretically, this study extends previous research on non-traditional media and creative media choice beyond processing of the advertising and the message to consumers' understanding of the sender. In addition to helping advertising to stand out from the clutter and to generate a greater impact, the current study shows that creative media choice sends a message about brand ability and that this in turn has positive effects on perceptions of both its advertising and its

brand. This seems to indicate that marketers should think about how they say something as well as what they say.

The study also provides new insights into the effects of creativity in advertising more generally. Firstly, it replicates the findings of Dahlén et al. (2008a) by showing that 1) advertising creativity signals brand ability and that this leads to positive effects on brand perceptions and 2) that the effects are mainly driven by consumers' perceptions of advertising creativity. In addition, we show that brand ability has a positive influence on perceived advertising value. As advertising-fatigue and "marketing savvy" grows, so does the need for advertising that is worth the while from a consumer perspective. Brands that are perceived as more able seem to have a better chance to so.

Our findings suggest that advertising creativity will be an important tool for marketers in adding value to consumers. We believe that the increasing advertising fatigue and marketing savvy of consumers will make communication signals equally, if not more, important as processing effects. In a time where there is no end to all the alternatives that are available to consumers, it is virtually impossible to offer anything truly unique in your product, or to even gain and keep their attention. Instead, consumers prefer exchanges with brands that they believe are able to offer them value. From a consumer perspective, the ability to communicate and make high quality products seem to go hand in hand. Brands therefore need to advertise accordingly, facing the double challenge of earning consumers' attention and signaling that they offer something extra, not in what they do, but how and why.

Although our findings are in line with our hypotheses and the findings presented by Dahlén et al. (2008a), the present study is limited by its focus on only one (mock) brand and one creative media choice. It should further be noted that it relied on only one (forced) exposure to a photographed version of the different media. This of course limits the ecological validity of the results. Another limitation of the current study is that we did not include perceived effort in the analysis. The reason we decided to focus on ability rather than effort is that Dahlén et al. (2008a) suggest brand ability to be the dominant signal of advertising creativity. Still it should be noted that Dahlén et al. (2009b) find perceived effort to be important to consider in non-traditional media, especially for high-reputation brands. We hope that the current study will inspire future efforts in which these limitations will be dealt with.

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How Does Shifting Ad Budgets Impact Trust in Advertising Media?

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1 Introduction

With increasing numbers of internet users advertisers have put more emphasis on online advertising and have shifted advertising budgets from traditional media to online media (Edelmann, 2007). While the internet certainly provides better ways for measuring the direct impact of advertising (e.g., in terms of click-through rates), it still remains an open question whether shifting from traditional to online advertising leads to higher effectiveness. In this study, we investigate whether and how such an advertising channel shift impacts consumers' assessment of advertising practices. We refer to trust in advertising media as such a general assessment of consumers that is an important antecedent of advertising effectiveness (Lutz, 1985; MacKenzie and Lutz, 1989). Since trust in media is related to the persuasiveness of messages conveyed by media, knowledge about trust in advertising media and its influence factors brings about important practical implications as related to the choice for the most appropriate channel for communicating with consumers. The study provides some new insights for the signaling literature as it confines the general finding that ad spending has a positive effect for companies.

2 Previous research

The impact of advertising spending on trust in advertising media

Trust in advertising media is a variable that describes how consumers assess and value different media information sources. It refers to the confidence that a channel is a reliable source of product information. The issue of trust towards traditional advertising media (e.g., print, TV) and online advertising media became a crucial issue for advertisers (Briggs, 2005). Okazaki et al. (2007) argue that consumers exhibit mistrust more strongly towards online media as compared to traditional media, since online content is less likely to governmental regulation.

Trust in advertising media can alter due to shifting advertising spending. Previous literature provides evidence for a positive effect of advertising spending for companies (e.g., Conchar et al., 2005). The theoretical basis for this effect is signaling theory that says that advertising expenditures function as a signal of a brand's quality (Nelson, 1974). The manufacturer signals that he believes in the product, that he stands by it and that he will be in the market for a long time. Consumers make inferences about the credibility of the manufacturer based on signals such as repetition that depend on advertising spending (Kirmani, 1997). In the same way as consumers conclude that manufacturers believe in a product due to the amount of advertising spending, they also infer manufacturers' beliefs in communication channels. If advertisers shift budgets towards online media, consumers infer less confidence in traditional channels and more confidence in online channels as a reliable source of product information.

Changes in trust in advertising media can also be explained by the concept of familiarity. The relationship between familiarity and trust in brands or companies is a well established finding in marketing literature (e.g., Chaudhuri and Holbrook, 2001). This idea is consistent with the mere-exposure paradigm that states that enhanced exposure leads to more favorable evaluations. These evaluations can also refer to truth perception, credibility, and trust (Brown et al., 2002). With increasing exposure to advertising in online media, trust increases as well, whereas decreasing exposure to advertising in traditional media might hamper familiarity with and trust in traditional advertising media.

H1: Shifting advertising spending from traditional to online advertising media is (a) negatively related to trust in traditional advertising media and (b) positively related to trust in online advertising media.

As for the net effect of shifting spending from traditional to online media, we expect an overall negative effect because the loss of trust in traditional media is bigger than the gain of trust in online media. It was shown that trust takes more time to create than to lose (Olsen, 2008; Slovic, 2000). Trust-destroying events, behaviors, and experiences are more salient than trust-building ones. Therefore, they are seen as more informative and are given more importance than trust-building events, behaviors, and experiences.

H2: Shifting advertising spending from traditional to online advertising media is negatively related to trust in all advertising media.

As mentioned before, there are two alternative explanations for the effect of advertising spending on trust: a signaling effect and a familiarity effect. We try to assess which one of the mechanisms accounts for the relationship between advertising spending and trust:

Research question: Can the effects on trust in advertising media be explained by a signaling effect or a familiarity effect?

3 First study: Country data

3.1 Method

Although the arguments from the signaling literature and the familiarity effect refer to the relationship between consumers and companies, we use aggregated country-level data in our first study. While within-country variance is neglected, there is still considerable between-country variance for our data due to national characteristics (e.g., laws, economic development) and advertising spending varies from country to country. As for our dependent variable trust in advertising, previous findings even indicate weak within-country variance, in particular, weak or non-significant effects of individual variables such as age, gender, education, and income (Huh et al., 2005; Menon et al., 2004; Soh et al., 2007). A recent study by Möller and Eisend (2010) showed that cultural values are important antecedents in explaining advertising effects on general assessments of advertising on a national-culture level; cultural values explained considerably more variance than antecedents on the individual level.

We therefore use country data to test our hypotheses and control for cultural and economic differences in our data set. We apply Hofstede's cultural framework that provides the most prominent way to measure cultural differences on the national level. We control for economic development in our data set because levels of economic development are strongly related to national cultures (e.g., Franke and Nadler, 2008). Furthermore, we argue that macroeconomic factors are related to advertising spending, which has been supported by previous research (e.g., Deleersnyder et al., 2009). Finally, economic development is strongly related to the use of media (Van der Wurff et al., 2008) and therefore controls for effects of media use.

3.1.1 Data and sample

Data for our study came from several databases. In particular, data on trust in different advertising media were provided by Nielsen's 2009 Global Online Consumer Survey (Nielsen Media Research, 2009). The survey provides trust data for 43 countries for which advertising spending data, GDP (Gross Domestic Product) data, and Hofstede index scores are available. Although these 43 countries represent less than 25% of all countries in the world, countries from the six main continents of the world are included. The countries included in this study

cover more than 50 percent of global ad spending in 2009 (World Association of Newspapers, 2009).

3.1.2 Measures

Trust in advertising media. The Nielsen survey provides 13 measures on trust in advertising media that were used for our study: trust in (1) text ads on mobile phones, (2) online video ads, (3) online banner ads, (4) e-mails I signed for, (5) consumer opinions posted online, (6) brand websites, (7) billboards and other outdoor advertising, (8) ads on TV, (9) ads served in search engine results, (10) radio ads, (11) newspaper ads, (12) ads in magazines, (13) ads before movies. Each trust item was measured by a scale ranging from “don’t trust at all” to “trust completely”. Trust in traditional advertising media was computed as the mean of six items (trust in billboards and other outdoor advertising, ads on TV, radio ads, newspaper ads, ads in magazines, and ads before movies; Cronbach’s Alpha = .98). Trust in online advertising media was computed as a mean of seven items (trust in text ads on mobile phones, online video ads, online banner ads, e-mails I signed for, consumer opinions posted online, brand websites, ads served in search engine result; Cronbach’s Alpha = .91). Trust in all advertising media was computed as a mean of all thirteen items (Cronbach’s Alpha = .95).

Advertising spending. Data from the World Association of Newspapers cover overall advertising expenditures in 2009 per capita as measured in U.S. dollars as well as advertising expenditures in 2009 per capita of different media types. We use the overall advertising expenditure and the online advertising expenditure for our analysis and we compute the ratio of online ad spending to total ad spending (*spending shift*). By this, we do not need to correct ad spending for economic differences between countries such as purchasing power.

Cultural values. Cultural dimensions of individualism (IND), masculinity (MA), power distance (PD), and uncertainty avoidance (UA) were measured by country index scores taken from Hofstede (2001).

Gross domestic product. As a control variable we applied the 2009 gross domestic product (GDP) per capita in U.S. dollars as provided by the International Monetary Fund (2009).

3.2 Results

Figure 1 shows the development of online spending over the years. The data represent the percentage of advertising spending for online media to total ad spending across countries from 1999 till 2009. Note that the underlying sample

size varies, because some country data became available only in recent years. The figure shows the increase from almost zero percent to eight percent on average in 2009, with two countries (Estonia and Switzerland) even reaching 26% in 2009. The minimum and maximum figures for 2009 indicate quite some variation in the main independent variable across countries.

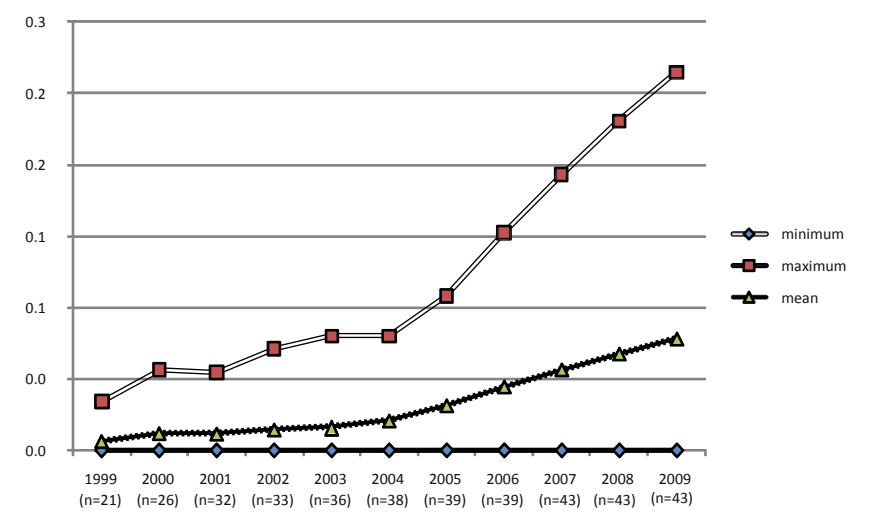


Figure 1: Spending shift across countries from 1999 till 2009

Table 1 shows the correlation matrix for the dependent and independent variables. Table 2 shows the results of the regression models explaining trust in advertising media. We conducted several tests in order to verify the adequacy of the regression models. One of the typical problems in country studies is multicollinearity; in our study, the highest VIF over all models is 2.38 that is below the strictest cut-off value found in the literature (Allison, 1999). Since the ratio of the number of predictors to the sample size is rather small, which might question the robustness of the results, we also ran regression models with several smaller subsets of predictors. The results remained stable. We checked for other possible violations of the regression model, particularly for non-linearities and heteroscedasticity, but didn't find any problems with the OLS approach. Due to the small sample size, we interpret significant ($p < .05$) and marginally significant ($p < .10$) results as it is common practice in country studies that typically comprise small samples of countries.

Table 1: Correlation matrix

	Trust all	Trust traditional	Trust online	Spending shift	IND	MAS	PD	UA	GDP
Trust all	1.00								
Trust traditional	.97	1.00							
Trust online	.95	.84	1.00						
Spending shift	-.51	-.50	-.48	1.00					
IND	-.56	-.50	-.58	.49	1.00				
MAS	.23	.24	.20	-.22	.05	1.00			
PD	.40	.34	.45	-.42	-.66	.06	1.00		
UD	-.03	-.10	.06	-.20	-.08	.17	.13	1.00	
GDP	-.55	-.47	-.60	.45	.65	-.15	-.64	-.21	1.00

Bold figures indicate significant ($p < .05$) correlations. All remaining correlations were non-significant ($p > .10$).

Table 2: Impact of ad spending shifts on trust in advertising media (standardized regression coefficients; $n = 43$)

	Trust in all advertising media		Trust in traditional advertising media		Trust in online advertising media	
IND	-.43 **	-.34 *	-.43 **	-.32 *	-.39 **	-.32 *
MAS	.24 *	.19	.27 *	.21	.18	.15
PD	-.08	-.10	-.10	-.13	-.04	-.05
UA	-.16	-.19 *	-.22	-.25 *	-.07	-.09
GDP	-.32 *	-.29	-.26	-.23	-.36 **	-.34 *
Ratio online ad to total ad Spending shift		-.25 *		-.31 **		-.17
R ²	.444	.487	.391	.45 3	.454	.473
Adjusted R ²	.37	.40	.31	.36	.38	.39
F	5.90 ***	5.70 ***	4.74 ***	4.97 ***	6.14 ***	5.39 ***
ΔR^2		.05		.06		.02
ΔF		3.02 *		4.08 **		1.30

* $p < .10$, ** $p < .05$, *** $p < 0.01$

The results show that the shift of ad spending to online media has a negative impact on trust to all advertising media and trust in traditional advertising media, but does not affect trust in online advertising media. The results support hypotheses 1a and 2, but not hypothesis 1b. The mediator analysis shows that the shift variable is a mediator between GDP and trust in all advertising media ($z =$

1.87, $p < .06$) and between GDP and trust in traditional advertising media ($z = 1.94$, $p < .05$), but not for GDP and trust in online advertising media ($z = 1.59$, $p < .11$). As for the cultural and economic control variables in the final models, uncertainty avoidance has a negative impact on trust in all advertising media and trust in traditional advertising media, whereas GDP has a negative impact on trust in online advertising media.

The Nielsen data set provides standard deviations underlying each country trust value. These data allow us to control for within-country variance that is not taken into account when using aggregated country data. The standard deviation across the three trust measures and countries in our sample comprise a rather small range (minimum of .60, maximum of .81), which already indicates that within-country variances might be a minor problem. Indeed, if we consider these figures in variance weighted regression models, the significant results remain unchanged and none of the weighted regression models explains significantly more variance than any of the regression models in Table 2.

4 Second study: Individual data

In the second study, we try to explain whether the above effects are due to a signaling effect or a mere exposure effect. We use individual data from a convenience sample of 171 undergraduate students at a German university. We test the signaling mechanism by measuring the impact of perceived advertising spending for different advertising media; we test the familiarity effect by measuring the direct impact of consumers' use of different advertising media. As control variables we use age and sex, two variables that have been used in previous trust studies. In addition, we control for individual trust in advertising regulation. Lack of regulation is discussed in the literature as major problem with consumers' trust in online advertising media (Briggs, 2005; Okazaki et al., 2007).

4.1 Measures

Trust in advertising media. Participants had to answer to the same 13 measures on trust in advertising media as the first study. Trust in traditional advertising media was computed as the mean of six items (Cronbach's Alpha = .93); trust in online advertising media was computed as a mean of seven items (Cronbach's Alpha = .71); and trust in all advertising media was computed as a mean of all thirteen items (Cronbach's Alpha = .89).

Perceived advertising spending. Following the procedure applied by Kirmani (1997), participants responded on a 7-point scale to the question “Considering all advertising media, how much do you suppose do advertisers invest in advertising on...” (1 = much less than average; 9 = much more than average) for each of the 13 advertising media. Perceived spending for traditional media was computed as the mean of six items related to traditional advertising media (Cronbach’s Alpha = .73); perceived spending in online advertising media was computed as a mean of seven items related to online advertising media (Cronbach’s Alpha = .69).

Media use. For each advertising medium, variables were developed that referred either to daily, weekly, monthly, or yearly use. We then added the six items related to traditional advertising media to measure traditional advertising use per week in minutes; we added the seven items related to online advertising media use to measure online advertising use per week in minutes.

Control measures. We measured perceived trust in advertising regulation by asking respondents how much they trust either regulations by the government or self-regulations by the advertising industry ($r = .51$). Both variables were combined to one regulation measure. In addition, we asked for respondents’ sex and age.

4.2 Results

Table 3 shows the correlation matrix for dependent and independent variables. The media use variables are not significantly correlated with perceived advertising spending. Table 4 shows the results of the regression models explaining trust in advertising media. We checked for possible violations (multicollinearity, heteroscedasticity, and non-linearity) but didn’t find any problems with the OLS approach.

Table 3: Correlation matrix

	Trust all	Trust tradi- tional	Trust online	Perceived spending trad. ads	Perceived spending online ads	Use tradi- tional	Use online	Trust in regu- lation	Age	Sex
Trust all	1.00									
Trust traditional	.92	1.00								
Trust online	.86	.60	1.00							
Perceived spending traditional ads	.17	.19	.10	1.00						
Perceived spending online ads	.12	.07	.16	-.09	1.00					
Use tradi- tional ad media	.07	.10	.01	-.05	-.07	1.00				
Use online ad media	.08	.03	.11	.13	.02	.17	1.00			
Trust in regulation	.26	.29	.18	.01	.10	.07	-.03	1.00		
Age	-.12	-.17	-.02	.01	-.16	.15	.11	-.12	1.00	
Sex	.01	.02	-.01	.12	.13	-.18	-.05	.03	-.17	1.00

Bold figures indicate significant ($p < .05$) correlations. Sex was coded as 0 = male, 1 = female.

The results show that perceived advertising spending does increase trust in advertising media, while media use does not impact any of the trust variables. The findings provide an answer to our research question, showing that a signaling effect but not a familiarity effect occurs. In addition, the results are in line with the findings of the country data study and further support hypothesis 2, as they show that trust in all advertising media is positively related to perceived spending in traditional media, but does not depend on perceived spending in online advertising media. That is, perceptions of lower spending for traditional advertising media would reduce trust in all advertising media, while variations in perceived spending for online media do not relate to trust in all advertising media. As for the control variables, trust in advertising regulation enhances trust in advertising media.

Table 4: Impact of perceived ad spending and media use on trust in advertising media (standardized regression coefficients; n = 171)

	Trust in all advertising media		Trust in traditional advertising media		Trust in online advertising media	
Regulation	.26 **	.23 **	.28 **	.27 **	.18 *	.14
Age	-.09	-.08	-.15	-.16 *	-.01	.01
Sex	-.02	-.04	-.02	-.03	-.01	-.03
Perceived spending traditional ads		.18 *		.20 **		
Use traditional ad media		.05		.11		
Perceived spending online ads		.11				.15 *
Use online ad media		.06				.11
R ²	.081	.116	.108	.155	.032	.060
Adjusted R ²	.064	.077	.092	.128	.014	.030
F	4.857**	2.974 **	6.682 **	5.889 **	1.813	2.050

* p < .05, ** p < .01

5 Discussion

The results of this study show that shifting advertising spending from traditional to online media has a negative impact on trust in all advertising media and trust in traditional advertising media. The results are in line with the signaling effect, showing that trust in advertising media depends on perceived advertising spending for particular advertising media.

The findings of the country study suggest that the negative effect of decreased advertising spending is stronger than the positive effect of increased advertising spending, as we did not find a positive impact of shifting advertising spending on trust in online advertising media. Such a negativity effect resembles a general pattern in human behavior. In the case of trust, it can be explained by the fact that trust building is more effortful than trust destroying (Olsen, 2008). Therefore, a loss of trust is easier to accomplish than gaining trust. Furthermore, online media are generally trusted less (Okazaki et al., 2007) and therefore trust-building is a particular challenging task for online media. Future increases in advertising spending for online media could therefore possibly lead to increases in trust.

In recent years advertisers have turned their efforts towards online advertising in order to reach customers (e.g., Edelman, 2007). While this might be appropriate considering the immediate effects of advertising, the results of this study show that there might be additional effects that are detrimental for adver-

tisers in the long run. The findings suggest that international media planning should carefully consider not only costs of different advertising media but also consumers' assessment of different media.

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When Bad is Good: The Creative Conundrum of Agency-Client Relationships

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1 Introduction

Some advertising agencies and their marketing clients have traditionally invested in long term relationships that were greatly valued. Recent economic imperatives have prompted many clients to break such long term bonds and re-define relationships. For example, in the auto industry, some client-agency relationships forged over one hundred years ago have recently been terminated during the search for new agency partners and creativity. Consumer packaged goods marketers like Proctor & Gamble and Unilever also tend to remain with their full service agency of record partners, even when switching account teams and resources globally. Overall, some relationships have been remarkably stable in spite of great industry change, possibly due to sheer scale and logistics, where clients and agencies have been interwoven over the years of doing business together. Clients appear to value such strong relationships and they have entrusted agencies with their brands, while confident that their agencies care and will produce optimal work, as brand stewards. Agencies also seem to value such relationships and presumably hope to use these partnerships to leverage more creative work to ultimately build the client's business for the good of both parties (see Henke, 1995; Waller, 2004).

However, previous researchers reveal that there is a "dark side" to client-agency relationships. Grayson and Ambler (1999) suggest that when agencies are in long term relationships with their clients, expectations for the agency heighten over time, as well as a sense of opportunism. Such increased expectations are difficult to achieve over the long run. Clients and agencies also tend to mirror each other and become too similar. Such familiarity then breeds contempt and relationships that might have worked well at one time tend to "go stale." Trust and the impact on the ability of agencies to deliver highly creative outputs and agency services may actually decrease as relationships mature, so it is still unclear. The attitude that it is "time for a change" may be evoked with a change in management. Thus, long term relationships have a dark side that dampens the influence of trust and although the exact nature of such relational dynamics is elusive, it may be that such partnerships carry the seeds of their own destruction.

Although Grayson and Ambler (1999) focused on issues like trust, interaction, commitment and expectations, a more recent stream of research examines creativity, as a focal point for agency-client relationships. Several scholars provide theoretical frameworks for understanding creativity (e.g., Ang et al., 2007; Sasser and Koslow, 2008; Sasser and Koslow, 2008/2009; Smith et al., 2007). Some researchers focus on how working creatives produce ideas for clients (Kover, 1995; Rossiter, 2008) and others investigate creative thinking techniques (e.g., Goldberg and Mazursky, 2008; Goldenberg et al., 1999; Kilgour and Koslow, 2009). Still others consider what creative advertising is actually defined as (Koslow et al., 2003; West et al., 2008). Finally, several researchers consider the situational factors in agencies (Koslow et al., 2006; Li et al., 2008; Sasser, 2008; Sasser et al., 2007).

Creativity research illuminates the mediating role that relationship-oriented constructs play in the agency-client relationships and may offer greater understanding of the ambiguities of trust (see Grayson and Ambler, 1999). Relationship-oriented research focused on marketing services relationships prior to more recent studies with agency creativity so it is worthwhile to incorporate creativity. Current research (e.g., Sasser and Koslow, 2008/2009) examines creativity across two components, originality and strategy. For a campaign to be deemed creative, it needs to possess both of these characteristics simultaneously. Thus, if campaigns are seen as “going stale” then they can be described in creativity research as lacking in originality, despite being on-strategy and/or appropriate.

Given such a context, it may be that the comfort and security derived from a long term stable relationship enables a co-creation mentality of interaction. The agency is empowered with brand insight, situational knowledge and access to top management to assure a focus on strategic issues. However, this long term relationship privileges strategy at the cost of originality, compromising creativity. Is it really unclear whether the net effect on creativity is extreme, modest or just a shift in the types of creativity explored rather than a net loss or gain?

Although sacrificing some level of creativity may prove popular in such assessments, the empirical findings of this study are not at all sanguine. The decline in originality experienced across strong client relationships is extreme, and made even worse by a number of factors. Even more troublesome, the expected gain in strategy remains elusive too, so neither originality nor strategy is achieved. In many situations, strong relationships have no major overall positive effect on strategy. In the few situations where the positive effects of relationship quality are found, the size of the effects are neither large or nor desirable scenarios. It truly is a lose-lose proposition, in keeping with the dark side theme.

2 Theoretical background

Commitment to client agency relationships is defined as a demonstrated intent to maintain relationship continuity built on attractive exchanges (Halinen, 1997). Some researchers have examined switching costs and hypothesized that there may be real and perceived barriers to changing agencies while others have studied “agency hopping” as deliberate and conscious management behaviour. Davies and Prince operationally define switching costs as the time, effort, money and psychological burden involved in setting up a relationship with a new agency and the benefits lost from terminating an agency in an existing relationship (2010). Interestingly, the researchers also found that agencies in the mature range of the client-agency relationships received more formal evaluations than those in early stages of a relationship and that switching costs are related to the degree of formal evaluation (Davies and Prince, 2010).

It is not clear if the formal evaluations were a precursor to switching or just a normal management practice, but clearly such activities give rise to concern in agencies, which constantly need to maintain existing accounts, while refreshing their roster with new business conquests too.

Another related area of agency theory involves risk taking behaviour as many creativity scholars have explored the willingness to explore and take risks as a key management trait in support of creativity (Sasser and Koslow, 2008; West and Berthon, 1997). Emerging agency theory explored risk sharing among individuals or groups and problems that arise when cooperating parties have different attitudes toward such risk combined with different goals and division of labour in a ubiquitous agency relationship where one party delegates work to another party to perform. Agency theory posits that the agent is more likely to behave in the interests of the principal when the contractual portion of the relationship is outcome based (Eisenhardt, 1989). This fits performance based compensation models of advertising arising in the past decade as a replacement for commission models. The dilemma is how to reward creativity, particularly award winning campaigns since clients often find it difficult to enumerate specifics in the quest for creativity. Thus, when the client has information to verify agent behaviour, the agent is more likely to perform in the best interests of the client in agency theory (Eisenhardt, 1989).

This is consistent with Davies and Prince finding that as relationships advance, exit costs can play a prominent role in evaluation decisions (2010) much like complicated divorces between disenfranchised spouses. The idea of agencies being almost “too big to fire” complicates many holding company relationships with interwoven joint interests and investments. Many of the implications suggested by Davies and Prince about switching theory appear to be happening as

agency-client relationships are severed after decades of working together (2010) and some agencies and clients keep some threads intact due to logistics.

As in any passionate affair, the harsh reality soon sinks in with eyes wide open. The likelihood of success for many newly ventured relationships is questionable even when judged by far different evaluation standards than the long term agency partners (Eisenhardt, 1989). Clients may find it necessary to maintain portions of their account with their long term agencies to ensure that integrated business models function. An example of this may involve separating consumer and dealer advertising in automotive, since transitioning certain programs would mean a loss in sales and profit, due to logistics and operations.

3 Hypothesis development

Instead of focusing on organisational theory highlighting the role of trust and commitment in long term relationships as Grayson and Amber (1999) and other scholars do, another direction for research is to consider the underlying dynamics of advertising creativity (Sasser and Koslow, 2008/2009) and relationships. These scholars introduce the idea that advertising agencies exist because client organisations are often toxic to creativity. Although well intended, many managerial practices employed by marketer organisations dampen creativity in-house. For example, rewarding creativity may be widely seen to enhance creativity, when research is clear that it actually suppresses it (Amabile, 1996). Expertise is often considered a key antecedent of creativity, but too much of it can be a negative (Sasser and Koslow, 2008/2009). This may explain some of the reason why in-house agencies or business units are not very creative while in-house, but once independent can become highly creative and entrepreneurial.

One possibility is that when agencies work with clients over long periods of time developing strong relationships, those in the agency may become too expert and too focused on the rewards of keeping the account, and these two effects in turn dampen agency creativity. To set this in context, consider the trade-off explored by Kilgour and Koslow (2009). They show that some creative thinking techniques tend to enhance originality at the expense of campaign strategy, while other techniques enhance campaign strategy, at the expense of originality. Possibly no one technique can enhance both at the same time. However, strong relationships between agency and clients may lead to the situation where strategic thinking flourishes, but originality wanes, as they coalesce.

Sasser and Koslow (2008) identify several constructs that orient an agency toward strategy or originality. For example, the role of the client's brief in advertising development has been studied (Koslow et al., 2006). Although they did not find that the presence of strategy in the client's brief influenced the creativity of

the campaign produced, this may be because the client's strategy only translates to an effect on creativity when relationships are strong. In strong longer term relationships it is much harder to ignore the client strategy and/or play dumb, while some new agencies are granted greater liberty.

H1: When the client's brief contains a strategy, the agency campaigns produced are more "on-strategy," and when relationships are strong this increase is further enhanced.

Another organisational factor that enhances how "on-strategy" a campaign may be is the use of consumer research (Koslow et al., 2006; Sasser and Koslow, 2008/2009). Consumer research helps inform campaign development to better enable consumer persuasion. This leads to more focused creative work, presumably by keeping campaign messages on strategy. Again, when client relationships are strong, it is difficult to ignore such information or produce a campaign that goes far astray from the consumer research.

H2: When consumer research is available, the agency campaigns produced are more "on-strategy," and when relationships are strong, this increase is further enhanced.

Finally, a third organisational factor enhancing strategy may be the use of copy-testing. Sasser and Koslow (2008/2009) note the controversies related to copy-testing, however little empirical research has shown a strong effect for the construct. Clients frequently use copy-testing to focus agencies on producing work that will sell products. When relationships are strong, the message sent by using copy-testing is even stronger.

H3: When copy-testing is used, the agency campaigns produced are more on-strategy, and when relationships are strong, this increase is further enhanced.

Several other organisational factors can be identified that should increase the originality of agency campaigns developed, and these effects may end up suppressing originality when relationships are strong. One of the major influences on creative outputs has been intrinsic motivation (Amabile, 1996). When people's creative ideas are rewarded or evaluated, creativity decreases. Presumably, most of the effect is a result of the creative work's originality being compromised as people game the reward system, rather than produce true art based on passion. As creative work becomes commercialized, it is no longer art for art's sake produced by creatives for pure joy. In an advertising agency context, passionate agency employees produce the most creative work when unbridled and

unjaded. However, when relationships are strong, agency employees are far more cognisant of pleasing the client and upholding the account status quo.

For example, to please a client, a creative may unconsciously tone down the originality of the work to fit the account—assuming the creative knows what the client is looking for. That knowledge, however, comes from strong relationships. Thus, when relationships are strong, less original work will be produced, even if the agency employee is passionate about the work. The positive effect of passion on the originality of the work may only be observed when the creative cannot “second guess” the client reactions or when relationships are not strong.

H4: When agency employees are intrinsically motivated, the agency campaigns produced become more original, and when relationships are strong, this increase is suppressed.

A second organisational factor related to originality is the agency culture of supporting creative work. In many situations, if agencies are supportive of creative work, this may translate to support for highly original work and greater defense of this work (see Sasser and Koslow, 2008). However, when relationships are strong, agencies may shy away from upsetting clients with highly original work and thus the supportiveness of agency culture may be less likely to translate into high original work.

H5: When agency culture is more supportive of creativity, the agency campaigns produced become more original, and when relationships are strong this increase is suppressed.

A final concern involves the client's willingness to take risks. West and colleagues (West, 1999; West and Berthon, 1997; West and Paliwoda, 1996) argue that risk plays an important role in influencing how highly creativity advertising campaigns are for some clients. If clients are experiencing financial uncertainty or missing budget goals, then they need a “big win.” At this point, clients and the agencies are more open to taking risks with more creative work. Much of this risk seems to be associated with the originality of the campaign rather than the strategy. When clients are willing to take risks, there is greater originality.

However, strong relationships may hold back agencies from producing such highly creative work, even when clients want it. Clients may be looking for a big hit, but in situations where clients are not meeting their budgets are also when their agencies are most vulnerable. As Kulbarni, Vora and Brown (2003) detail, when the client firm has had a decline in market share for an extended period of time, agencies are sometimes scapegoated and fired. When relationships are strong, agencies may feel there is more to lose and therefore have a higher level

of caution when dealing with clients. Agencies may think that a strong relationship will pull them through difficult periods so they are less likely to produce highly original work than they otherwise would be expected to do.

H6: When clients are willing to take risks, the agency campaigns produced are more original, and when relationships are strong, this increase is suppressed.

4 Data collection

The field work consisted of questionnaires which enabled on site collection of data from 121 London advertising professionals who described up to three campaigns each, for a total of 361 recent campaigns. Views were solicited from account planning, management and creative departments. Respondents were asked to provide details about three recent client campaigns that they personally worked on, whether positive or negative. In fact, the survey asked some very specific questions about whether the campaign was worthy of winning awards etc. The majority of the top 20 London agencies participated and data was collected on site during work hours, including tea time and lunch time breaks. Qualifying executives of participating agencies were encouraged to participate through human resources or public relations executives so as to feel that it was an open forum without management pressure. Respondents were invited via work email and provided with lunch in a conference area or activity room. During this lunch and/or tea time, the questionnaires were filled out, often coupled with brief interviews and observations in conference rooms and lunch areas.

5 Method

Several key constructs were measured via multiple items. These included intrinsic motivation (4 items), relationship quality (4 items), extent to which client's brief contains a strategy (4 items), agency culture (3 items), availability of consumer research (4 items), use of copy-testing (4 items), and the client's willingness to take risks (2 items). These items were factor analysed and appeared on their expected factors, with clean loadings. All expected loadings were above .6, except one was .567. All other off loadings were less than .35. Cronbach's alphas for the seven items were above .7.

Four items measured originality and four more measured strategy. These again were factor analysed and the loadings came out as expected. All expected loadings were above .7 and the Cronbach's alphas for the two constructs were both above .8.

Originality and strategy were predicted using the other constructs in a repeated measures model in GLM. There was also a control for the mean level for each individual respondent. All two-way interactions were initially included, and non-significant interactions were backwards deleted. Both regression models were highly significant, and the parameters and explanation of variances for each model are listed in Table 1.

Table 1: Parameters for repeated measures analysis predicting originality and strategy

<i>Parameters</i>	<i>Originality</i>	<i>Strategy</i>
Relationship quality	-0.352‡	-0.020
Client's brief contains a strategy	0.024	0.256‡
Availability of consumer research	0.072	0.170*
Use of copytesting	0.001	0.047
Intrinsic motivation	0.550‡	0.611‡
Agency culture	0.187*	0.018
Client willingness to take risks	0.367‡	-0.130*
Relationship quality X Client's brief contains a strategy	-0.119*	-0.176†
Relationship quality X Availability of consumer research	0.078	0.185†
Relationship quality X Agency culture	-0.141*	0.035
Relationship quality X Client willingness to take risks	0.190‡	0.099
Intrinsic motivation X Availability of consumer research	-0.049	-0.189†
R ²	74.4%	73.7%

*p<.05, †p<.01, ‡p<.001

6 Results

The pattern of significant parameters is important and the focus of the hypotheses is on the interactions, rather than the one-way effects. Relationship strength has a negative influence on originality. However, to test the support for each hypothesis, both the one-way and interaction effects need to be discussed. In the interaction plots, the high level was one standard deviation above the mean of the variable and the low level was one standard deviation below.

For H1, it was expected that relationship strength will increase the influence of a client's brief for the "on-strategy" campaign component. There is the ex-

pected positive and significant parameter in the strategy model, and the construct is involved with two significant interactions in Figures 1 and 2. Although the presence of strategy in the client's brief has a positive influence on how strategic the campaign is, this is qualified by the interactions. As Figure 1 shows, when relationships are *weaker*, the *stronger* the influence of the client brief's strategy on how "on-strategy" campaigns become, which is the opposite of what was expected in the hypothesis. An unexpected interaction is presented in Figure 2 and it shows that when relationships are *weaker*, and when the client's brief contains a strategy, this leads to *more* originality as well.

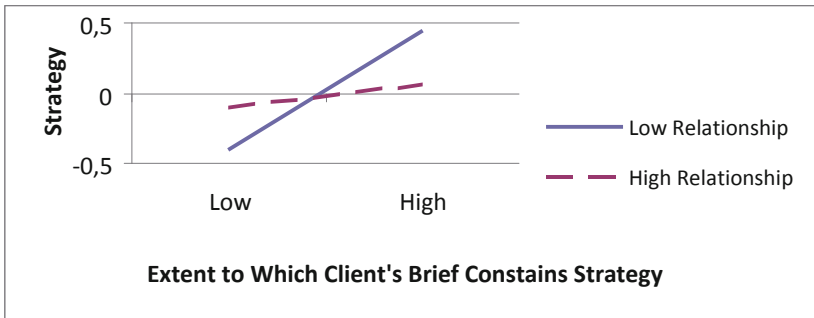


Figure 1: Influence of client brief and strategy by relationships

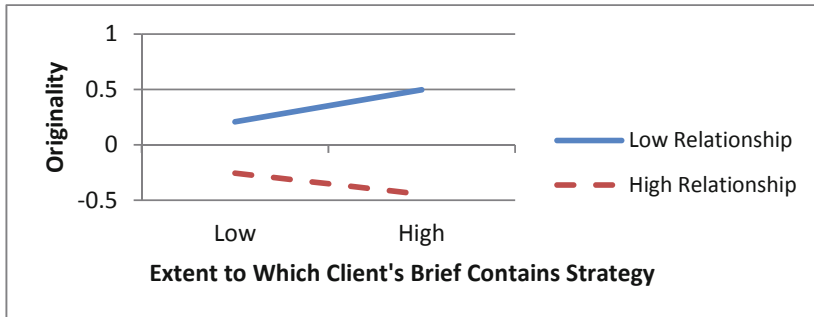


Figure 2: Influence of client brief and originality by relationships

H2 suggested that when consumer research is available, campaigns are kept more on strategy, and this relationship is heightened when relationships are strong. Although there is the expected positive parameter predicting strategy, this is again qualified by the interaction plotted in Figure 3. Here, there is a stronger effect on strategy in the high relationship situation, which supports H2.

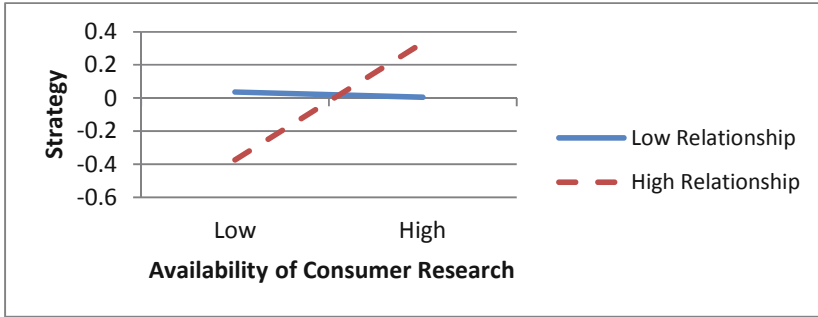


Figure 3: Influence of consumer research and strategy by relationships

H3 suggested that relationship strength should moderate the influence of the use of copy-testing. However, copy-testing did not have any significant influence. Therefore, there is no support for H3.

The next hypothesis, H4, looked at how relationship strength moderated the effect of intrinsic motivation. Although intrinsic motivation had a positive influence on both originality and strategy, it was not moderated by relationship strength. Therefore H4 is not supported. Intrinsic motivation is involved with an interaction term, shown in Figure 4. When intrinsic motivation is high, campaigns are more “on-strategy.” However, when intrinsic motivation is low, then the availability of consumer research keeps campaigns “on-strategy.”

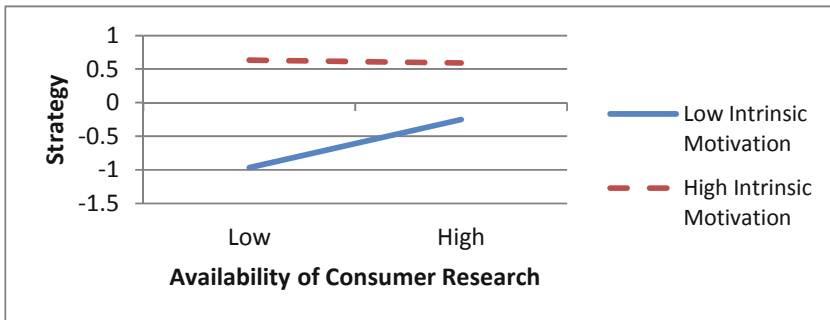


Figure 4: Influence of consumer research and strategy by motivation levels

H5 suggested that agency cultures that are more supportive of creativity lead to more original work, except when relationships are strong. In this case, creative support has less influence. As expected, the parameter for agency culture in the originality equation is positive, but this is qualified by the interaction plotted in Figure 5. Again, as expected, support has a stronger effect on originality when relationships are weak.

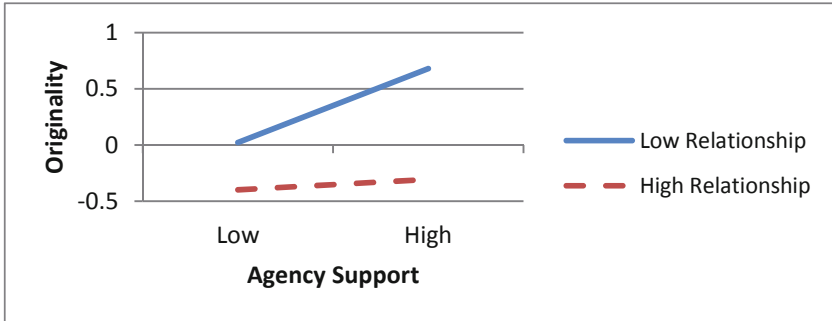


Figure 5: Influence of agency support and campaign originality by relationships

Finally, H6 posed the argument that when clients are willing to take risks they receive more original work, except when relationships are strong and agencies are afraid of upsetting clients. There is a positive one-way parameter for the risk concept on originality, and also a significant one for strategy. However, the influence on originality is moderated by relationship strength and this interaction is plotted in Figure 6. Although there is a positive effect for client willingness to take risk in both situations, the low relationship situation leads to higher levels of originality. This supports H6.

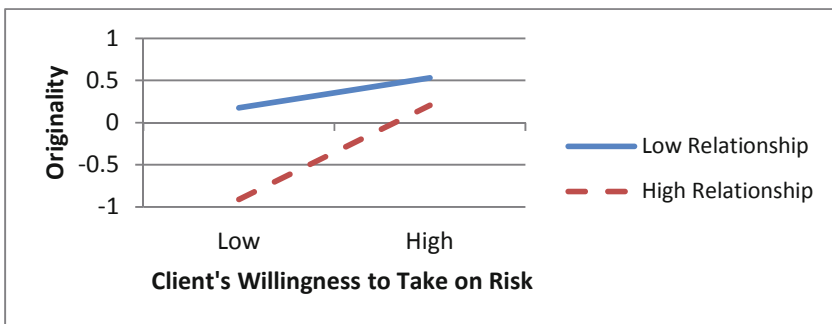


Figure 6: Influence of client's willingness to take risk and originality by relationships

7 Implications

Initial expectations were that strong relationships would have both positive and negative effects on creativity. These effects would—to some extent—end up as a counter balance. For example, strong relationships might encourage greater strategy at the cost of originality, in an agency campaign. However, few positive effects for either strategy or originality were observed when relationships are strong. In fact, the dark side of relationships may impact creativity too.

Overall, this pattern of research findings indicates that a good strong relationship may actually be the “kiss of death” in terms of creativity. So the message may be to not get too comfortable or complacent in an agency-client situation. However, a few situations show that there are compensating increases in how “on-strategy” a campaign is with such strong relationships. Surprisingly, one example of a scenario where clients receive more “on-strategy” work is when they have no strategy at all - a blank slate. Nothing is typically more terrifying to an agency than a complete blank slate, so they overcompensate. Obviously, this situation is probably best avoided if there is actually a concern about strategy. Effectively, the agency is bailing the client out in this instance because the client has abdicated their responsibilities to direct the agency strategically or it may be that a new person has been placed on the account and the agency has greater brand insight and knowledge than the client contact. This notion of the agency as keeper of the brand is documented across long term relationships.

Consumer research clearly results in better on-strategy work, so that it really becomes a mandate and it is required that the client ensure good consumer research – otherwise, the campaign will lack strategy as well as originality. Double jeopardy may arise in this worst case scenario.

While Grayson and Ambler (1999) explored the “dark side” of client-agency relationships, these research findings confirm the “dark side” from a creative perspective for specific situations and campaigns. Thus, the title of “When Bad is Good” is a fitting description for this surprising research stream. With respect to “a dark side,” it is suggested that it is better to think of strong relationships as “*all* dark”, with only a few “*bright* sides” so that agency-client relationships remain terribly tenuous at best! Please leave the light on and hope that originality and strategy triumph in the dark!

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Part VII

Consumers, Companies, Brands and their Relationships

The Cumulative Effect of Transaction-Specific Satisfaction on Share of Wallet: A Longitudinal Investigation

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1 Introduction

Marketing scholars traditionally regard satisfaction as an important determinant of customer loyalty (Oliver, 1999; 2010). The relevance of the satisfaction-loyalty link to managers is that changes in customers' levels of satisfaction are expected to correspond to changes in customers' share of category spending (i.e., share of wallet, SOW). In fact, Jones and Sasser (1995, p. 94) assert, "the ultimate measure of loyalty, of course, is share of purchases in the category." While this may be an overstatement, since SOW is not as forward looking as other measures of loyalty (Oliver, 1999), it is frequently used by researchers to operationalize loyalty behavior (e.g., Bowman et al., 2000; Bowman and Narayandas, 2004; Brody and Cunningham, 1968; Cunningham, 1956; Tellis, 1988; Wind, 1970).

One of the fundamental tenets of the satisfaction-loyalty relationship is that it requires multiple firm-customer encounters before customer satisfaction can impact customer loyalty. Oliver (1999, p. 34) explains, "For satisfaction to affect loyalty, frequent or cumulative satisfaction is required so that individual satisfaction episodes become aggregated or blended." Specifically, researchers argue that satisfaction with each discrete purchase encounter provides new information to customers in their overall evaluation, and thereby impacts their future buying behavior (Boulding et al., 1993; Jones and Suh, 2000; Parasuraman et al., 1994; Teas, 1993). To date, however, there are no models in the peer-reviewed scientific literature for how customers aggregate their satisfaction with discrete transactions (i.e., transaction-specific satisfaction) and how this aggregated transaction-specific satisfaction influences customers' future SOW. In his seminal paper on consumer loyalty, Oliver (1999, p. 43) specifically points to the need for future research examining the following regarding the relationship between satisfaction and loyalty: "*What is the role of repetition and mere exposure in loyalty in a consumption community?*"

The objective of this research is to provide insight into this topic, specifically by (1) proposing a model relating transaction-specific and cumulative satisfaction, and (2) investigating the role of repetition of post-purchase transactional satisfaction on future SOW. These contributions advance our theoretical understanding of how consumers form a cumulative satisfaction rating.

2 Theoretical background

Oliver (1997, p. 27) defines consumer satisfaction as follows: "Satisfaction is the consumer's fulfillment response. It is a judgment that a product or service feature, or the product or service itself, provided (or is providing) a pleasurable level of consumption-related fulfillment, including levels of under- or over-fulfillment." Consumer satisfaction research can be broadly divided into two groups: 1) transaction-specific, and 2) summary. Transaction-specific satisfaction is a post-choice evaluation of a specific purchase occasion (Anderson et al., 1994; Oliver, 1977; 1980). Summary satisfaction represents the customer's overall evaluation of a product or service provider to date (Oliver, 2010).

Transaction-specific satisfaction is often measured as part of a firm's quality-and/or service-improvement initiatives, and is an explicit requirement for ISO 9001:2000 certification (Vavra, 2002). This is because 1) satisfaction measurement is frequently associated with process improvement, and 2) continuous satisfaction tracking is designed to detect changes in customers' perceptions of service over time.

The vast majority of satisfaction research in the marketing literature, however, has focused on summary satisfaction (Olsen and Johnson, 2003). The fundamental logic behind this emphasis is the widespread belief that summary satisfaction takes transaction-specific satisfaction into account (Jones and Suh, 2000, p. 148). This belief, however, is largely deductive - to date, there is no empirical evidence that equates summary satisfaction as a function of all prior transaction-specific satisfactions. With the exception of Jones and Suh (2000) and Olsen and Johnson (2003), virtually all published research has measured one or the other, but not both. We could find only one academic study (Homburg et al., 2005) that measured the cumulative effect of satisfaction following discrete experiences over time.

Researchers widely accept that the impact of satisfaction on buying behavior is usually not based upon a single encounter, but upon multiple ones (Homburg et al., 2005; Johnson et al., 1995). This belief largely derives from social exchange theory (Adams, 1965; Homans, 1961), which argues that human relationships involve a subjective cost-benefit analysis and comparison of alternatives.

The rationale is that interpersonal interactions are repetitive and develop over time (Olsen and Johnson, 2003). Consequently, researchers argue that satisfaction with past experiences has a strong carry-over effect (e.g., Anderson et al., 1994). For example, high satisfaction based upon multiple prior encounters is believed to moderate more recent dissatisfying or merely satisfying experiences (Bolton, 1998) particularly if consumers believe that a negative encounter is atypical. The consumer's cost-benefit analysis of the entire relationship is still net positive.

We argue that the development of consumer loyalty is also an extension of social exchange theory, i.e., consumer loyalty is the direct result of a customer's perceived positive cumulative cost-benefit analysis of multiple highly satisfactory exchanges with the firm/brand. This explains why an individual remains loyal despite episodes of dissatisfaction (Fletcher, 1993; Hirschman, 1970; Keiningham et al., 2009; Oliver, 2010; Royce, 1908; Van Vugt and Hart, 2004).

Oliver (1999; 2010) argues that satisfaction is the "seed" (1999, p. 42) from which loyalty sprouts. He also makes the longitudinal nature of the satisfaction-loyalty relationship clear, stating, "Maintaining loyalty...generally requires that consumers be able and willing to continue interaction with the brand in some way, usually by repetitive purchasing (2010, p. 424)." As such, the impact of satisfaction with each encounter on customers' subsequent purchasing behavior is thought to be iterative and cumulative (in the sense that new information updates prior perceptions of the firm) (Bolton and Lemon, 1999; Mittal et al., 1999). This implies that cumulative satisfaction can be thought of as a function of prior transaction-specific satisfaction encounters. Hence, it is hypothesized that:

H1: Transaction-specific satisfaction over multiple time periods will have a cumulative, lagged effect on future SOW.

3 Data collection and measurement

Data for this research are drawn from a satisfaction tracking study for a large U.S. specialty retailer. Field dates for the study were August 2007 through April 2009. Customers tend to be occasional (as opposed to frequent) shoppers; the median number of purchases by customers at the retailer is five times per year. The tracking study (from which the survey data used in this investigation is gathered) is designed to collect a representative sample of all customers, including frequent, occasional, and one-time shoppers. Customers receive an invitation printed on their receipts to visit a website and complete a survey measuring satisfaction and SOW. Entry into a sweepstakes is used as an incentive to participate in the survey. Respondents are limited to one response per day, and each

invitation is linked to a specific receipt. Thus, every transaction (except for the rare exception of the second, third, etc. transactions of someone making more than one purchase *on the same day*) has a non-zero probability of being selected for the customer satisfaction survey. There are 48,773 unique individuals who completed surveys during the time frame of the study. Most of our hypotheses require studying how satisfaction develops over time, and we therefore restrict our attention to all customers who have completed 5 or more purchases during the 21-month study period. This group consists of 1,448 customers who completed 10,983 surveys.

The following measures are used in this analysis. *Transactional Satisfaction* is measured using an 11-point numeric scale, where 0 = “completely dissatisfied” and 10 = “completely satisfied.” Respondents were asked, “Thinking of your most recent visit to [retailer], please rate your overall shopping experience.” *Share of wallet* (SOW) is the ratio of the self-reported total household spend on items from the retailer in the past three months divided by the total household spend on items within the category overall. *Summary satisfaction*, measured on a 5-point scale. “What is your overall rating of [retailer]?”

4 Empirical test of hypothesis

This section presents the statistical model for each hypothesis, provides parameter estimates, and summarizes the conclusion. H1 posits that transaction-specific satisfaction has a cumulative lagged effect on future SOW. We estimate a mixed model predicting next-period SOW from cumulative satisfaction, allowing for different customers to have different random intercepts (heterogeneity). We derive the effect of cumulative satisfaction from the estimates of this model, and validate our derived measures by correlating them with a single-item measure of summary satisfaction.

Let x_{it} be the transaction-specific satisfaction rating, and y_{it} be the SOW of customer i measured for transaction t . The following model relates transaction-specific satisfaction at time t to SOW at time $t+1$:

$$y_{i,t+1} = (\alpha + a_i) + (\beta + b_i)x_{it} + \lambda y_{it} + e_{it},$$

where α is the grand intercept and a_i is a random effect with mean 0 and standard deviation σ_a indicating the difference between the grand intercept and the one for customer i , β is the effect of transaction-specific satisfaction on next-period loyalty and b_i is a random effect accounting for customer heterogeneity having mean 0 and standard deviation σ_b , λ is the *carry-over effect* of loyalty, and e_{it} is a normal random variable accounting for “errors” that are not explicitly

included in this model for the sake of parsimony. Naik and Raman (2003) motivate this model. It has a long history of being used to model dynamic effects, especially advertising on sales (e.g., Montgomery and Silk, 1972; Koyck, 1954).

H1 concerns the *cumulative (summary) effect* of satisfaction, rather than *transaction-specific* satisfaction. The cumulative effect of satisfaction can be derived from the above model, which is recursive since $y_{i,t+1}$ is a function of y_{it} . Under the initial condition that the share of wallet prior to any transactions is $y_{i0} = 0$ for all customers, we can derive:

$$y_{i,t+1} = (\alpha + a_i) \sum_{j=0}^t \lambda^j + (\beta + b_i) \sum_{j=0}^t x_{i,j+1} \lambda^{t-j} + \sum_{j=0}^t e_{i,j+1} \lambda^{t-j}.$$

The middle term relates satisfaction with each previous transaction to next period SOW. The effect of satisfaction with the most recent transaction x_{it} on next period SOW is $(\beta + b_i) \lambda^0$, and, averaging over customers, the expected effect is $\beta \lambda^0 = \beta$. The expected effect of satisfaction with the previous transaction ($x_{i,t-1}$) is $\beta \lambda^1$. The expected effect of satisfaction two periods ago ($x_{i,t-2}$) is $\beta \lambda^2$, The *expected cumulative effect* of satisfaction with all previous encounters is a geometric series that approaches $\beta(1-\lambda)$ as the number of transactions becomes large (e.g., see Naik and Raman, 2003, Remark 1):

$$\lim_{t \rightarrow \infty} \sum_{j=0}^t \beta \lambda^j = \frac{\beta}{1-\lambda}.$$

H1 is supported when the ratio $\beta/(1-\lambda) \neq 0$.

Estimated coefficients, using PROC MIXED in SAS, are shown in Table 1. The coefficient for satisfaction is 1.1216 and is different from 0 ($t=7.43$, $P<.0001$) indicating that higher levels of transaction-specific satisfaction are associated with higher levels of future SOW. The variance of the slopes across customers (0.2991) is not significantly different from 0. The effect of previous-period SOW on the next period SOW is 0.2596 and is significantly different from 0 ($t=25.79$, $P<.0001$).

Table 1: Parameter estimates testing H1, relating cumulative satisfaction to future SOW

	Fixed Effects				Random Effects	
	Estimate	Std. error	T value	P value	Variance	Std error
Intercept	38.37	1.424	26.94	<0.0001	196.83**	22.0281
Satisfaction	1.1216	0.1510	7.43	<0.0001	0.2991	0.2382
Prev SOW	0.2596	0.01007	25.79	<.0001		
Error					317.27**	5.6666

The cumulative effect is $1.1216/(1-0.2596) = 1.51$, suggesting that the cumulative effect positive, but is this ratio significantly different from 0? We test this hypothesis by generating 100 bootstrap samples with 5000 customers, estimating the model, and examining the empirical distribution of the ratio $\beta/(1 - \lambda)$. Across the 100 bootstrap samples, the ratio giving the cumulative effect has a mean of 1.4750, a standard deviation of 0.0423, a minimum value of 1.359, fifth percentile of 1.407, 95th percentile of 1.547, and a maximum of 1.578. The empirical distribution does not cover the value 0, and so we reject the null hypothesis that the ratio is 0. H1 is thus supported: there is a cumulative effect.

We attempt to validate our derived measure of cumulative satisfaction by correlating it with a single-item measure. Our model formulates that a consumer's level of cumulative satisfaction as a weighted average of satisfaction with specific service encounters, giving weight $\beta\lambda^0$ to the most recent encounter, weight $\beta\lambda^1$ to the next most recent one, etc. Let $w_j = \beta\lambda^{t-j}$ be the weight given to transaction t . A weighted average estimate of cumulative satisfaction for customer i is given by $\sum_t x_{it}w_t / \sum_t w_t$. We compute this for each customer (using $\beta=1.1216$ and $\lambda=0.2596$ from Table 1) and correlate it with a single-item measure of summary satisfaction typical of what firms use in practice, e.g., "Overall, how satisfied are you with [firm]?" Using all 18,928 observations, the correlation is 0.73927, which is different from 0 ($p<.0001$).¹ Using only the 1,419 observations where customers have made more than 4 purchases gives a correlation of 0.73929 ($p<.0001$). Thus, when consumers are asked to rate their overall satisfaction with a firm, it is plausible that they are averaging satisfaction with their previous service encounters, using weights that decay geometrically so that more recent transactions are given more weight than earlier ones.

5 General discussion and conclusions

The analysis reported here advances the empirical research regarding the intuitive relationship between customer satisfaction and SOW by showing how summary satisfaction is derived from satisfaction with individual encounters. This model makes a theoretical contribution by explaining how consumers aggregate

their experiences with service encounters over time to form an overall rating. In previous work, scholars have suggested that satisfaction with specific encounters is averaged or blended, and this work formalizes these assertions with a statistical model and empirical validation. Cumulative satisfaction is a weighted average of satisfaction with service encounters, with weights decaying geometrically so that more recent encounters receive more weight.

Our findings indicate that both transaction-specific and summary satisfaction have an effect on a customer's share of category spending; specifically, higher levels of either satisfaction significantly correspond to higher share of wallet allocations. Researchers have long maintained that the effect of satisfaction on a customer's buying behaviors is cumulative, but empirical research has overwhelmingly relied upon summary satisfaction measures as proof of concept; in essence, researchers have argued that a single summary satisfaction measure takes all prior transaction-specific satisfaction levels into account. Our findings confirm that generating consistently high levels of transaction-specific customer satisfaction over multiple firm-customer encounters result in significantly higher SOW allocations by customers.

This finding has important implications for researchers and managers. For researchers, this investigation offers new insight into the role repetition of highly satisfying experiences on consumer loyalty (Oliver, 1999). While this research specifically investigated the impact of multiple transaction-specific satisfaction levels on SOW, the satisfaction-SOW relationship is widely recognized in the scientific literature as providing insight into the satisfaction-loyalty relationship (see Van Doorn and Verhoef, 2008). As proposed by Oliver (1997; 1999; 2010) our research indicates that satisfaction has a cumulative effect on customers' loyalty-related behaviors (specifically in the case of this investigation, SOW).

This finding also has important implications for managers. First, they indicate that maximizing a customer's SOW with a firm requires consistently delivering high levels of satisfaction with each experience. Therefore, our research would indicate setting specific operations standards based upon metrics and processes proven to link to high transaction-specific customer satisfaction levels. While this may appear obvious, it is a problem that all of us as consumers have experienced on a frequent basis in our firm-customer interactions. Our finding indicates that the support systems for creating and maintaining high operating standards (i.e., customer-centric process development, deployment, training, and regular monitoring through customer feedback mechanisms and mystery shops) should be considered in light of their potential revenue impact based upon improved customer SOW.

As with all scientific research, there are limitations that need to be considered when evaluating the generalizability of the finding. It is important to note that the transaction-specific satisfaction metric investigated represents a single-item measure. The authors believe this is acceptable, particularly given the research of Bergkvist and Rossiter (2007), which demonstrated that single-item measures achieve the same predictive ability as multi-item measures, provided that the focal construct is concrete and singular in nature. Additionally, the nature of this investigation required that customers must have completed five or more purchases during the 21-month study period. Therefore, the results may only hold for customers with some degree of loyalty. This study utilized data from a business-to-consumer relationship within a single industry. As such, the results cannot be immediately applied to different industries or business-to-business relationships.

Finally, as noted earlier, the findings of this research point to several important and related issues that need to be addressed in future research: what is the relationship over time between transaction-specific satisfaction, summary satisfaction, and SOW; and what are the sequential effects of transaction-specific satisfaction? Another issue requiring further research is the estimation of statistical model used in this paper, which includes both random effects modeling heterogeneity across customers and lagged terms creating a complicated error variance structure that does not conform to the assumption of independence. We have chosen to address customer heterogeneity with a random coefficient model, but new estimation methods should be developed to handle both issues. Therefore, this investigation clearly cannot and should not be considered a comprehensive, definitive study of the dependence of SOW on transaction-specific and summary satisfaction. Nonetheless, we believe that these results present compelling evidence of the role of repetition and the cumulative effect of transaction-specific satisfaction in determining SOW and provide motivation for further investigation in this area.

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The Potential Danger of Negative Free Publicity for the Consumer-Brand Relationship

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1 Introduction

How can free publicity contribute to building high quality consumer-brand relationships or strong brands? This is an important question because building strong brands is the main objective of brand management. Consumers are more willing to receive communication messages from strong brands (Smit et al., 2007); consumers show a tendency to ignore negative communication more if it is related to strong brands (Oliver, 1999), and strong brands generate higher profits than weak brands (e.g. Bendapudi and Berry, 1997; Bendapudi and Leone, 2002; Bhattacharya and Sen, 2003; Blackston, 2000; Morgan and Hunt, 1994; O'Malley and Tynan, 2001; Reichheld, 1996; Winer, 2001). Hence the aim of brand managers should be to establish high quality consumer-brand relationships.

However, little research has been conducted about the effects of free publicity in relation to the development of high quality consumer-brand relationships. Therefore, the overall objective of this research is to provide insight into how free publicity influences the consumer-brand relationship. We investigated the impact of free publicity on TV and free publicity in print in two different studies. In the first study, we investigate the relationship between negative free publicity on TV and consumer-brand relationship quality (BRQ). In the second study, we investigate the impact of positive and negative free publicity in print on BRQ in two stages of the consumer-brand relationship: the initiation stage and the maintenance stage. We first review the literature to give a perspective on this topic before going into the details of the study.

2 Theoretical background

2.1 Consumer-brand relationships

The fundamental characteristics of interpersonal relationships are used to describe consumer-brand relationships (e.g., Fournier, 1994, 1998). These funda-

mental characteristics are interdependence, temporality and perceived commitment (De Wulf et al., 2001; Hendrick and Hendrick, 2000; Hinde, 1997; Rusbult, 1983; Rusbult and Buunk, 1993; Rusbult et al., 1994).

The concept interdependence refers to the influence the brand has on the consumer and vice versa. Consumers and brands are interdependent because the brand fulfills needs for the consumer and the consumer gives his loyalty in return (buys the brand repeatedly).

The concept commitment refers to the wish to continue the relationship. If the consumer perceives the quality of the relationship as high, the probability that he will continue the relationship with the brand increases which should result in repurchases of the brand. The brand relationship quality concept is an important concept because several researchers state that the difference between a strong and a weak brand lies in the level of brand relationship quality (Bendapudi and Leone, 2002; Fournier 1994, 1998). The higher the quality of the consumer-brand relationship, the stronger the brand. Fournier (1994, 1998) conceptualizes consumer-brand relationship quality (BRQ) as a construct with seven facets: (1) intimacy, (2) personal commitment, (3) passionate attachment, (4) love, (5) self-concept connection, (6) nostalgic connection and (7) partner quality (see figure 1) and the bond between the consumer and the brand is the strongest if the relationship is characterized with the existence of high levels of all seven facets.

The concept temporality refers to the duration of the relationship because a relationship is not one single moment in time but it stretches itself over time which means that interpersonal and consumer-brand relationships can develop over time (Dwyer et al., 1987; Levinger, 1980). Furthermore, it is believed that it needs time for consumer brand relationships to develop into relationships which are characterized by high levels of brand relationship quality via several stages (Bendapudi and Leone, 2002; De Wulf et al., 2001; Dwyer et al., 1987). These stages are described in the following sequential stages: initiation, growth, maintenance, deterioration, and dissolution. It is assumed that the brand relationship quality or the strength of the bond between two parties is the highest in the maintenance stage of the relationship and the lowest or non-existent in the initiation stage. From there, it grows until it reaches a certain maximum level in the maintenance stage of the relationship.

As remarked before, it is unclear how the quality of the consumer-brand relationship develops over time and how (negative) free publicity influences that development. The current studies give some insights into these questions.

2.2 *The impact of negative free publicity on TV*

To what extent is negative free publicity on TV harmful for the consumer-brand relationship? In interpersonal relationships, communication is essential for relationship development, every relationship starts with a first good impression of the other party (Hinde, 1997) and for starting interactions between two persons the exchange of information is a necessary condition (Aron et al., 1991).

The content of the message is considered a key element with regard to the impact on relationship quality (Nicholson et al., 2001). Showing that you understand the other party and sending the right messages stimulates the development of the relationship (Barber, 1983; Barnes, 1997) and sending the wrong messages can harm the relationship. Furthermore, if the communication message contains too much information or is negative, the quality of the relationship and as a result the development of the relationship could be harmed (Barber, 1983; Baumeister and Leary, 1995). Other research (Aaker et al., 2004) suggests that transgressions of the consumer-brand relationship can harm the development which implies the possibility that consumers will doubt their next purchase of the brand. We expect the same process to occur in the relationship between consumers and brands. Free publicity communicates a brand message to consumers and influences the quality of the relationship positive or negative, depending on content of the message. This leads to the following hypothesis:

H1: Free publicity via TV with a negative content has in general a negative impact on the quality of the consumer-brand relationship (BRQ) and will result in a lower future buying intention.

2.3 *The impact of negative free publicity in print in different relationship stages*

Is the impact of negative free publicity in print different in different relationship stages? Interpersonal theory suggests that negative communication is especially harmful in early stages of the relationship (Barber, 1983; Baumeister and Leary, 1995). Furthermore, individuals develop cognitive filters in interpersonal relationships in the maintenance phase for negative information with the purpose of maintaining the relationship quality in the relationship (Buunk and Van Yperen, 1991). A similar phenomenon seems to occur among consumers (Oliver, 1999). Consumers are less vulnerable to negative information about brands or information from competing brands if their level of loyalty is high and the relationship is more developed. This suggests that negative free publicity has more impact on BRQ in the initiation stage compared to the maintenance stage. Therefore we hypothesize:

H2: Free publicity with a negative content does influence the initiation stage of the consumer-brand relationship more compared to the maintenance stage of the consumer-brand relationship with regard to BRQ.

3 Negative free publicity on TV study

3.1 Research design

In order to evaluate the effect of negative free publicity, we interviewed 527 viewers of a TV program with a negative message about a brand. We asked these viewers if they had seen the item with the negative brand message. In total 187 viewers reported that they did see the item and 340 viewers reported that they did not see the item (table 1). To evaluate the impact of the negative free publicity, we compared the BRQ for the group respondents who did see the item with the group who did not see the item. To evaluate the impact of BRQ on the future buying intention, we compared the BRQ level with the future buying intention.

Table 1: Research design

<i>Screening</i>	<i>Nr. of viewers of the program</i>	<i>Item seen</i>	<i>Item not seen</i>
N=4200	N=527	N=187	N=340

3.2 Data collection

The viewers of the program were detected by means of the screening of TNS NIPObase which is an access panel consisting out of 200,000 potential Dutch respondents. The participants in the access panel are screened using a variety of research instruments, are selected for studies on a rotating basis, which minimizes participant fatigue, and are rewarded for their participation (Bronner et al., 2003). After the screening, viewers of the program received a questionnaire by means of computer assisted web interviewing (CAWI). Fieldwork was carried out by the market research agency TNS NIPO.

3.3 Content of the negative message

The ‘experimental’ variable was the negative message shown in the TV program. The TV program showed an item about eye tests. In this program, a person was tested by an eye doctor. This person was also tested by an optician from an optician brand. In this test, the measurement by the optician from the optician brand

differed in a negative way from the measurement by the eye doctor and the comments in the TV program stated that the optician test was executed poorly.

3.4 *Dependent variables*

As dependent variable we used brand relationship quality (BRQ). To measure BRQ we used the reduced 8-item BRQ scale of Fournier (1994). In a previous study the scale was translated and combined with the four-item trust scale of Chaudhuri and Holbrook (2001) and used in an online study with ten different brands and a total of 1,972 users of one of the brands (Smit et al., 2004; Tolboom, 2004;). This study reduced the BRQ instrument to a reliable and more practical instrument of 8 items (7-point scale). We applied this reduced BRQ scale to our present study (table 2). To measure future buying intention, we used a future buying intention question (table 3).

Table 2: BRQ measurement

<i>Facets</i>	<i>Items</i>
Passionate attachment	Something would definitely miss in my life when X would not exist anymore
Intimacy	It feels like I know X for a long time
Self connection	X and I have lots in common
Nostalgic connection	X will always reminds me of a certain period in my life
Love	If it is about <category>, X is my most favorite brand
Partner quality	X has always been good to me
Personal commitment	X can always count on me
Trust	I trust X

Table 3: Future buying intention measurement

	<i>Item</i>
Future Buying Intention	To what extent has this item influenced your consideration to visit <brand> for buying spectacles and/or contact lenses?

3.5 *Group characteristics respondents 'item seen' versus 'item not seen'*

Respondents in both groups did not differ significantly with regard to sex and age. However, respondents who did see the item did wear more often spectacles (76% wears spectacles) compared to the group who did not see the item (67% wears spectacles). To check if spectacle wearers differ from non spectacle wearers with regard to BRQ, we compared the overall mean BRQ score for both

groups. The overall BRQ score is computed as the arithmetic mean of the 8-item BRQ scale. The mean BRQ scores did not differ significantly (mean spectacle wearers = 2,70; mean non spectacle wearers = 2,83; oneway ANOVA; $F(1,069)$; $p=.32$).

3.6 Results

We expected that free publicity with a negative content has in general a negative impact on the consumer-brand relationship with regard to BRQ and will result in a lower future buying intention (H1). Overall, the results confirm our expectations (table 4). With respect to BRQ, only the relationship facet *nostalgic connection* is not affected by the negative free publicity when compared to viewers who didn't see the item. All other BRQ aspects are significantly affected. Interesting to see is that the absolute difference scores are highest for the relationship dimensions *love*, *partner quality*, *self connection* and *trust*. Furthermore, a clear relationship exists between the overall BRQ score and future buying intention ($r=.44$, $p<.01$).

Table 4: BRQ differences for item seen or not seen

<i>Relationship facets</i>	<i>Item seen? YES</i>	<i>Item seen? NO</i>	<i>Absolute difference</i>
Passionate attachment	1.98	2.16 *	0.18
Intimacy	2.36	2.75 **	0.39
Self connection	2.81	3.13*	0.32
Nostalgic connection	2.75	3.34**	0.59
Love	2.24	2.72**	0.48
Partner quality	2.35	2.43	0.08
Personal commitment	2.44	2.76*	0.32
Trust	3.20	3.83**	0.63

*Mean scores on 7-point scale (1=totally disagree, 7=totally agree); * significant different average mean BRQ score in the same row between viewers who did see the item versus viewers who did not see the item ($p<.05$); ** significant difference $p<.01$ based on one way ANOVA.

4 Negative free publicity in print study

4.1 Data collection

The study utilizes interviews with users (customers) ($n=617$) of an investment firm brand and non-users (prospects) ($n=546$). Two methods were used to collect the data. For non-users (prospects) computer assisted self interviewing (CASI)

and for users (customers) computer assisted web interviewing (CAWI) was carried out by the market research agency TNS NIPO and the procedure for selection was identical to the previous study. To approach users the investment firm provided a data file with a random selection of email addresses from their own clients. Respondents in both samples shared the same consumer profile and are identical with regard to the demographics age, education, social class, sex and income.

4.2 *Research design*

We used an experiment which was executed with two different target groups (customers and prospects). Customers were assumed to be in the maintenance stage of the relationship and prospects in the initiation stage (e.g., Bendapudi and Berry, 1997; Dowling, 2002; Dwyer et al., 1987). The experimental variable consisted of one positively rated free publicity message suited for relationship building and one negatively rated free publicity message that was not suited for relationship building by means of an evaluation of three media expert judges. The positive condition contained positive information about the financial product performance of the consumer products. The negative condition contained negative information about the financial product performance of the consumer products. In total we investigated 4 independent samples.

4.3 *Dependent variable*

As dependent variable we used brand relationship quality (BRQ). To measure BRQ we used the reduced 39-item BRQ scale of Fournier (1994) (see table 1).

4.4 *Results*

We expected that free publicity with a negative content does influence the initiation stage of the consumer-brand relationship more compared to the maintenance stage of the consumer-brand relationship with regard to BRQ (H2).

The results confirm our expectations. The negative free publicity condition affected the initiation stage of the relationship more compared with the maintenance stage if we compare the absolute differences between BRQ means in the initiation stage versus the maintenance stage (see table 5 and 6).

Table 5: Differences in BRQ for the initiation stage (prospects)

<i>BRQ</i>	<i>Free publicity with positive content</i>	<i>Free publicity with negative content</i>	<i>Absolute difference BRQ means</i>
Passionate attachment	1.98	1.89	.09
Intimacy	2.73	2.42	.31
Self connection	3.33	3.10	.23
Nostalgic connection	4.00	4.00	.00
Love	2.32	2.30	.02
Partner quality	2.52	2.43	.09
Personal commitment	2.95	2.50*	.45
Trust	4.50	4.30	.20

Mean scores on 7-point scale (1=totally disagree, 7=totally agree); * means a significant different average score in the same row between the positive and the negative condition ($p < .05$) based on ANOVA with post hoc tests (LSD).

Table 6: Differences in BRQ for the maintenance stage (customers)

<i>BRQ</i>	<i>Free publicity with positive content</i>	<i>Free publicity with negative content</i>	<i>Absolute difference BRQ means</i>
Passionate attachment	2.64	2.62	.02
Intimacy	3.89	3.72	.17
Self connection	4.46	4.58	.12
Nostalgic connection	4.47	4.42	.05
Love	3.23	3.33	.10
Partner quality	3.18	3.22	.04
Personal commitment	4.53	4.30	.23
Trust	5.45	5.38	.07

Mean scores on 7-point scale (1=totally disagree, 7=totally agree); * means a significant different average score in the same row between the positive and the negative condition ($p < .05$) based on ANOVA with post hoc tests (LSD).

5 Discussion

First of all, the results suggest that negative free publicity, both in print and on TV, do harm the consumer-brand relationships. Interesting to see is that the relationship dimensions *love*, *partner quality*, *self connection* and *trust* are most affected by the negative free publicity on TV. This suggests that consumers who did see the negative message feel less *love* for the brand. The brand as a partner in the relationship is also more doubted. Furthermore, consumers feel less connected with the brand in the sense that they see less similarities which suggests that consumers are less willing to identify with a brand as a partner of which is badly spoken. And finally, the brand is less trusted which is maybe the most harmful consequence of the negative free publicity because of the importance of trust in the development and continuation of relationships (De Wulf et al., 2001; Hendrick and Hendrick, 2000). Furthermore, the relationship (correlation) BRQ and future buying intentions suggest indeed that the negative free publicity - which we call a negative relationship event - is a major threat for the continuation of the consumer-brand relationship. With regard to the impact of negative free publicity in print in different relationship stages, the results suggest that it is most harmful in the initiation stage of the relationship.

The question is of it is possible for the brand manager to repair the damage by means of countering the arguments given in the TV program and in print. The results suggest that counter argumentation could be a successful strategy because the positive free publicity condition resulted in most cases in higher BRQ scores. Furthermore, earlier research shows that messages with a positive content have a positive influence (Barnes, 1997). Therefore, a possible solution for the brand manager could be to develop communication which stresses the expertise of the brand in various media in order to rebuild the trust in the brand. When the brand manager has to prioritize in marketing activities, it would make sense to start with rebuilding trust because this relationship dimension was most harmed.

To conclude, the effect of free publicity on the quality of the consumer-brand relationship should not be underestimated. The negative free publicity message harms in this research especially the relationship dimensions *love*, *partner quality*, *self connection* and *trust* which can result in relationship deterioration and can prevent further development. Because brand managers can't control free publicity they should think beforehand about counter communication strategies when a negative free publicity occurs in the media.

One of the limitations of this study is the examination of only one product category and the fact that the effects of the negative free publicity message is not measured in different relationship stage. It would be interesting to see if consumers who have already a strong consumer-brand relationship are less affected

by the negative message which is suggested by earlier research (e.g., Oliver, 1999).

Another limitation of this study is that we had to use a screening to find viewers of the program. This meant that we did not have control over the characteristics of both groups such as background variables sex, age or wearing spectacles or not. Fortunately, both groups were comparable with regard to sex and age. The group respondents who did see the item contained more spectacle wearers compared to the group who did not see the item. However, the mean BRQ scores did not differ significantly between spectacle wearers and non spectacle wearers. This is important because it means that BRQ differences between both groups cannot be caused by the fact that a respondent is wearing a spectacle or not.

The advantage of the study is the use of a real live situation (impact of negative free publicity in a TV program) and the use of 'real consumers' for the research and not students. It comes closer to everyday reality compared to controlled experiments in a laboratory environment which increases the reliability of the results.

Further research is needed to add more different brands to our database, and also to vary more on different media or other marketing strategies with respect to the influence on the several stages in the development of the consumer-brand relationship.

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Why Organizations Systematically Engage in Employer Branding: A Conceptual Framework

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1 Introduction

'An organization has two important key factors: its brand and its employees. Both are not imitable and basically unique'. This quote by one of the interviewees in our study described in this paper (the CEO of a well-known international organization) clearly states the importance of organizational focus being on employees in order to succeed in a complex and fast moving environment. In recent years employer branding has significantly grown in relevance. Especially practitioners research on the topic of employer branding has received increasing attention (e.g., Andreassen and Lanseng, 2010; Edwards, 2010). Next to an expanding number of practitioners literature, different studies in the field of employer branding have been conducted, like for example the Q12 Workplace Survey (Gallup). The major task of the employer brand is to attract and retain superior employees (Berthon et al., 2005). With regard to the frequently cited 'war for talent' (e.g., Ewing et al., 2002; Lievens and Highhouse, 2003; Moroko and Uncles, 2008) a strong employer brand is seen essential to become an 'employer of choice' to attract prospective and retain existing employees (Martin et al., 2005). Especially inexperienced job seekers may rely upon the employer's brand image as making a comparison based on job and company attributes can be difficult for them and furthermore they are not familiar with all workplace attributes (Agrawal and Swaroop, 2007). Indeed not only inexperienced job seekers have to manage with incomplete information. In fact, all employees have to accept a certain amount of missing information due to the fact that the complete assessment of an employer is not possible prior to employment with the organization (Moroko and Uncles, 2008). A strong employer brand can help to attract prospective and retain existing employees. However, even though the benefits and the importance of branding and brand building in the labor market have been discussed and acknowledged by many authors (e.g., Agrawal and Swaroop, 2007; Andreassen and Lanseng, 2010; Collins and Stevens, 2002), little is known regarding the factors that drive employer branding activities in organizations. Hence this paper focuses on the following research question to extend the research area of employer branding and to identify insights which have not yet been empirically examined.

Research question: What drives organizations to systematically engage in employer branding?

The paper addresses this research question by conducting semi-structured interviews with ten successful organizations and discussing the research results with two consultancies in the area of employer branding. Based on the findings of this exploratory research, a conceptual model of the drivers of employer branding from the organizations' perspective is proposed.

2 Employer branding

Employer branding is based on the assumption that human capital is assigned as a strategic resource (Barney, 1991). The term 'employer brand' was first used in academic literature by Ambler and Barrow (1996: 8) who defined the employer brand as *'the package of functional, economic and psychological benefits provided by employment, and identified with the employing company'*. Backhaus and Tikoo (2004: 502) have already focused on the differentiation aspect by stating that the employer brand *'suggests the differentiation of a firms' characteristics as an employer from those of its competitors. The employment brand highlights the unique aspects of the firm's employment offerings or environment.'* With focus on the target group, employer branding furthermore *'is a targeted, long-term strategy to manage the awareness and perceptions of employees, potential employees, and related stakeholders with regards to a particular firm'* (Sullivan, 2004). This definition includes two important aspects: Firstly, employer branding has to be a long-term strategy and secondly its target group is not limited to employees, rather it includes prospective employees and other stakeholders such as customers or public bodies. While previous definitions of the employer brand focused predominantly on employment offerings, today employer branding extends far beyond regular human resource management and recruiting.

Employer branding can be described as an interdisciplinary approach targeting the differentiation of an employer from its competitors on the labor market. According to Berry and Parasuraman (1991) the offered employment should attract, develop and motivate prospective and existing employees who are the target group of employer branding. Similar to customers who have difficulties cognitively comparing products or services on key functional attributes (Cobb-Walgren et al., 1995), it is especially prospective employees who cannot easily compare employers. Hence the branding of products or services as well as employers is used to support evaluation by the target group, as the perceived brand image allows for the comparison of brands and personal requirements (Keller, 1993). In accordance with marketing theory (Reeves, 1961), the creation

of a brand should lead the company to a 'unique selling proposition' to stand out from its competitors (Backhaus and Tikoo, 2004). The strategic development of a brand is traditionally rooted in marketing disciplines and thus the topic of employer branding was first discussed by marketing academics (Martin et al., 2005). Drawing parallels to broader branding literature, Davies (2008) for example transferred four main benefits of a brand to the sphere of employer branding. Therefore, the ability to differentiate, the creation of loyalty, the satisfaction and development of an emotional attachment can be provided by an employer brand. It can be argued that these benefits are also provided by the corporate brand and although there is some similarity between the corporate brand and the employer brand, the latter exclusively considers the organization in the role of an employer and is therefore very employment specific (Backhaus and Tikoo, 2004). In contrast, the corporate brand addresses multiple stakeholders other than employees (Hatch and Schultz, 2003). Nevertheless Gregory (2007) identified employees as a stakeholder category with a high level of power and interest in an organization. Furthermore, employee actions can strongly impact an organization. According to Roper and Davies (2007) various stakeholders can hold differing opinions regarding the same corporate brand and for that reason they suggest that each stakeholder group should be communicated to in different ways according to their needs. In keeping with this stakeholder specific approach and the important role of employees as stakeholders, it can be argued that a separate employer brand primarily focusing on the target group of prospective and existing employees is essential. Although the benefits and importance of branding and brand building in the labor market have been discussed by many authors (e.g., Agrawal and Swaroop, 2007; Andreassen and Lanseng, 2010; Collins and Stevens, 2002; Davies, 2008) little empirical research has studied the employer brand itself.

3 Research methodology

An exploratory study with semi-structured in-depths interviews with organizations from different industries was carried out. After screening and evaluating the relevant literature on employer branding, a guideline questionnaire was developed in German and English. The questionnaire included questions to reflect the following topics: current relevance of employer branding within the industry sector and the organization, development and creation of the employer brand, external aspects of the employer brand (e.g., attraction of prospective employees), the importance of person-job-fit and person-organization-fit, problems and key success factors of employer branding and finally a personal estimation of the future development of employer branding. The selection of the organizations was based on Holman's (1980) criteria of visibility, variability and personality. According to Andreassen and Lanseng (2010), visibility represents general awareness in the population, variability refers to different industry sectors and

personality describes the perceived images of the organizations. Furthermore, the cross-sectional analysis should cover different recruitment conditions and constraints due to different labor market conditions (Windolf, 1986). In the end, ten well known, internationally operating organizations participated in the study (table 1 provides an overview of the organizations). All organizations differ in their industry, ranging from the food and beverage industry to oil and power to software and the consulting industry. Additionally, the organizations vary in size. The number of employees ranges from 300 to 160,000 worldwide and the turnover varied between € 80 million and € 23,200 million.

Table 1: Participating organizations

<i>Organization</i>	<i>Employees worldwide</i>	<i>Turnover in million 2009</i>
Beverage industry	301	€ 102
Food industry	25,000	€ 1,800
Tobacco industry	25,000	\$ 9,600
Electronic industry	116,000	€ 23,200
Oil industry	34,000	€ 17,920
Power industry	1,400	€ 1,200
Paper industry	31,000	€ 4,100
Hardware industry	160,000	\$ 30,900
Software industry	48,000	€ 10,700
Consulting industry	400	€ 84,3

The interviews were conducted with the persons actively involved in employer branding processes on national and international levels. The interviewees varied in their position between Employer Brand Manager, Director and/or Manager of Human Resources and General Manager. The interviews were carried out between July and October 2010 with participants in Austria, Germany, Switzerland and Malaysia. All interviews were personal interviews, seven were face-to-face, and three interviews were conducted via phone. The duration of the interviews varied between forty-five and one hundred and twenty minutes. The interviews were recorded and transcribed verbatim. Data analyses followed qualitative research guidelines (Spiggle, 1994). The interviews were analyzed using a qualitative software package called ATLAS.ti. First, after reviewing each interview, global themes were identified. Subsequently the data was categorized in

two different ways. On the one hand codes were identified by reading each interview and abstracting semantically common statements and on the other hand the function of automatic coding based on the coherent meaning of keywords was used. Coding was furthermore accompanied by writing more than 50 memos (Miles and Huberman, 1994) regarding important aspects of the interviews. The resulting more than 1,000 quotations were allocated to a total set of 92 categories. In a next step, the previously identified categories were brought together and abstracted in more general classes. After that, all affected quotations were reviewed again and the identified classes were strategically compared. Based on this comparison the dimensions were identified and the conceptual framework was constructed. To validate the identified drivers the research results were discussed in two separate meetings with representatives of the Great Place to Work® Institute Austria (www.greatplacetowork.at) as well as the Deutsche Employer Branding Akademie (www.employerbranding.org). Both discussions took place in August 2011. Based on discussion results the framework was finalized.

4 Findings and interpretations

The identified drivers for the launch of an employer brand can in general be divided into organization-related and environmental drivers.

4.1 Organization-related drivers

Organization-related drivers consist of five dimensions: lack of differentiation, lack of attractiveness, special requirements, organizational development and expectations for the future. According to Lievens and Highhouse (2003), many organizations do not differ in terms of job and organizational attributes. This **lack of differentiation** was clearly confirmed by addressing the importance of answering the following questions in the first step of the development of an employer brand: *‘What sets the organization apart from its competitors in terms of human resources? What does the organization want to communicate internally and externally? What are the organization’s unique aspects and how does the organization want to position itself within the labor market (high level organization)’¹*

¹ Excerpts are followed by the employer branding level of the organization to which the interviewee belongs. Levels were identified based on interview data and secondary data. On the one hand the evaluation is based on the self-esteem of the interviewees. Additionally, high-level organizations show strong organizational anchoring of the employer brand with clearly demarcated responsibilities (e.g., employer brand managers). On the other hand the level of external communication of the employer brand (e.g., homepage, advertisements) was remarkably higher in high-level organizations. Low-level organizations in contrast, handle employer branding topics in terms of projects

Furthermore it was explicitly stated that the relevance of employer branding is increasing due to the rising importance of organizations' differentiation and recall value to achieve an attractive positioning in a highly competitive labor market. *'These days the topic of employer branding is gaining in importance because the whole industry is moving in the direction of employer branding. The differentiability and the recognition value of every organization have to become sharpened, regardless of whether you are a medium or large organization (high level organization).'*'

The second important organization-related driver is a ***lack of attractiveness*** to prospective and existing employees. Employer attractiveness is an important concept to attract employees with superior skills in order to achieve a competitive advantage (Berthon et al., 2005). Looking at employer attractiveness in more detail, five factors emerged which negatively influence employer attractiveness. Firstly, legal regulations can influence an organization's attractiveness. The interviewees especially referred to concrete constraints regarding the recruitment (e.g. the ban on advertising in the tobacco or pharmaceutical industries). *'We have more regulation than other organizations. We are not allowed to use our products in our communication, which usually increases the attractiveness of an organization as an employer (high level organization).'*'

Secondly, branding was identified as a relevant factor. The importance of corporate and/or product branding was highlighted in all interviews. Organizations without strong product brands were likely to be on a higher level of employer branding according to their need to compensate for a lack of attractiveness by offering special employer branding activities. Interviewees agreed that strong product and/or corporate brands are still primary attractiveness factors for employees. This is supported by several practitioners' surveys where the top rankings were achieved by organizations with strong product or corporate brands. As two of the interviewed organizations are well-established organizations with strong brands in the consumer goods industry, the above-mentioned statement can be confirmed. Both organizations approved their brand's attracting prospective and retaining existing employees through the identification of the target group with the brands and products of the organization. Furthermore they explained that employer branding within their industries had not yet reached equivalent popularity when compared to other industries. This results among other things from the high level of interest which, for example, is reflected in exorbitant numbers of applications. Thus the attractiveness achieved by organizational brands and products tends to decrease the importance of employer branding. *'Successful product brands are very important for the employer brand as they strongly support it. If the product brand is successful, the employer*

within the HR-Departments, don't have clear responsibilities and do not communicate their employer brand externally.

brand is successful as well, as you can see for example with computer brands. Our case is very different. We don't get a lot of support from our product brands. ... Hence we don't use our product brands in our communication (high level organization).'

Thirdly, organizations with attractive and high-quality products are perceived to be more attractive than others. Similar to the findings of Turban and Greening (1996), interviewees stated consistently that corporate reputation and employer attractiveness are closely related to product quality. Hence business-to-business, service and low-quality product organizations have to compensate for this missing factor of attractiveness. In accordance with the results of product brand influence, five interviewees explicitly underlined the difference between product and service companies. Service companies, which offer abstract and complex products, have to compete with consumer good companies, which have a high level of product awareness and identification. As consumer good companies seem to have a natural attractiveness for prospective and existing employees, service companies feel increased pressure and hence are likely to achieve a higher level of employer branding. *'If you do have a high-value product like e.g. a fancy car, posh clothes or other attractive consumer goods people are more likely to be satisfied and to identify with the product. I think in that case it is easier to be perceived as an attractive employer. For a bank, a law office or a consultancy this is much more difficult (high level organization).'*

Fourthly, the degree of internationality of an organization can influence its attractiveness on the labor market. Thus organizations can achieve attractiveness though the possibility of an international working environment. Especially international and global players can provide attractive benefits to their employees, like for example international careers and attractive development offers. Therefore the establishment of an internationally successful employer brand was noted to be the focus of employer branding strategies. *'We aren't a global player, we are an international player. Hence we have to face disadvantages for example in terms of a global job rotation. Our biggest competitor can offer a job in every country but we are limited on our countries (high level organization).'*

Fifthly, image impairments and deficient awareness can intensify the lack of attractiveness. Working for a well-respected organization and participating in the success of the organization can make employees proud and increase their sense of self-worth (Smidts et al., 2001), but on the other hand employees are also affected by a negative external image (Dutton et al., 1994). As mentioned above organizations known for their products or brands have a 'natural' attractiveness for employees. Hence organizations with low awareness need employer branding to compete in the labor market. Furthermore a 'bad' or 'dirty' industry image, like e.g., in the tobacco or oil industry, leads to a higher level of employer brand-

ing, as image impairments drive the development of the employer brand. Both factors emerged from the study. *'Why do people send us applications? Our brand is well known, generally perceived as likeable and nearly everybody had already gotten to know our products several times in their lives. We have a penetration rate of 89%, which means that 89% of Austrian households use at least one of our products per year. If you consider this, the probability that an applicant knows one of your products is very high (low level organization).'*

The third organization-related driver that was identified is **special requirements**. Organizations which have special requirements and therefore address a narrow target group of employees (e.g., technical experts) underlined the importance of employer branding. Experts in specialized fields are rare and the affected organizations have already implemented selective initiatives to attract and satisfy this target group. *'For many organizations with a high level of specialization - especially in the engineering sector - incredible problems in terms of recruiting will occur in the future. Hence employer branding will automatically gain in importance everywhere (high level organization).'*

Furthermore **organizational development** has been identified as an influence on the development of an employer brand. Organization development in this sense refers to the growth and expansion of an organization. Two interviewees pointed out that organizational growth has been the main driver that implements employer branding strategies within the organization as a higher labor demand should not reduce the quality of human resource capital. As a special form of organizational growth, three out of ten interviewees mentioned the organization's expansion therewith increasing internationality as a main driver. It was discussed that organizations with a high level of awareness and attractiveness in the originating country tend to have a lower domestic priority regarding employer branding. With the expansion to other countries where the organization might have less or little awareness of it, employer branding increases in importance. Furthermore, working in an international environment requires a higher qualification level for employees. *'We started with employer branding about two and a half years ago. At that time there was a wrap-up and we had to hire about 100,000 employees. So at that time we really needed employer branding to attract talents (high level organization).'*

The last organization-related driver is **future expectations**. Organizations who expect a future intensification of the battle for highly qualified employees emphasized the importance of employer brand development. Competitive pressure was also mentioned in this context. Those organizations who expect their competitors to further develop their employer brand attach more importance to the topic. Future expectations can also refer to legal regulations which have already been mentioned above. Industries which expect further legal regulation

tend to take preventive steps to position themselves as attractive employers on the labor market. In addition, expectations concerning the advancement of globalization in the labor market (described in the next paragraph) can drive the development of the employer brand. *'In my opinion employer branding will be increasing in importance in the future. I am sure that it will increase in importance. ... Speaking of competitors within the industry, it will also be the same picture: an increase of effort is unavoidable, as the population of appropriate graduates, hot-shots or talents is decreasing. ... Talent management is a very important success factor and ... this can only be done if you have a strong employer brand in the background (high level organization).'*

4.2 Environmental drivers

In academic literature it has already been discussed that macroeconomic and institutional environments influence employment systems (e.g., Whitfield and Poole, 1997). The final framework consists of the following four environmental drivers: competitive pressure, global 'war for talent', shortage of highly qualified people and legal requirements. Starting with **competitive pressure**, a differentiation between competitive pressure within an industry sector and in the overall economy can be made. Within an industry sector that is on a lower level of employer branding, every little step into the direction of employer branding can create competitive advantage on the labor market. Therefore, especially in those industry sectors, competition can be a very strong driver. For industry sectors that have already achieved a higher level of employer branding, like for example consulting, the pressure of organizations outside the industry is increasing. For that reason it was mentioned that more and more industrial organizations are discovering the advantages of employer branding and can therefore compete cross-industry for the 'best' employees. As a result, further improvement and differentiation of the employer brand have to be a priority in order to achieve a unique position on the labor market. *'We have to face the situation that at this point industrial concerns also provide attractive offers, especially for graduates and young professionals. Therefore the employer attractiveness of consultancies regarding personnel development, career advancement, remuneration, internationality, the possibility of business trips, et cetera, is perceived less strong than in the past. Quite on the contrary, industrial concerns have become a serious competitor once again, especially with graduates (high level organization).'*

Furthermore, the growing 'war for talent' was identified as becoming increasingly global. The **globalization of the 'war for talent'** is traceable to the increase of two factors: global competition and the internationalization of employees. The globalization of organizations affects labor markets outside the domestic market. Global players with strong employer branding in the domestic

market easily transfer their employer brand to all other markets. Therefore the best-qualified people all over the world can be attracted. In this context, the Asian area was specifically mentioned, which - according to an interviewee - has already achieved a very high level of employer branding. Due to this development, organizations that want to compete with global players, and specifically with Asian organizations, have to improve their employer brand in terms of professionalism and differentiation. *'If you take a look at the global tendencies, for example the Asian area. It is impressive what has already been done in the area of employer branding. This is going to be a close fight. The 'war for talent' has already started and it will for sure intensify in the future (medium level organization).'*' The second aspect refers to the internationalization of employees. As another result of globalization, employees tend to widen their job search on an international basis. Especially Europeanization simplifies employment within member states. Thus highly qualified people have a greater variety of prospective employers. Certainly this tendency also positively affects the labor market as many internationally operating organizations are already presenting job offers on an international basis. In terms of employer branding this shift from a national to an international or even global labor market has to be considered when identifying the target group. *'We always make our job advertisements for young professionals (authors' amendment) on an international level, so we are talking about several countries (medium level organization).'*'

The third dimension refers to the **shortage of highly qualified employees**, which has also been addressed in academic literature (e.g., Mahroum, 2000). According to the findings of the interviews, this shortage divides the target group of employer branding into engineers, graduates and professionals. *'We don't want to attract the entire population and we are not interested in all of them but particularly in those people who can be successful in our organization and who can be satisfied with this employee value proposition that we can offer them. So, it's our target to create an instrument which will work only for those people who we really need (high level organization).'*' It emerged from the interviews that two of three organizations with a technical background have already been driven to work on their employer branding. Furthermore the interviewees confirmed the same tendency for their competitors. This result is also supported by the literature where engineers have been identified as a part of the target group (Burmann and Zeplin, 2005; Turban and Greening, 1996), although their importance has been underestimated to date. *'Like all organizations we suffer from a shortage of engineers. This ranges from electricians, mechanics, mechatronic engineers, instrument engineers to petroleum engineers (high level organization).'*' The second group – graduates – was mentioned in all interviews as a target group of employer branding but in reference to the interviews the technical organizations focus more strongly on engineers. Moreover the significant importance of graduates in knowledge-intense organizations, like for example in

service organizations or consulting, was identified. In comparing this to academic literature, the target group of graduates can also be found (e.g., Berthon et al., 2005; Ewing et al., 2002). But the interviewed practitioners do not focus on graduates in general; their target is to attract the ‘best’ graduates with outstanding qualifications. *‘Employer branding is very important if an organization has the goal of addressing the best 10% of graduates per year and furthermore find the right ones, who personally and professional fit to the organization (high level organization).’* The last group that was mentioned in the interviews is made up of professionals, who can be defined as graduates with several years of working experience. Four out of ten interviewees underlined the importance of attracting (young) professionals whereby one identified professionals as the main target group of the organization. *‘Our main employer branding target group is young professionals and higher (medium level organization).’*

According to the interviewees the shortage of highly qualified employees is driven by three factors: demographic changes, migration and immigration policy and educational limits. According to the demographic changes, especially the aging of the population was addressed. One organization, which is on a very high level of employer branding, explicitly noted that the younger generation is shrinking. In addition the same number of organizations is battling for a smaller number of people and this smaller number of people has to get the same job done. In this context the interviewee moreover criticized the local immigration policy as this is – in her eyes – the only solution to face the lack of qualified employees. On the other hand migration also impacts the employee-shortage. With regard to factors such as the internationalization of employees, increasing labor mobility, rising globalization and Europeanization, prospective employees are likely to choose attractive employers outside their home country which negatively affects the domestic labor market. As migration and immigration have gained importance over recent years, many academics have studied these topics and support the above-mentioned findings (e.g., Mahroum, 2000). The last factor refers especially to engineers. Interviewees stated that the amount of domestic education is limited in specific fields (e.g., mathematics, physics, information technology). As a result, labor demand in these specific areas is higher than labor supply and this also drives the development of the employer brand.

The last environmental driver is **legal requirements**. As already discussed above, legal requirements can directly influence organizations by reducing the attractiveness of an employer (see organization-related drivers). Regardless of the organization-internal impact, legal requirements are enacted outside an organization and can therefore not be influenced. Especially in strongly regulated industries like, e.g., the ban on advertising in the tobacco industry, legal regulations can play an important role. Those industries are likely to be more driven to build an employer brand than non-regulated industries. *‘We have more regula-*

tion than other organizations. We are not allowed to use our products in our communication, which usually increases the attractiveness of an organization as an employer. ... We have numerous restrictions in most of our countries. This is a big challenge for common Marketing activities (high level organization).'

4.3 Validation of results

To validate the identified drivers the research results were discussed with two well-established consultancies in the area of employer branding. The representatives of the Great Place to Work® Institute Austria confirmed the identified drivers and once again underlined the importance of employer branding in organizations with a technical background. Furthermore the problem of a changing corporate name (e.g., due to mergers and acquisitions) was mentioned, which can negatively influence an organizations' awareness. The second discussion was hold with the Deutsche Employer Branding Akademie and as a result of this discussion we derived the final framework, shown in figure 1.

The importance of the environmental and organization-related drivers was evaluated differently by our discussion partners. As the Deutsche Employer Branding Akademie supports organizations in the development and implementation of employer brands they were able to confirm that both levels drive employer branding. Nevertheless they clearly stated that employer branding is usually initiated on an organizational level. According to their experience organizations are aware of the environmental drivers but their impact can be evaluated as an indirect one. Hence environmental drivers enforce the impact of organization-related drivers but do not originate themselves the implementation of employer branding. Therefore the final framework shows two different layers, whereas the environmental level surrounds and influences the organizational level. Another result of the discussion was the replacement of the organization-related driver ***lack of differentiation*** by ***identity problems***. According to our discussion partners, organizations face a lack of differentiation if they have a lack of identity.

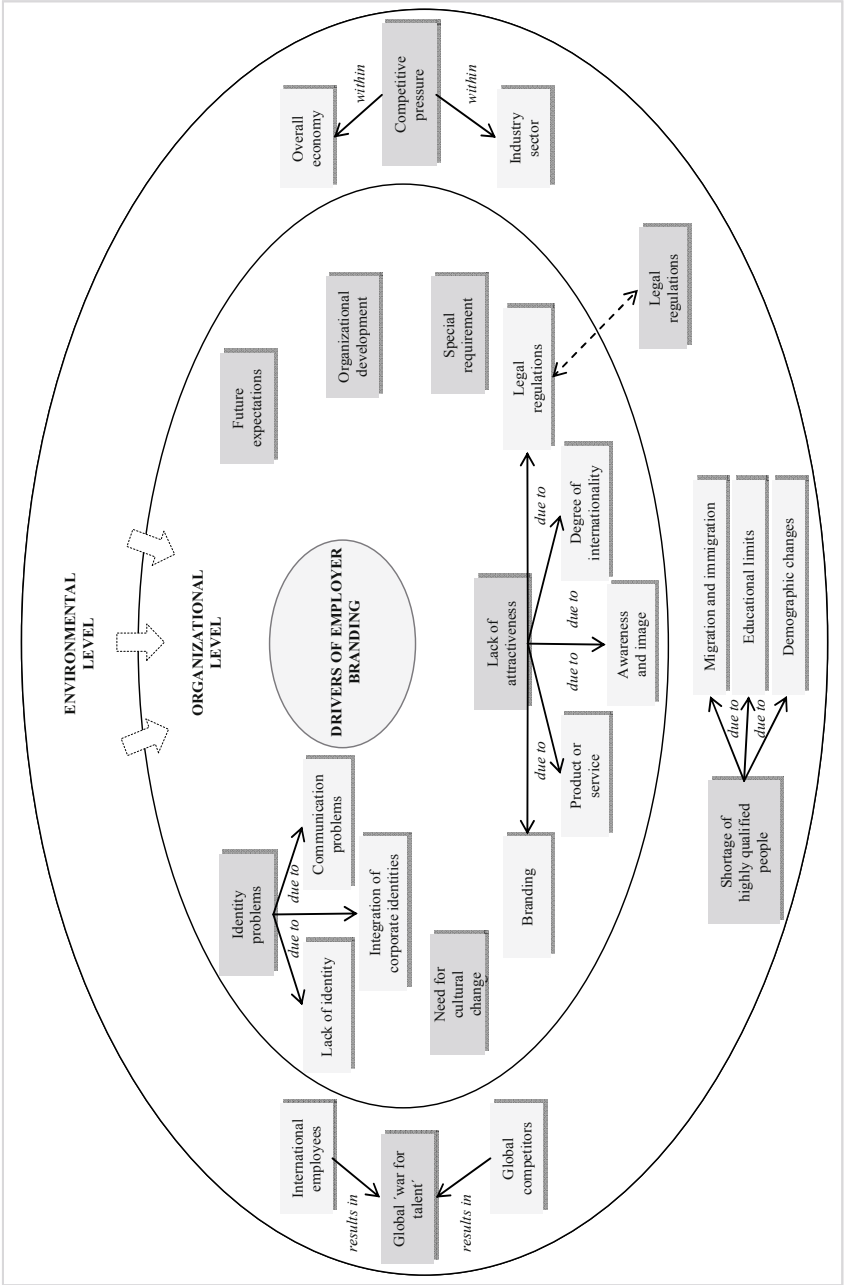


Figure 1: Drivers of employer branding

According to the CEO of the Deutsche Employer Branding Akademie, organizations need to know who they are to further be able to differentiate themselves on the labor market. Other organizations indeed have an identity, however they are unable to translate and communicate it for their target groups. Furthermore the integration or corporate identities in mergers and acquisitions can cause strong identity problems. Hence those three sub-drivers, the lack of identity, the integration of corporate identities and communication problems, form the replacing driver identity problems. Last but not least, the framework is completed by adding a final organization-related driver. The ***need for cultural change*** was argued to strongly drive employer branding. Thus organizations initiate employer branding in case they achieve a cultural change within the organizations. Especially organizations that have a powerful desire for change feel the strong need for employer branding e.g., if the current staff does not fit the identity of the organization or in terms of mergers and acquisitions. For this reason this driver was included in the final framework.

5 Conclusion

With this paper we aim to contribute to the understanding of employer branding by providing a conceptual framework of drivers of employer branding from the organizations' point of view. The rising importance of employer branding stems from different drivers which do not affect all industry sectors and organizations to the same extent. Drivers are divided into organization-related and environmental drivers. On the organizational side we identified a lack of attractiveness on the labor market, special requirements of the organization towards their employees, organizational development in terms of growth and expansion, future expectations of the management, identity problems and finally the need to change as drivers of employer branding. Furthermore environmental developments can raise the necessity of the development of an employer brand. Four environmental drivers were identified which indirectly drive organizations to implement employer branding by influencing the organizational level. Environmental drivers can create the need for employer branding in case the drivers meet a weakness of the organization. Hence environmental drivers acquire importance on the organizational level. The identified environmental drivers are competitive pressure within the industry as well as the overall economy, the globalization of the 'war for talent', a shortage of highly qualified employees within the target group and legal regulations. In addition, study results suggested widening the target group of employer branding activities from graduates to engineers and professionals, although the concrete focus varies along the industry sectors.

With regard to these results it can be confirmed that the importance of employer branding varies between industry sectors (see also Cable and Graham, 2000) and/or organizations, although a general increase can be observed. The developed framework should help managers to assess their current and future organizational need of employer branding. As the framework includes an internal and external perspective, the assessment requires high management knowledge in terms of internal requirements, the industry sector as well as the overall industry. Moreover the general distinction between organization-related and environmental drivers clearly demonstrates that managers also have to keep an eye on their environment as well as internal developments. Hence changes of the drivers, not only within an organization but also in its environment, have to be monitored, especially if they could meet a weakness of the organization. Doing this, the identified framework can act as an early-warning system for the implementation of employer branding initiatives. Another important aspect is the knowledge that drivers of employer branding occur in combination. Therefore drivers cannot be evaluated separately. Especially environmental drivers, which have an indirect impact on the development of employer branding, have to be evaluated with regards to the organizational level.

The constructed framework establishes a basis for further research. Hence it would be interesting to collect data from additional organizations. Thus further studies could enlarge the current sample size by analyzing more industries not included in this study. Furthermore it would be interesting to deepen the analysis in other countries and especially in Asia, where employer branding has achieved much attention over the recent years. Moreover the current study cannot provide quantitative statements regarding the strength of the drivers and the relationship between the drivers. In contrast, the validation of such statements requires a quantitative approach, which would be interesting to study in future research.

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From CM to CRM to CN²: A Research Agenda for the Marketing Communications Transition

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1 Introduction

Marketing, and particularly marketing communication (marcom), has experienced dramatic transitions over the last 60 years. From the dependency on mass media to the development of data-based systems, to today's digitally-driven, interactive approaches, marcom has evolved based on new approaches and methodologies that were not even imagined six decades ago. The evolution has been driven by technological innovations (Achrol, 1991), social and political developments (Thorson and Moore, 1996) and economic shifts that have occurred around the world (Vargo and Lusch, 2004).

IBM recently conducted the 2011 Global CMO (Chief Marketing Officers) Study (IBM, 2011), consisting of face-to-face, hour-long interviews with more than 1,700 CMOs from 64 countries and 19 industries ranging from B2B to consumer products to government. CMOs were asked to describe their company's marketing activities, challenges and opportunities. This survey characterizes the global state of marketing today. In the study, one of the questions was "Which of the following market factors will have the most impact on your marketing organization over the next 3 to 5 years?" The six most highly ranked areas were, "customer collaboration and influence," "growth of channel and device choices," "social media," "ROI and accountability," "decreasing brand loyalty," and the "data explosion." This, we believe, reflects the challenges marketing and marcom managers face today and their needs for the future.

In this paper, we outline, in broad strokes, the transition that has occurred in marcom in three phases, based on observable marketplace changes (Kitchen and Schultz 2009). We explain and illustrate why the changes occurred and the impact they have had on how marcom is researched, developed and implemented (Schultz et al., 2007). Most of all, we use this transition as a springboard to identify a new marcom research agenda. This agenda is unique in that it is not focused on filling the gaps in what is already known, but attempts to set a new direction for scholarly research in a marketplace that is dynamic and continually evolving.

2 The development of customer-focused marketing

What we call “modern marketing” emerged quite rapidly following the end of World War II (Kotler, 2002). Building on a base of industrialization and manufacturing, the initial implementation of customer-focused marketing was based on producing as many products as quickly as possible to fill the voracious consumption appetites of product-deprived consumers around the world. Figure 1 below illustrates the relationship between the maker/seller and the customer during this phase. This is called the acquired relationship phase because marketing firms acquired their relationships with customers through media and distribution channel partners.



Figure 1: The acquired relationship model

The most important point about this phase is that the marketer controlled the entire system, ranging from the identification of which products were to be produced to how they would be distributed to the price that would be charged to the promotion and brand communication of those products through mass (traditional) media and sales promotion. Tools were developed to profitably manage customers such as a marketing strategy, segmentation, product design, positioning and pricing, which all helped the marketer control the relationship with the customer. Products were made available through marketer-dictated distribution systems, i.e., wholesalers, distributors, retailers and the like, who followed the dictates of the manufacturer (Day, 1994). Even in-store promotion was controlled by the marketing organization through the use of deals and discounts made available to the channel partners (Day, 1994). The primary tools used by the marketing organization were traditional media such as print, broadcast, and out-of-home (Schultz et al., 2009). Thus, by controlling the information systems, the marketer was able to dictate products and conditions to pliable customers. Since it was not easy for customers to acquire additional information on products from non-media sources, and, since much of the product information was distributed through free entertainment systems such as radio, television, newspapers and magazines, customers had few alternatives but to accept the conditions imposed by marketers (Schultz et al., 2009).

The CM model above worked quite well. But, marketers, operating in a competitive marketplace, needed to continually develop new approaches and meth-

ologies that would give them a competitive edge. That quickly came in the 1970s and 1980s in the form of technology, primarily the development of digitalization and computational capabilities.

3 Evolving to customer relationship management

By controlling all the marketplace communication and distribution systems, marketers increasingly dominated the marketplace. Success brought forth a rash of new products and innovations, all of which added to the marketer's dominance. Since information and information technology were responsible for much of the marketer's success, the drive to develop even more dominant technologies was soon on. First came computers, which, when connected to retail tills, gave marketers insights into consumer behaviors that they had never seen before (Humby et al., 2004). Next came CRM (customer relationship management), where the marketing organization captured various levels of customer information, most often the customer's actual marketplace behaviors, which they then used to build more targeted marcom models and approaches. Many of these CRM approaches were initially developed from work done by direct marketers, that were later emulated and extended by service organizations such as banks, airlines and hospitality organizations (Blattberg et al., 1994). Thus, the marketer's systems moved from mass to the individual and extended the marketer's control over the marketplace.

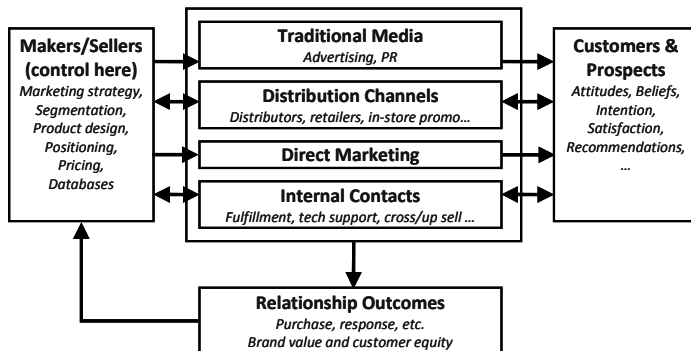


Figure 2: Customer relationship management: Digital data enabled outbound consumer relationships

Figure 2 illustrates the approach. The model maintained the basics of mass marketing such as marketer-controlled traditional media and distribution channels, but added direct marketing, first through mailing systems and later through the telephone and eventually other electronic forms (Mehta and Sivadas, 1995). These new direct marketing systems extended the marketer's array of resources.

Concepts such as test and control mailings (Mehta and Sivadas, 1995), predictive analytics and scoring models (Malthouse, 2003) and customer segmentation and personalization improved the marketer's ability to discriminate among and between customers. Concepts such as lifetime value provided marketers with clear insights into the financial value of individual customers and customer groups and enabled them to focus resources on best customers. Marketers added distribution channels with call centers, fulfillment facilities, technical support and customer service. Thus, marketers knew what customers were doing, what they were responding to and the value of those responses; customers were still mostly in the dark about what marketers were doing and why they were doing it. This period of the late 1980s and early 1990s was likely the high-water mark of traditional marketer-controlled marketing.

CRM was all to the benefit of the marketer. While it was termed "relationship marketing" the relationship was entirely controlled by the marketer. The system worked quite well for marketers until the middle 1990s, and still works under certain conditions. Things began to change, however, when the first commercial uses of the Internet and the World Wide Web appeared (Ho, 1997). These new, interactive communication systems changed traditional marketer-controlled marketing forever. Marketers still want to control the marketing system, but when customers get information and marketplace knowledge, marketers lose control. We believe this model represents the 20th century marketplace.

4 Customer networked/negotiated relationships

With the development and diffusion of new information technologies, traditional marketing and marcom has been changed forever. In this networked and negotiated relationship system (Figure 3) the marketer will continue to develop products and services. They may continue to advertise and promote them in traditional media and with direct marketing (arrow A), and distribute them through mass distribution channels (arrow B) as well as through internal distribution channels (arrow C). That will be much like what has gone before. But, the marketer no longer has the nearly complete control they enjoyed in the past over the messages, offers or even information about the products they are trying to vend.

Before discussing the meaning of CN², it is important to note the role of the World Wide Web, search engines and now mobile devices. These technologies enabled customers to sort through, evaluate and make decisions based on information ranging from product descriptions to retail pricing to customer-generated evaluations of products and services (Nel et al., 1999). These developments have had much to do with the well-publicized "shift of marketplace power" (e.g., Deighton and Kornfeld, 2009). Mobile communication forms have allowed customers to gather marketplace information anywhere at any time, thus breaking

the tether of the broadcast signal, the cable wire and the computer cord (Krause and Magedanz, 1996). In short, the Web, search and more recently mobile devices have given customers fingertip access to massive amounts of information, available anytime and any place desired.

The C in CN² indicates that it is still a customer-oriented communication system, and the N² suggests two new elements have been added. The first N is for networked. The system is no longer linear and direct, from marketer to customer. It is networked where multiple voices, using multiple communication channels are all interconnected. This network model changes the entire marcom system, which has historically been based on a linear “stimulus-response” model (Lavidge and Steiner, 1961). The marketer sent out stimuli, in the form of messages and incentives, and consumers responded. In a network model, there are few loci of control. This obviates many of the traditional marketing concepts and approaches. This is largely due to social media (Scott, 2007). With the rise of electronic systems such as Facebook, YouTube, Twitter and the like, customers can now talk back to marketers, ask questions, challenge claims and the like. Historically, marketers spoke and customers were supposed to listen and respond. Now customers can communicate with other, like-minded customers all over the world. That is, customers can create their own marketing and brand contact systems, either positive or negative, and share them with others, or indeed, the world. It is a system marketers can’t control. More loss for the marketer, more gains for the customer.

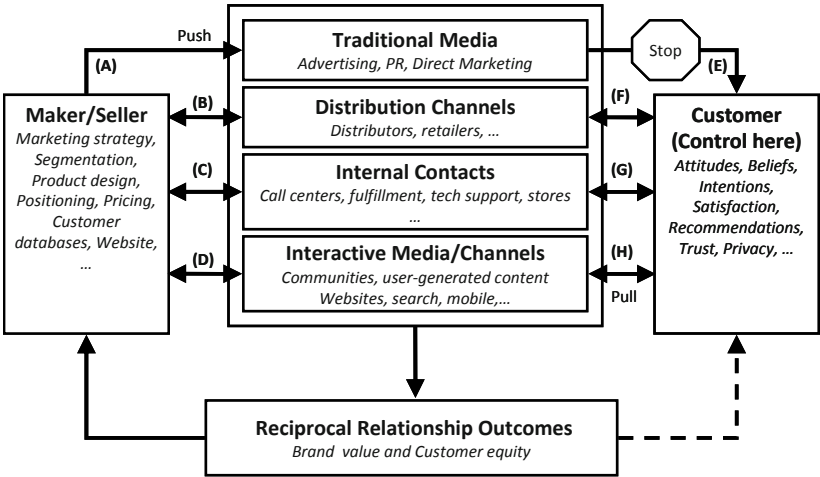


Figure 3: CN²: Networked and negotiated relationships

The second N is for negotiated. That means when customers gain control of marketplace information, they become able to negotiate channels, pricing, terms, and incentives – in short, the whole range of formerly marketer-controlled activities that determined the marketplace value of offers and product bundles (Tuli et al., 2007). Today, it is not unusual for a consumer to walk into an electronics store, armed with a mobile device, view the retailer's offerings and prices, and immediately compare and contrast them with what is available across the street (Shankar et al., 2010). In these instances, which are becoming more and more common, the seller must either negotiate with the buyer or lose the sale. Interestingly, it is not just the communication that is being negotiated, but, the entire relationship between the marketer and the customer.

Another important difference between the CN² model and earlier ones is that the continual pushing of controlled brand messages at customers and prospects is no longer as effective as it was in the past. Consumers, now armed with technologies such as DVRs and spam filters, can shut out messages at will ("Stop" sign impeding the flow through arrow F). Instead, they now commonly seek out relationships with marketers of their choice through search or other interactive means.

Clearly, the traditional approaches used in the first two phases of Customer and Customer Relationship Marketing will continue to be useful and relevant, particularly in markets where information technology is less developed or where consumers are still learning how to be consumers. The ability of makers/sellers to direct information to specific groups of customers and prospects, thus moving them out of the mass market and into identifiable segments to which relevant marketing materials can be delivered, will continue to evolve over time. Interestingly, it is often in the emerging markets where Networked/Negotiated Relationships will likely become most prevalent. When consumers have interactive capabilities, they quickly learn to use them to level the playing field with even the most sophisticated marketing organizations. Examples where this is occurring abound in Korea, China, India, Brazil and other markets (Mathews, 2009). Therefore, we argue the real challenge in this Networked/Negotiated Relationship marketplace will occur primarily in emerging markets. It is in those markets where the new interactive technologies are developing most rapidly. Indeed, it may well be these new markets, which are often considered to be less developed by traditional marketing organizations, where networked/negotiated relationship marketing will be most appropriate. And, it is about these consumers that existing marketers have the least information, knowledge, insights and experience. Thus, we believe networked/negotiated relationship marketing is more likely to develop most rapidly in those markets (Schultz et al., 2009).

5 A marketing communication research agenda for the CN² marketplace

With this background in mind, we present a new research agenda. Space does not allow us to go into great detail, but we have identified five areas that we feel have been under-researched. The agenda is organized around the framework in Figure 3. As background for these research suggestions, see Egan (2003), Möller and Halinen (2000) and Christopher et al. (1991) on the first two stages. For the CN² marketplace, Hennig-Thurau et al. (2010) provide a more extensive literature review on new media, Rangaswamy et al. (2009) a review of search, and Shankar and Balasubramanian (2009) on mobile marketing. All illustrate how the new marketplace is developing and why this networked and negotiated approach is appropriate.

Here are the basic content areas where academic research can contribute the most.

Understand network models. Marcom approaches are mostly based on outbound, linear, stimulus-response models. Today's systems are now one giant network connecting customers with each other as well as the firm. This means marketers must learn how networks are created, how they are expanded, contracted and re-formed on all levels. New types of research techniques will need to be employed such as object-oriented modeling, principal-agent analysis, evolutionary learning, and network models for the diffusion of innovation (Valente, 1996). Another difference in this networked/negotiated marketplace is that the traditional marketer cannot just continue to send out messages, offers, etc., through outbound systems; they must learn to respond appropriately to the consumer-generated contacts that are developed outside of the traditional marketing system. Often, these are contacts that the firm did not initiate nor with which it may externally agree (arrow D). In other words, the marketer moves from "external talking" to "external listening," an area that is not well developed in most selling-oriented organizations.

Firms must understand when and how to respond to customers who post content to social media, discussion forums, review sites, etc. We suspect that a firm can ignore at least some, and perhaps much of the user-generated content, but what criteria determine which content can be ignored and what demands a response? For the user-generated content requiring a response, what communication strategies should a firm follow in crafting a response? What metrics can the firm use to monitor social media and gauge the effectiveness of its interactions with customers?

Negotiation and relationships. For the most part, academics are not accustomed to researching negotiated marketplaces, where haggling in bazaar-like situations is a way of life. This will require the development of new forms of

understanding consumer behaviors and the ability to generate new customer insights. Marketers must move away from the view that they create and maintain the ongoing brand relationships to one where relationships are reciprocal (Aggarwal, 2004). There must be equal value to the customer and the marketer if relationships are to be built. This implies rethinking many of the traditional, marketer-controlled CRM models that have developed over the last 30 years or so.

The concept of co-creation, where consumers participate in the creation of value, has been discussed for decades, but it is not fully understood along with the technology used to create these new opportunities for its use. How can the firm use marcom to stimulate consumers to co-create brand meaning, benefits, and values? For decades the firm has decided what the brand should be and then created advertising to convey the brand and its meaning to passive consumers. Now, consumers create alternative brand messages and post them on social media and the Internet. How effective is consumer-generated brand messaging to traditional advertising and how can it be monetized? How does the firm respond when the consumer's views of the brand differ from what the marketer intended?

Synergy, integration of all contacts, and the growth in channels and devices. Over the past several years, the focus of marketing has been to identify the one or two primary marcom tools, optimize them and observe marketplace success. The traditional western marketer approach of "starting with TV and adding a few other media forms to fill out the holes" is likely in its last stages. Going forward, the emphasis must be on identifying what combination of marcom forms is optimal. This task is being made more difficult by the growth in the number of advertising channels, devices and titles within a channel. In addition to print, TV and out-of-home advertising, there are many more delivery channels including the computers on the Internet, mobile devices, text messaging, paid search, etc. The number of, for example, TV channels and programs is also growing. This increases the complexity of allocating media budgets. We need better methods of understanding the effectiveness of each vehicle, as well as how vehicles and channels interact with one another...in short, message synergy. Measuring and demonstrating the return on investment of individual media and combinations of media will continue to grow in importance.

The traditional marketing belief has been that if we know all the pieces and parts, we can re-assemble them to our benefit. Increasingly, however, we see that that all the moving parts interact. Customers are holistic. They take in, assemble and activate the knowledge they need, when they need it, in the form they need it. Marketers must become holistic in their views as well. Integration will be a key skill for marketers going forward, but, not integration of what they do, it must be integration of what their customers, influencers, recommenders, detrac-

tors and all the others in the marketing network do. It is this form of integration that will be important in the future.

Research methods. Data has always been the most challenging aspect of academic research. Thus, acquiring or capturing relevant marketplace data has driven the academic research agenda for decades. Today, there is a plethora of data, generated by both marketers and customers, floating about in various marketing systems. Capturing and harnessing that data will be one of the key skills of researchers in the CN² marketplace. That means, going forward, new research tools will have to be developed, tested, proven and then implemented going forward. Survey research, the traditional workhorse of both academic and professional researchers, will likely become less and less important as it becomes easier and easier to capture actual marketer and customer behaviors. Some sets of research tools that seem especially important for marketers in the future include the following.

First, marketers should become more skilled at using all of the variables available on social media and the rest of the Internet. Marketers need to become better at doing string processing and text mining. These methodologies have existed in computer science for many years, but, most marketers, to our knowledge, are not trained to use them, and they are not covered in any of the marketing research textbooks. The extant classification of word-of-mouth (WOM) is simplistic and ranges from a continuum of positive to negative. Surely, however, not all negative WOM is the same, nor deserving of the same responses. As part of text mining, we need more granular descriptions of WOM.

Second, marketers must learn more about computer science algorithms and artificial intelligence. Many of the new-media advertising decisions – for example those that center around paid search terms, bidding for banner and display ad space, selecting hosting sites for ads, picking a set of products to recommend to a customer visitor to a webpage, etc. – must be made millions or even billions of times each day. Clearly automated computer algorithms are required. Therefore, these decisions must be made in a fraction of a second, and so issues such as whether a model or algorithm can produce a recommendation in such a short time must be considered. Another modeling issue is that the marketplace is constantly changing and the firm is constantly acquiring more data. Marketers have traditionally used models where the model parameters are estimated once, then embedded in a “batch” model. Those are then held constant until the model is re-estimated, again in a batch model. It will become important to develop models where the parameter estimates change dynamically as more data become available and the marketplace changes. Such issues have traditionally not been concerns of marketing scientists or researchers, but, they are today.

Third, marketers will have to address the data explosion that is created by the digital devices and other technology. The amount of data collected about customers has expanded by several orders of magnitude over the past few decades, because of the Internet, social media, mobile devices, etc. Such data can be overwhelming, but new opportunities for more relevant and effective marketing contact points are created. We can think of these new data sets as expanding the set of variables that a marketer can “condition on” when delivering contact points. For example, at one point media buying decisions were made primarily on the basis of demographics – an advertiser might be looking for women between the ages of 25 and 40, and such a demographic block was assumed to be homogeneous. Marketers can now decide on contact points for an *individual customer*, based on previous purchase history, what the individual has said in social media, where the customer is (including GPS information from mobile devices), and more. How can marketing contact points be made more effective by using all of this data? How can such data be used to generate new ideas for products and services?

Decreasing brand loyalty. Another challenge created by the CN² marketplace is that consumers have more goods, products and services available from which to choose. For example, at one point, a consumer, looking for a product, would have gone to the local retailer and bought whatever that retailer stocked. Alternatively, the consumer may have sought out some catalogs and mail-ordered the item. The Internet, search and the widespread availability of efficient delivery systems has now changed all this. Consumers can find a manufacturer or distributor on another continent and buy. At the same time there is more parity in the quality and functionality of products, and consumers are less attached to particular brands. An important issue is how to develop, nurture and maintain brand loyalty in this competitive marketplace. One possible solution is for firms to understand and develop customer *engagements* with products and services. Marketers agree that customer engagement is important, but do not agree on what it is (Brodie et al., 2011) nor how to develop or maintain it.

6 Summary

We have presented our view of how marketing and marketing communication have developed and evolved over the last half-century. Inherent in this view is the fact that most of the changes have come as the result of technologies, which have benefited both the marketer and the customer. These technologies will continue to emerge and evolve. Thus, we view marketing and marketing communication as a dynamic system, where traditionally only snapshots in time were possible. The snapshots, after some period of time, can now be assembled into a moving picture, which is what we have tried to do in this paper. That moving picture can provide insights into why and how things developed as they did, but

it is limited in its ability to predict the future. Thus, we have built two historical models to explain what has happened. The third model, which we call the CN² marketplace, is an attempt to place in perspective a current “snapshot” of the marketplace. We believe it suggests some new methodologies and approaches that must be developed if marketers and academics are to improve and understand the dynamic and ever-changing marketing system in which all of us find ourselves. Each of the 3 areas of future research that we have suggested are all rich areas for new thinking and new development. Going forward, we believe much of the new thinking must come from the developing markets and economies of Asia-Pacific. It is here that technologies are seeing their most rapid development and markets are evolving most quickly. In our view, it will likely be the Asia-Pacific area where much of the new thinking must originate.

7 References

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