

European Advertising Academy



Ralf Terlutter / Sandra Diehl /
Shintaro Okazaki (Eds.)

Advances in Advertising Research (Vol. 1)

Cutting Edge International Research



RESEARCH

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GABLER RESEARCH

European Advertising Academy



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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 the 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 organisation.

The EAA was founded in 2005. The current board members are: Peter Neijens (president, University of Amsterdam), Ralf Terlutter (president elect, University of Klagenfurt), Flemming Hansen (past president, Copenhagen Business School), Sandra Diehl (treasurer, University of Klagenfurt), Robert Heath (School of Management, Bath), Shintaro Okazaki (publication manager, Autonomous University of Madrid), Patrick de Pelsmacker (University of Antwerp) and Edith Smit (information manager, University of Amsterdam).

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

Preface

We are pleased to introduce a new series focusing on advertising and communication from an international perspective. This book is the first volume in a series entitled *Advances in Advertising Research*, published by the EAA (European Advertising Academy). New volumes in this series will appear on an annual basis.

Research on advertising, branding and communication from an international perspective is essential in the face of the growing globalisation of markets, which requires academics and practitioners to take an increasingly international orientation in developing communication policies. Researchers as well as advertisers and marketers are confronted with an expanding, and above all changing, variety of both traditional and new media available for communication purposes, among them, advergames, mobile marketing and viral marketing. The goal of this book is to advance, from an international orientation, more systematic research in these fields.

Renowned communication researchers from around the globe have contributed to the making of this book. Contributors originate from countries throughout Europe, as well as from the U.S., Asia, Africa, and Australia. This international mix of authors offers the reader a comprehensive overview of current thinking and cutting-edge research in the area of international advertising and communication. The book includes cross-cultural investigations as well as studies representing the respective countries of the researchers. The contributions are selected expanded papers from the 8th ICORIA (International Conference on Research in Advertising; www.icoria.org), which took place at the Alpen-Adria University of Klagenfurt, Austria, in 2009.

The book addresses a number of important areas of communication research: strategic issues in advertising, branding and communication; advertising and communication content; the innovative fields of advertising and computer games (advergames), as well as advertising, branding and communication on the Internet; gender issues in advertising, branding and communication; communication and new media; international advertising and, finally, media placement,

brand placement, public relations and viral marketing. Despite of the great variety of issues covered, all papers are united in their desire to move international communication research forward.

We wish to thank all the authors for their willingness to contribute to this endeavour. We also want to express our gratitude to Simone Hochegger and Susanne Ortner from the Alpen-Adria University of Klagenfurt who handled the formatting of the book. It is our hope that readers find the book both enjoyable and stimulating. If the material presented in this book generates constructive debates and subsequent investigations, then we have accomplished our goal.

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Part I

Strategic Issues in Advertising, Branding and Communication

Integrated Marketing Communications: A Test for Different Levels of Strategic Consistency

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1 Abstract

Strategic Consistency appears to be one of the main criteria to follow when developing an integrated marketing communication campaign. However, there is a wide body of research which also suggests that incongruent information may be more effective than consistent information. Due to these contradictory points of view, the present study analyzes what is the most effective level of strategic consistency in an integrated communication campaign. For this purpose an experiment is designed in which the level of strategic consistency is manipulated. A total of 227 undergraduate students participated in the study and were randomly assigned to one of three different levels of strategic consistency (high, moderate, low). Advertising and sponsorship were the communication tools used in the experiment. Cognitive and affective responses obtained from the study suggest that a moderate level of strategic consistency is the most appropriate to improve the effectiveness of an IMC campaign.

2 Introduction

Integrated Marketing Communication (IMC) has received considerable attention during the last decade as a means to enhance communication effectiveness. In opinion of Schultz (1998), the brand is the very key to IMC which involves blending various communication tools (e.g. publicity, advertising, sales promotion, sponsorship...) into a unified and consistent brand image (Tsai, 2005). Central to the concept of IMC is the notion that strategic consistency is the most recommended approach to ensure this consistent brand image (Duncan and Mo-

riarty, 1998; Madhavaram et al., 2005) and protect it in a context of a fast-changing marketing environment (negative publicity, competitive action...).

From a strategic point of view, consistency refers to the existence of sharing common brand meaning among multiple tools of communication ("what is said" about the brand), because the messages may be focused on a host of different tangible or intangible aspects of the brand itself (e.g., physical, attributes, user or usage imagery, brand personality...) (Duncan and Moriarty, 1998). Keller (2001, 2008) also posits that communication tools are strategically consistent if the information they convey share meaning and content with the purpose of sending and reinforcing common associations about the brand. To this respect, recent studies have demonstrated the more positive cognitive and affective effects derived from a strategic consistency based integrated campaign (Navarro et al., 2009).

Despite the basic recommendation that inconsistency should be avoided, the true is that a growing body of research has demonstrated the existence of positive cognitive and affective effects when people are exposed to an incoming information that is not consistent with previous expectations in consumer's memory (for a review see Alden et al., 2000 and Arias-Bolzmann et al., 2000). Due to these contradictory points of view in the literature, an interesting research question is what level of strategic consistency is more effective on consumers when developing an integrated communication campaign.

From an academic approach this issue is under-researched due to the methodological difficulties of operating with several communication tools and designing different levels of consistency among their messages. In the literature on congruency, most of previous studies have analyzed the effects obtained from extreme congruency and incongruency (Heckler and Childers, 1992; Dahlén and Lange, 2004; Lange and Dahlén, 2003), but they have not included in their analysis a moderate level of consistency. In this sense, it is necessary to develop a methodological approach to test what effects can be obtained when using different levels of consistency among messages (Sjödin and Törn, 2006). This issue has been considered as a research priority by the Marketing Science Institute (2005) though it has not yet been investigated.

The purpose of this research is to fill this gap in the literature by analyzing consumers' reactions to a strategic consistency-based integration campaign in which three different levels of consistency are designed. For this purpose, we develop a new methodology for addressing the design of the level of consistency in an integrated communication campaign. This methodology will allow us to evaluate the effects on consumer's information processing and persuasion derived from each level of consistency in this integrated campaign.

3 Conceptual framework and hypotheses

Several studies have provided empirical evidences that there exist positive cognitive and affective effects when people are exposed to incoming information that is consistent with their previous schemata (Loda and Carrick, 2005; Smith, 1993). These evidences are based on theoretical postulates as the Integration Theory (Anderson, 1981), the Encoding Variable Principle (Melton, 1970) and the Elaboration Likelihood Model (Petty and Cacioppo, 1986). More specifically, in the context of an integrated communication campaign these positive effects occur because consumer is exposed to several communication options that constitute different cognitive contexts of presenting the same message about the brand (Chang and Thorson, 2004; Edell and Keller, 1989).

Nevertheless, under a perspective of communication and persuasion, there exists a common industry practice of creating incongruent messages in order to challenge consumers' expectations, foster their interest and motivation to process the messages and revive their interests in the brand. In this sense, previous studies in advertising and consumer behavior literatures have provided empirical evidences of the positive cognitive and persuasive effects derived from incongruent information (Alden et al., 2000; Arias-Bolzmann et al., 2000; Dahlén and Lange, 2004; Heckler and Childers, 1992; Törn and Dahlén, 2009). The theoretical foundations of these effects can be found in different theoretical perspectives. For example, Festinger's Cognitive Dissonance Theory (1957) posits that inconsistency or disagreement between two pieces of information produces dissonance or tension that motivates individuals to seek ways of reducing it. Under the same line of reasoning, Consistency Theory (Hunt, 1963) also states that inconsistency causes arousal and that, depending on the degree of inconsistency, the degree of arousal can be either positive or negative. However, the fundamental theoretical foundations of these effects can be found in the Schema Congruity Theory (Mandler, 1982). Unlike others theories on (in) consistency, this theory is focused on how information that is not consistent with individual's previous schema is processed and resolved (Lee and Schumann, 2004).

These contradictory points of view in the literature raise the question of whether inconsistent information is more effective than consistent information in an integrated communication approach. In other words, what should be the most recommended level of strategic consistency when people are exposed to an integrated marketing communication campaign?

For this purpose, this study analyzes consumers' reactions to an integrated communication campaign in which the level of strategic consistency has been manipulated. Specifically, based on Schema Congruity Theory (Mandler, 1982) and the cognitive-response Model of Persuasion (Meyers-Levy and Malaviya,

1999), we formulate several hypotheses to analyze how consumers' processing and attitudes are affected by different levels of strategic consistency among messages.

3.1 Effects of strategic consistency-based integration on information processing

Schema Congruity Theory (Mandler, 1982) proposes that people have several schemata in their memory that represent previous expectations and experiences with something (e.g. a brand, a product) or someone (e.g. a salesperson). The main argument of this theory is that consumers' reactions to new information depend on the level of congruity between this incoming information and their previous self schemata because they expect certain information given their established schemata. According to this theory, when people are exposed to a message that conforms to their expectations there is little need to process the information in-depth because incoming information is coherent and confirms previous expectations in consumer's memory (Heckler and Childers, 1992; Mandler, 1982; Meyers-Levy and Tybout, 1989). In this situation, a high level of consistency in the message can be easily processed employing few cognitive resources.

However, when people are exposed to incoming information that is not coherent with previous expectations consumers need to resolve the conflict. Such resolution can generate positive effects on information processing because the need for resolution favors a more extensive processing and careful elaboration (Heckler and Childers, 1992; Fiske et al., 1983; Lee, 2000). Being so, the amount of elaboration and processing (cognitive responses) that people engage in will be higher if incongruity is successfully resolved. For example, it can be resolved by assimilating the new information in their memory without prompting an important change in previous schema (Meyers-Levy and Tybout, 1989). Such situation may occur at moderate levels of strategic consistency. However, extreme incongruity implies that conflict between incoming information and previous schema cannot be resolved without prompting this fundamental change in the established schema in consumer's memory (Mandler, 1982; Meyers-Levy and Tybout, 1989). Due to this extreme level of incongruency, individuals are more likely to consider only the information that is congruent with previous expectations and further elaboration is impeded.

Based on this reasoning, we therefore hypothesize that people engage in more elaborative processing at moderate levels of strategic consistency:

H1: Moderate levels of strategic consistency-based integration result in higher consumers' information processing than high and low levels of strategic consistency.

Judging from literature review, different levels of strategic consistency in an integrated communication campaign may have also impact on consumer's persuasion. According to the cognitive-response Model of Persuasion (Meyers-Levy and Malaviya, 1999; Wright, 1980), persuasion is related to the net favourableness of the cognitive responses that people evoke as they elaborate on a message. It is not about the amount of processing that the consumer develops when he/she is exposed to the campaign, but about the favourableness of such processing. A new message that is congruent with previous knowledge leads to favourable responses because the encountered information conforms to expectations and allows predictability.

Nevertheless, the general prediction from Schema congruity Theory is that incoming information that is moderately congruent can be evaluated more favourably than strongly congruent or incongruent information. In this sense, previous research on inconsistency and advertising effects has demonstrated that information that defies expectations can enhance consumers' persuasion as far as they successfully resolve the incongruity (Dahlén et al., 2008; Lee, 2000; Meyers-Levy and Tybout, 1989; Sjödin and Törn, 2006). These positive effects on persuasion can be explained by two main reasons:

First, the more thorough processing that occurs when there are inconsistencies leads to enhanced confidence in resolution judgments. Being so, whether the object of the processing is evaluated more positively or more negatively depends on how much effort is involved in resolving the incongruity (Orth and Holançova, 2003).

Second, incongruent information produces a kind of entertainment value, as it challenges consumers to solve a puzzle. Solving the puzzle produces positive responses and a sense of accomplishment (Peracchio and Meyers-Levy, 1994). Therefore, when consumers encounter new information that is incongruent with an evoked schema they are motivated to resolve the incongruity which may, in turn, contribute to more favourable responses than schema congruity. This only occurs in a congruent moderate level. In contrast, when inconsistency cannot be resolved, as occurs in a low level of consistency, consumers may elicit less favourable responses because this inconsistency produces a kind of frustration in solving the discrepancy (Mandler, 1982; Meyers-Levy and Tybout, 1989).

Consequently, we expect that moderate levels of strategic consistency result in higher persuasion than high and low levels of consistency:

H2: Moderate levels of strategic consistency-based integration result in more favourable consumers' information processing than high and low levels of strategic consistency.

Regarding consumers' information processing, it is also interesting to analyze what type of processing activity prevails when people are exposed to different levels of strategic consistency. Based on Edell and Keller (1989)'s study, after a first exposure, encoding activities are more prevalent while subsequent exposures to the stimulus divide consumers' processing efforts between retrieval and encoding activities. Because limited processing resources are available, these cognitive activities must compete during subsequent exposures. Therefore, after a first exposure to a stimulus the cognitive activity could vary depending of the degree of strategic consistency provided by the second stimuli. Based on the above reasoning, when subsequent stimuli is congruent, retrieval activities are more prevalent because the second exposure conforms to previous expectations and it may serve as a retrieval cue for the information stored in consumers' memory (Edell and Keller, 1989; Keller, 1987). In this retrieval process we expect that people will elicit the same thoughts than in the first exposure to the message. In contrast, when people are exposed to information incongruity (moderate and low levels of strategic consistency), the additional elaboration needed to resolve this incongruity may lead to a new encoding and processing of the message (Edell and Keller, 1989). In these cases, we expect that subjects will evoke fewer repeated thoughts than in high levels of strategic consistency:

H3: Moderate and low levels of strategic consistency-based integration result in less repeated processing than high levels of strategic consistency.

3.2 Effects of strategic consistency-based integration on consumer's attitudes

Finally, traditional persuasion models state that cognitive and affective responses can mediate effects on consumers' evaluations (MacInnis and Jaworski, 1989). Thus, more positive responses may lead to more favourable evaluations. Based on this reasoning, we posit that when subjects are exposed to a schema incongruity information that can be resolved attitudes are more favourable than attitudes generated under schema congruity, because this incongruity is resolved and more positive evaluation is derived from the success of resolution. However, when

incongruity is not resolved consumers will elicit more negative evaluations due to the feeling of frustration that result from not resolving the discrepancy (Meyers-Levy and Tybout, 1989).

Therefore, we expect that moderate levels of strategic consistency result in higher evaluation than high and low levels of strategic consistency:

H4: Moderate levels of strategic consistency-based integration result in more favourable attitude towards the communication campaign than high and low levels of strategic consistency.

4 Methodology

4.1 Experimental design

To test the hypotheses we have used a between subjects experimental design composed by three levels of strategic consistency (high, moderate, low). The study has been developed for a soft drink. The main criterion when choosing the product was the adequacy of the product to the sample (i.e. undergraduate students). Soft drinks were selected for this experiment as they represent a product category highly demanded by the target individuals. In order to avoid bias, we used a fictitious brand name because unfamiliar brands do not have a strong and sophisticated schema in consumers' memory (Sjödin and Törn, 2006). For the integrated communication campaign, we used two different tools (advertising and sponsorship). Sponsorship was selected because of the increasing efforts developed by companies to reinforce their communication strategies using this tool (Becker-Olsen, 2003; Sneath et al., 2005). In addition, sponsorship allows companies to improve brand knowledge and to reinforce the image created through advertising (Keller, 2008).

4.2 Pre-tests and factor manipulation

Before data collection, several focus groups and pilot studies with different samples of undergraduate students were conducted with the aim of designing the three levels of strategic consistency (see Figure 1). As we used a fictitious brand, the first step was devoted to identify a set of significant associations for a soft drink brand (first focus group). Forty subjects were asked to list associations they a) perceived as desirable for a brand of soft drink to connect with its target (young people) and b) perceived as conflicting with this target. The most com-

monly mentioned associations of each list were quantified with 10-point Likert scales and rated by 65 new subjects (first pre-test). The four associations of each list that received highest scores by all the subjects were chosen. The associations held with the brand were *dynamism, enjoyment, boldness* and *extrovert*; and the non desirable associations or perceived as conflicting with the brand were *boredom, shyness, quiet, and traditional*. In order to complete the creation of the brand, we needed to select a brand name that were coherent with the desirable associations and that it facilitated brand identification at the same time. FUNgo was selected as a brand name. An advertising agency helped in both brand name selection and ad creativity. The advertising agency designed two versions of a print ad simulating real-world ads for this product category (Dahlén and Lange, 2004; Heckler and Childers, 1992). For this purpose, the agency was instructed to consider the initial schema of brand associations to design both ads. These ads were named “attractions” and “tattoo” (see Appendix 1).

The four desirable associations held with the brand also constituted the initial brand schema that served as the reference point from which the different levels of strategic consistency were designed. More specifically, at a high level of strategic consistency both tools communicated these desirable associations. In contrast, at a low level of consistency the ad evoked the desirable associations while the sponsorship resembled the less desirable ones.

The second focus group (14 individuals) concerned the design of the moderate level of strategic consistency. With that purpose, a snowballing-technique (Suphellen, 2000) was used to elicit secondary associations with the brand. Each primary association of the initial schema was used as a stimulus word for subsequent elicitation of secondary associations with the brand. Again, the most commonly mentioned associations were rated by 54 new subjects (second pre-test). As a result, four secondary associations were chosen: *improvement, individualism, freedom* and *personal enrichment*.

With regards to sponsorship as the second stimulus in the integrated campaign, we needed to select three specific sponsorship activities extracted from different categories of events (sports, leisure or travelling) that resembled the schema of brand associations at each level of strategic consistency. For this purpose, we developed another focus group and a new pre-test to select and validate the events evoked. As a result, three sport events (rafting, hiking, and chess) and three leisure activities (gymkhana, snooker, and bowling championship) were pre-selected for the high, moderate and low level of consistency.

Finally, with the aim of selecting the three combinations of ad-sponsorship that better resembled the three levels of consistency, we conducted a new pretest with a sample of 108 individuals. They were instructed to rate the perceived congruency between the two versions of the ad and the two sets of sponsorship

activities (e.g., sport activities and leisure activities). As a result, we selected “attractions” as the ad for the first stimulus and the three sport events (“a rafting championship”, “hiking” and “chess championship”) for representing the stimulus in the three levels of strategic consistency (high, moderate, low).

4.3 *Data collection, sample and procedure*

Following Heckler and Childers (1992) and Singh and Rothschild (1983)’s procedure, the experiment took place in two separate sessions in order to avoid ceiling effects on consumers’ memory. Undergraduate students were selected based on their accessibility and the need for participating twice in the experiment. In the first session, subjects were told that we were interested in their opinions about a communication campaign for a new soft drink. In this session, all individuals were exposed to the ad. After ad exposure, subjects wrote down all the thoughts they had while they were exposed to the stimuli. In the second session, which took place two days later, individuals were randomly assigned to one of three experimental conditions and were exposed to a specific event depending on the level of consistency they were assigned to. The second stimulus was a description of the event sponsored by the brand (rafting, hiking, or chess) depending on the level of strategic consistency (see Appendix 2). After the second exposure, individuals were requested to fill the questionnaire including the main variables of the study. At the end of the second session students were thanked for participating and were paid €5 each.

4.4 *Measures*

In order to measure processing, subjects were instructed to report spontaneously all the thoughts that came to their minds while they were exposed to the communication stimuli (Briñol et al., 2004; Cacioppo and Petty, 1981). This processing was measured in each session just after the exposure. By doing so we can test how processing varies along the campaign. *Total processing* to the integrated communication campaign was measured following the next formula: total number of thoughts in the first session plus new thoughts elicited in the second session. To measure *favourability of campaign processing* a thoughts categorization was done by two independent judges. In this process, each thought was classified as positive, negative or neutral. Following Briñol et al. (2004) we operationalized this dependent variable as an index that was formed subtracting the number of negative thoughts from the number of positive thoughts and dividing this

difference by the total number of thoughts. For completing the measurement of campaign processing, we measured the *type of cognitive activity* developed during the second exposure. For this aim, the judges counted the thoughts elicited in the second exposure and that were repeated from the first exposure. *Attitudes* were measured with a differential semantic scale developed by Mackenzie et al. (1986). We used a four 7-point items anchored by negative-positive, unfavourable-favourable, I do not like it-I like it, bad-good.

Perceived consistency between the communication tools was assessed with a 7-point Likert scale extracted from the studies of Speed and Thompson (2000) and Gwinner and Eaton (1999). In order to avoid bias, two additional variables regarding sponsorship (*congruency between product category and event* and *attitude towards the event*) were measured in the study using 7-point Likert scales based on previous studies (D'Astous and Landreville, 2002; Speed and Thompson, 2000).

For all multi-item scales we used the mean value of the summed scale to test the research hypotheses.

5 Results

A sample of 227 students (44% male, and 56% female) participated in the study. Age range varied from 18 to 28 years old (mean value was 21). Results also suggested that individuals had a high knowledge and experience with soft drinks. The mean value for product knowledge is 5 on a 7-point Likert scale and subjects consume between 5 and 6 sodas per week. No significant differences were obtained for knowledge ($F_{(2,224)} = 0.051, p > 0.05$) and for experience with product category ($F_{(2,218)} = 0.271, p > 0.05$) across the three experimental conditions.

Before testing the hypotheses, we assessed the level of perceived strategic consistency between the two communication tools (advertising and sponsorship) in each experimental condition. As expected, ANOVA results indicated that the degree of perceived congruency was in agreement with each level of strategic consistency ($X_{\text{high}}=5.21$; $X_{\text{moderate}}=4.07$; $X_{\text{low}}=2.29$). As significant differences among these conditions were found ($F_{(2,224)} = 97.1, p < 0.05$) the manipulation check was successful.

Univariate analyses of variance (ANOVAs) were conducted to test the hypotheses (see Table 1). Based on the results obtained, we found empirical support for 3 of the proposed hypotheses. As suggested by H1 and H2, the amount ($F_{(2,224)} = 10.187; p < 0.05$) and the favourability ($F_{(2,224)} = 12.139; p = 0.00$) of information processing are higher in the moderate level of strategic consistency. In addition, individuals exposed to the moderate and low levels of strategic consis-

tency evoked fewer repeated thoughts in the second exposure than individuals exposed to the high level. This result gives empirical support for H3 ($F_{(2,224)}=19.482$; $p<0.05$). Finally, the level of strategic consistency influences on consumer attitudes ($F_{(2,224)}=7.616$; $p<0.05$). However, attitude towards the communication campaign does not significantly differ between the moderate ($M=4.71$) and the high level of strategic consistency ($M=4.81$). Therefore, H4 cannot be fully supported.

6 Conclusions

The present study contributes to the schema congruity literature in the area of IMC in order to offer empirical evidences about the effectiveness of different levels of strategic consistency when developing an integrated communication campaign. More specifically, we analyzed what level of strategic consistency is the most effective on consumers. Based on Schema Congruity Theory (Mandler, 1982), our point of view suggests that a moderate level of strategic consistency is more appropriate for improving the results of an integrated communication campaign than schema congruity. From a consumer perspective, our findings demonstrate that when people are exposed to a moderate level of strategic consistency several positive effects on processing occur. First, challenging consumers' perceptions induces interest and attention to process the message more carefully. In this process, individuals engage in a greater cognitive elaboration compared to individuals exposed to a high level of consistency. Second, resolving this incongruity contributes to more favourability in the responses evoked. And third, individuals exposed to this moderate level are more likely to engage in a new elaboration and encoding of the incoming information during the second exposure. This process enriches consumer processing of the integrated communication campaign. In summary, the study concludes that the level of strategic consistency determines consumers' processing and evaluation of the communication campaign. As expected, the low level of strategic consistency obtained the worst evaluations because incongruity could not be successfully resolved. However, our findings offer no clear results regarding how incongruity information implies more positive effects on consumer's persuasion. Despite a moderate level of consistency based-integration results in more positive cognitive responses to the integrated campaign, our study show no significant differences on attitudes towards the communication campaign between the moderate and high level of strategic consistency. For this reason, the development of more studies is needed for providing further evidence about the effectiveness of these two levels of strategic consistency.

From a managerial point of view, the importance of this study relies on the increasing use of integrated communication campaigns. However, managers still have many practical doubts about how to effectively integrate communication tools and how to assess the results obtained. This study offers some evidence that might be helpful when designing IMC campaigns. Evaluating IMC programs requires an assessment of exactly how “integrated” the program is from the standpoint of how well different marketing communication options “fit together.” Our research offers an important contribution to this issue by developing a new methodological approach that serves as a guideline for managers in order to create and validate effects derived from three different levels of strategic consistency (including a moderate level) when using an integrated communication campaign. Compared to high and low levels of schema consistency, the operationalization of the moderate level of consistency is especially difficult because neither it represents the initial schema of associations of the brand (high consistency) nor it advocates for a radical and conflicting change in the brand schema (low consistency). For this reason, prior research on incongruity literature has mainly focused on the extremes of this consistency. However, a moderate level of consistency may be more common in real-life marketing communication.

In addition, results obtained in this study allow us to heavily recommend the use of these integrated campaigns as they have proven very efficient in improving the results obtained. More precisely, this paper helps managers in anticipating the results derived from different levels of strategic consistency. If the campaign aims at motivating consumers to process the message at a deeper level, at evoking favourable responses in consumers or at enhancing brand associations, a moderate level of strategic consistency should be selected. If the objective is more related to attitudes then moderate and high levels of strategic consistency get similar results. In this sense, the study may be helpful when executing the design and during the implementation of the integrated campaign.

Finally, branding literature may also be benefited from this research because we offer some empirical evidences that may expand researchers’ understanding of the role of communication in building brand equity under an integrated perspective. As far as different levels of strategic consistency among messages have different consequences in terms of information processing about the communication campaign and favourability of that processing, it is reasonable to expect that these effects could also be applied to the processing about the brand. Therefore, brand equity could be more benefited by moderately consistent messages because it may excite consumers and make them think more and positively about the brand. In this sense, this study may empirically relate both strategic brand management and IMC perspectives. This is an important contribution due to the lack of previous studies combining these two literatures (Tsai, 2005).

However, there are some limitations that need to be acknowledged regarding the present study. These limitations provide avenues for future research opportunities. First, this study uses an experimental methodology. Therefore, the limitations that are related to this type of methodology also apply in this study. It is likely that effects could be weaker or stronger depending on the specific context. In addition, the study used a student sample, a single product category and a single brand (fictitious). While this controls variation and aids reliability, it also limits the generalizability of the results to other populations and/or products. Future studies are necessary to evaluate the research findings in different situations and manipulating other variables that may influence on these results. For example, an important variable that can be considered in future studies is the type of brand (familiar vs nonfamiliar) with the aim of getting a better understanding about the influence of this variable in the development of integrated campaigns. This could help to determine whether the effects obtained in our research are the same depending of the brand familiarity. Finally, it is also necessary to note that this experiment has used only two communication tools and two exposures to create the integrated campaign. In this sense, different approaches, such as a variation in the number of exposures or tools used, could complement the present study.

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Appendix I



Figure 1: Advert 1 “Attractions”



Figure 2: Advert 2 “Tattoo”

Appendix II

Sponsored event in the high level of strategic consistency

Fun-go, a new soft drink for young people, has announced that it will sponsor the next rafting championship to be held this summer in your city. Rafting is a sport practiced by bold and dynamic people who like to experience the feeling of adventure and risk while they fall whitewaters and are in contact with nature.

Sponsored event in the moderate level of strategic consistency

Fun-go, a new soft drink for young people, has announced that it will sponsor a series of outdoor activities including hiking in various rural areas in your city. This sponsorship is intended to boost the performance of this activity for people who want to get in touch with nature and to improve their physical and mental state.

Sponsored event in the low level of strategic consistency

Fun-go, a new soft drink for young people, has announced that it will sponsor the next chess championship to be held this summer in your city. The organisers hope that national chess players take part in the championship.

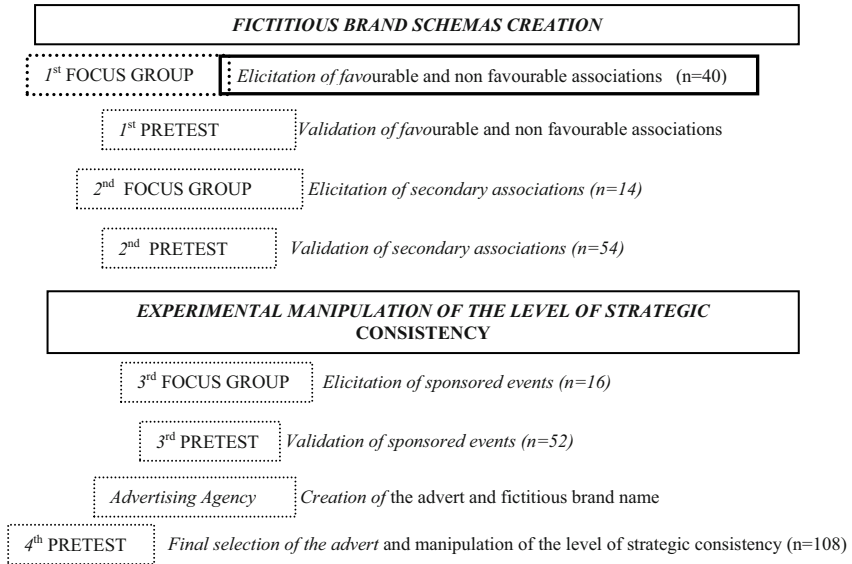


Figure 3: Focus groups and pre-tests

Table 1: Effects of different levels of strategic consistency based-integration

		Experimental condition			F	p
		High N=76	Moderate N=76	Low N=75		
H1	Total number of thoughts related to the communication campaign	7.97	9.34	7.43	10.187	0.000
H2	Favourability of thoughts related to the communication campaign	58%	70.37%	38.12%	12.139	0.000
H3	Number of repeated thoughts	1.03	0.64	-0.03	19.482	0.000
H4	Attitude towards the communication campaign	4.81	4.71	4.06	7.616	0.001

Evaluation and Feedback Effects of Limited Editions in FMCG Categories

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1 Abstract

Limited Editions are a widely used type of line extensions to introduce new products in the Fast-Moving-Consumer-Goods business. In this process an exceptional, limited available variant is added to the permanent offers of a product line. Despite the meanwhile wide use of this strategy in marketing there is almost no scientific discussion about limited editions. This article focuses on how consumers react to limited editions. Based on exploration-, scarcity- and categorization-theory, effects of exploration seeking and processing depth are analysed. Additionally reciprocal effects of limited editions on the parent brand are examined. Implications for the use of limited editions in practice will be deduced from the results.

2 Introduction

The launch of new products is an important driver for corporate growth (Montgomery 1975; Urban/Hauser 1993). In this case, product line extensions are the most common strategy of establishing new products. Through the use of a brand for a new product within the current product category, companies reduce the risk of a failure and keep startup costs at a moderate level (Reddy et al. 1994; Keller 2008). *Limited Editions* characterise a special form of line extensions. On the one hand, they differ from typical extensions by their limited availability. This is indicated by labels like “limited edition” or “only for a short time”. On the other hand, limited editions are characterised by atypical variations of product attributes. Limited Editions can be differentiated from other manifestations of temporary limited product ranges. In practice, frequently observed forms are giveaway products, special variants, product bundles and quantity variations.

These variations are also characterised by a time limit. However, they especially can be distinguished from limited editions by the fact that they mainly focus on a price advantage and not on the extraordinary variation of essential product attributes. An example of Limited Editions is given by Magnum's limited edition "5 Senses". The restricted availability of this special variation is illustrated by "Limited Edition". Extraordinary varieties and atypical design elements support a clear distinction from permanent offers (fig. 1).



Figure 1: Magnum product line including Limited Edition

Whereas limited editions in high involvement categories, such as watches or art prints, look back on a long tradition (Amaldoss/Join 2008; Franke/Schreier 2008), in recent years this kind of strategy has been used increasingly in *fast-moving-consumer-goods (FMCG)-categories* as well. Companies use the limited-edition-strategy especially because of the additional growth potential and the possibility to distinguish one's brand from the others (Kirsche 2005). For example, the number of limited edition launches in the U.S. food- and beverage-sector increased from 2001 to 2004 about 87% to 230 (Banasiak 2005). For consumers, these products are very attractive because they offer something new and exciting (Theodore 2004; Banasiak 2005, Oller 2006). In FMCG-categories, consumers show a distinct openness to innovations and related desires for variety

and new sensory experiences. Limited editions succeed to meet these desires by their extraordinary product characteristics (Banasiak 2005; Kirsche 2005). The restricted availability indicates a “use-it-or-lose-it”-situation and is therefore an additional sales appeal (Theodore 2004; Oller 2006).

3 Research objective

In spite of its high practical relevance as a special form of product line extension, there is up to now a lack of scientific discussion about the effects of *limited editions* on the consumer. Some authors list possible effects, like addressing the need for stimulation or positive feedback effects to the parent brand image (e.g. Banasiak 2005; Oller 2006). A theoretical foundation respectively empirical discussion is missing. The following research issues are main subjects of this article: How important is the individual exploratory tendency for the evaluation of limited editions in FMCG-categories? To what extent may the regular brand benefit from positive feedback effects of the limited edition?

4 Theoretical background

The theories used, derive from the characteristics of limited editions. Effects related to the limited availability of a product arise from theoretical approaches about scarcity. A scientific discussion concerning the impact of atypical products follows from categorisation theory. In addition, theoretical approaches, which discuss the role of need for stimulation, are used.

Exploratory tendency: The desire for stimulation by diversification and new sensory experiences is assumed to be a basic motivation for buying limited editions (Banasiak 2005; Oller 2006). In exploration research, this issue is called exploratory tendency and contains behavioural tendencies which help to regulate arousal and result from the motivation for stimulation seeking (Raju 1980). Exploratory tendency is a temporary relatively stable *personality trait* with varying intensity between individuals (Joachimsthaler/Lastovicka, 1984; Baumgartner/Steenkamp 1996; Van Trijp et al. 1996; Grande 2005). It is supposed that there are different levels of optimal stimulation among individuals (Leuba 1955; Hebb 1955; Maier et al. 2007). Exploration seekers show a high optimum. They will search more likely for stimulation than exploration avoiders, who are characterised by a lower optimum respectively a preference for familiar stimuli and situations (Raju 1980; Baumgartner/Steenkamp 1996; Van Trijp et al. 1996). The tendency of the consumer towards exploration can take several *forms*. In the

differntiated considerations it is assumed that if certain stimulation is considered to be too weak, there are various methods for the regulation of arousal. To determine the tendency towards explorative consumer buying behaviour, *Baumgartner/Steenkamp* (1996) make a distinction between the two following dimensions: exploratory acquisition of products and explorative information seeking. The *exploratory acquisition of products (EAP)* can be defined as “a consumer’s tendency to seek sensory stimulation in product purchase through risky and innovative product choices and varied and changing purchase and consumption experiences“. The *exploratory information seeking (EIS)* is “a tendency to obtain cognitive stimulation through the acquisition of consumption-relevant knowledge out of curiosity” (*Baumgartner/Steenkamp* 1996, S. 125). As a result of the exploratory tendency, *explorative behaviours* aim at the variations of the consumers’ surrounding attractions and act as a stimulant to the organism (Berlyne 1960; Raju 1980; Baumgartner/Steenkamp 1996). Van Trijp et al. (1996) show that explorative behaviour is expected particularly in those product categories with low product involvement (Hoyer/Ridgway 1984). Because of their extraordinary characteristics limited editions in FMCG-categories are expected to show a particularly high potential for stimulation. Therefore, they may primarily meet the acceptance of exploration seekers.

Scarcity heuristics: In case of limited editions, the company deliberately reduces the number of products produced. Fundamentally, behavioural scientific literature emphasises the strong influence of scarcity on people. This influence becomes manifest in the so-called *scarcity effect*. Therefore, products seem to be more attractive if they are only restrictedly available (*Brock* 1968; *Lynn* 1991; *Verhallen/Robben* 1994; *Ward* 2007). Several authors discuss the question to what extent *scarcity as a heuristic cue* has a positive impact on product evaluation (*Lynn* 1989, 1992; *Cialdini* 1993; *Stock/Balachander* 2005). *Cialdini* (1993, 2001) assumes a “*scarce = attractive*”-*heuristic*, with consumers drawing direct conclusions from scarcity to attractiveness (*Cialdini* 1993, 2001). The information about limited product availability initiates a standardised, cognitively hardly controlled sequence of behaviour which causes a longing for the product (*Cialdini* 1993). According to *Lynn* (1992), scarcity is not directly resulting in increased attractiveness. In fact, consumers use a “*scarce = expensive*”-*heuristic* and infer from limited availability to a higher price (*Lynn* 1992). An increase in attractiveness due to scarcity may be expected only if consumers prefer costly products rather than cheap alternatives, e.g. to demonstrate higher status or if a price-quality relationship is assumed. Concerning *limited editions* in FMCG-categories, it can be said that consumers will take the indication of limited availability as a *heuristic stimulus* as well. However, it is unlikely that one of the above described heuristics will be activated. The arousal of a desire for the prod-

uct “at the push of a button” is contradictory to other views about scarcity effects. According to several authors (e.g. Brehm 1966; Folger 1992; McConnell et al. 2000; Brannon/Brock 2001; Zeelenberg/Pieters 2007), *cognitive processes* are fundamental for increased attractiveness caused by scarcity. This is contrary to Cialdini’s (1993) assumption. However, effects shown by Lynn (1992) are primarily expected in high involvement product categories where products serve as status symbols or where they clearly differ in product quality (Lynn 1989). Concerning FMCGs, a scarcity information may rather lead to a “*scarce = novel*”-*heuristic*. This heuristic assumes that consumers learn about the limited edition characteristics of novelty and speciality in FMCG categories. Therefore, consumers draw conclusions from limited availability to the offers’ distinctiveness. In turn, depending on individual exploratory tendencies, this leads to increased perceived product attractiveness.

Categorisation: Categorisation-theoretic considerations provide conclusions about reciprocal effects of limited editions towards the parent brand. The process of *categorisation* contains the identification of an object as a member of a class of objects on the basis of similarities (Rosch/Mervis 1975; Pavelchak 1989; Ozanne et al. 1992). A *brand category* can be understood as a group of several distinguishable products bearing the same brand name. It forms the basis for the reception and evaluation of new information of the brand (Boush/Loken 1991). Similar to categories in general, the members of a brand category show a *graded structure*. “Some products are more representative of a brand category than are others” (Boush/Loken 1991). All of a brand’s existing products as well as new ones can be described in terms of how much they are (a)typical for the brand (Joiner/Mason 2007). Within the scope of product categorisation, both assimilation- or contrast-effects can be caused (Lee 1995; Wänke et al. 2001). A contrast-effect usually occurs if a stimulus related to a context-stimulus is categorised further away than in absence of this context-stimulus. Assimilation describes the fact that a relation to a context stimulus increases perceived similarity (Lee 1995). Assimilation effects occur if a product is successfully identified as a member of a certain brand (Fiske/Neuberg 1990; Schwarz/Bless 1992). On the one hand, this implies a transfer of characteristics from the brand to the product (Park et al. 1991; Reddy et al. 1994). On the other hand, characteristics of the product become a fundamental part of the brands’ mental representation and lead to a change of the brands’ image (Romeo 1991; Loken et al. 1993; Thorbjørnsen 2005). For limited editions it can be expected that they change the parent brands’ mental representation through their characteristics, like, for example, the novelty, or their overall attractiveness in product categories with a tendency for exploration.

5 Hypotheses

Meaning of exploratory tendency for the effect of a product limitation: Concluding from the considerations about the impact of scarcity, consumers in the FMCG-sector use scarcity signals as a heuristic cue to infer novel characteristics of the product. The perceived novelty should have a positive effect on product evaluation, especially in case of high exploratory tendency. The following hypotheses can be derived from these conclusions:

- H1:* Marking a product with an indication for limitation, increases perceived product novelty.
- H2:* Exploration seekers show a) a more positive attitude respectively b) a more distinctive behavioural intention towards a limited product than exploration avoiders.
- H3:* The scarcity effect appears only with exploration seekers. An indication for limitation causes a) an increased product evaluation respectively b) a more distinctive behavioural intention with exploration seekers. There is no positive impact on product evaluation and behavioural intention by limitation with exploration avoiders.

Reciprocal effects of the limited edition to the parent brand: The reciprocal effects of a limited edition on the standard brand can be explained by category-conditioned assimilation effects. Limited editions are new exemplars of the brand category. The inclusion of the limited edition leads to a change of the mental brand representation. It can be assumed that there is a positive evaluation for limited editions in those FMCG-categories which tend to exploration. However, positive feedback effects on the overall-attitude can be expected only for weak brands, because strong brands are assumed to already have a stable attitude (Keller/Aaker 1992). Moreover, the quality of novelty, which is associated with limited editions, leads to a changing attitude towards the brand. As in this case evaluations of a specific level are touched, there is also a possibility of a change in judgement over a strong brand (Loken/Roedder John 1993). The following hypotheses can be deduced:

- H4:* The launch of a limited edition under a weak brand has a positive effect on the brand's attitude. In case of a strong brand, the attitude towards the brand remains the same.
- H5:* The introduction of a limited edition has a positive effect on the perceived creativity of the brand, regardless of the strength of the brand.

6 Results

For the verification of the hypotheses, two experiments were carried out. An evaluation takes place through analyses of variance.

Experiment I: The aim of the first experiment was to examine in what way the effect of product limitation, which is characteristic for limited editions, is dependent on the exploratory tendency of the consumers. For the determination of the stimulus material, two preliminary studies were carried out. To eliminate brand effects, the aim of a first preliminary study ($n=30$) was to develop a neutral brand which evokes neither pleasant nor unpleasant feelings and which does not trigger any specific associations (Consumer Behavior Seminar 1987; Campbell/Keller 2003). In a second preliminary study ($n=30$), a product category should be identified which would be positively evaluated by the test persons and in which the test persons can be grouped according to differently strong realisations of exploratory tendencies. Moreover, it was necessary to define a variety of the test product which is moderately atypical for the product category and which the test persons fundamentally evaluate to be positive. "Osseo" was chosen for the brand name because it best fulfills the above mentioned criteria. Furthermore, the product category "Frozen Pizza" and the variety "Mozzarella-Rocket-Parma Ham" were identified as being appropriate. The design of the main research is a 2x2-factorial between-subject-design. On the one hand, the limitation has been varied as one factor (with vs. without indication of limitation). An illustration of the product line of the fictitious frozen pizza brand Osseo was presented to the test persons with the test product "Mozzarella-Rocket-Parma Ham" as well as the two standard varieties ("Margherita" and "Salami"). In comparison with the experimental situation "no limitation", in the situation "with limitation" additional information "Limited Edition – Only for a Short Time" were provided to the product "Mozzarella-Rocket-Parma ham" (see appendix). On the other hand, a division of the examination participants according to their exploratory tendency took ex post place (high vs. low exploratory tendency). This tendency has been operationalised by using the "Exploratory Acquisition of Products" (EAP)-Index (Baumgartner/Steenkamp 1996). The differentiation between exploration seeker and exploration avoider is made on the basis of a median split (Memon/Kahn 1995). In total, 120 students of a German university were interviewed. For the dependent variable, the perceived novelty of the product, the attitude towards the product as well as the trial interest were captured on the basis of nine-level bipolar items (see appendix). In addition, the product involvement for frozen pizza was included as a possible disturbance variable. *Results of experiment I:* Through the signalling of the limited availability, the altogether perceived novelty of the test product increases to a significant extent ($F_{1,116}=5.694$,

$p < .05$). Therefore, hypothesis 1 can be confirmed. Exploration seeker express a significantly more positive attitude judgement ($F_{1,58}=7,395$; $p < .01$) and trial interest ($F_{1,58}=13.155$, $p < .001$) towards the limited product than exploration avoider. This confirms the hypotheses 2a and 2b. A comparison of the situations with and without limitation shows that the attitude towards the product ($F_{1,59}=6.699$, $p < .05$) as well as the trial interest ($F_{1,59}=7.905$, $p < .01$) of exploration seekers will be significantly improved through a limitation, while there is no significant change in the attitude ($F_{1,57}=0.585$, $p = .448$) or rather in the trial interest ($F_{1,57}=0.078$, $p = .781$) of exploration avoiders. Hypotheses 3a and 3b can be supported (fig. 2).

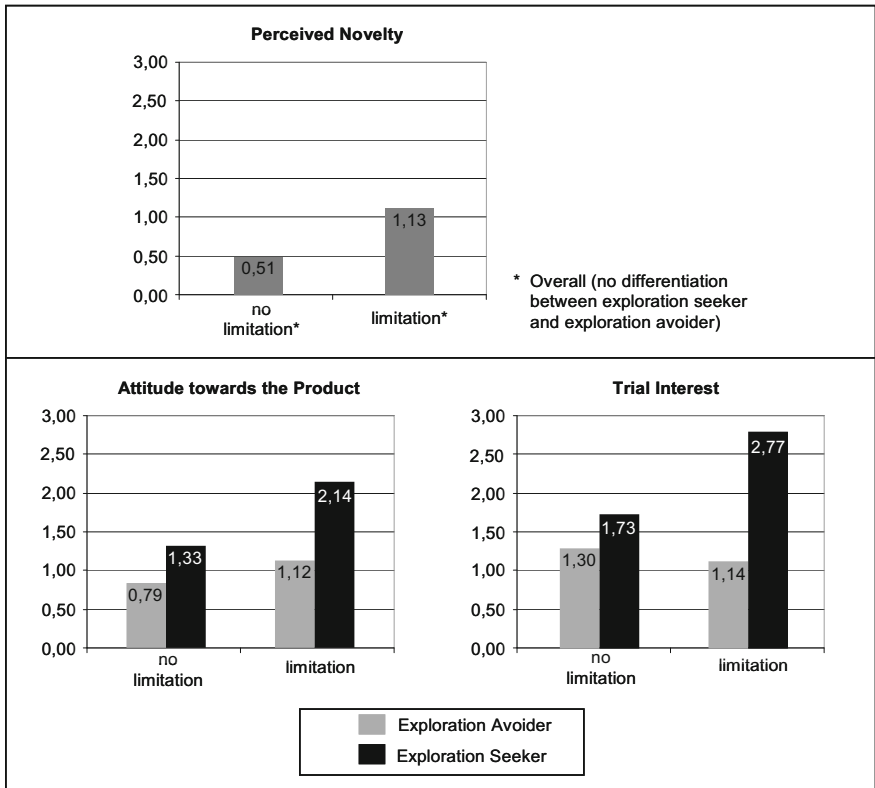


Figure 2: Results of experiment I

Experiment II: The aim of the second experiment was the analysis of reciprocal effects of a limited edition launch to the parent brand depending on the brand strength. Again, two preliminary studies for the determination of the stimulus material were carried out. At first, the aim was to find a weak and a strong brand of the same product category whose line contains corresponding standard varieties as well as a similar product design. A positive evaluation should exist towards the underlying product category as well as a tendency of the test persons towards exploratory behaviour. The variety of the limited edition should be perceived as moderately atypical and positively evaluated. Finally, a moderately atypical perceived visual design of the limited edition had to be defined. In the first preliminary study ($n=30$), the brands Leibniz and Choc me, which belong to the category of chocolate butter biscuits, proved themselves suitable for the strong and weak brand respectively. According to the test variety, “Stracciatella” fulfilled the above mentioned conditions. In the second preliminary study ($n=30$), concerning the moderately atypical variant of the particular brand, a yellow packaging with a light-blue frame on the sides was identified for Leibniz and for Choc me a completely light-blue packaging.

The main research is based on a 2x2 factorial design, which contains both a within- and a between-factor. “Launch of a limited edition” (product line before vs. after the launch of the limited edition) represented the within-factor. 61 students of a German university in total were interviewed. Each test person was interviewed about the dependent variables at two points in time, before and after the extension of the product line with the limited edition. Brand strength (strong vs. weak brand) was the between-factor. First, the test person was asked to rate the brand out of the standard variants (butter biscuit, milk chocolate and dark chocolate). Afterwards, they were shown a board, where the product line was extended with the limited edition “Stracciatella”. Again, the test persons were asked to judge the brand. The attitude towards the brand as well as the brand creativity were questioned as the dependent variables. The control variables are the product involvement, the attitude towards the package design as well as the exploratory tendency. *Results of experiment II:* Through the introduction of the limited edition, the result for the weak brand is a highly significant improvement of the brand attitude ($F_{1,28}=19.663$, $p<.001$). The attitude towards the strong brand does not change significantly through the launch of the limited edition ($F_{1,58}=1.578$, $p=.219$). Therefore, hypothesis 4 can be confirmed. By launching a limited edition, the perceived brand creativity of both the weak brand ($F_{1,28}=61.112$, $p<.001$) and the strong brand ($F_{1,29}=45.291$, $p<.001$) increase significantly high. Therefore, hypothesis 5 can be confirmed as well (fig. 3).

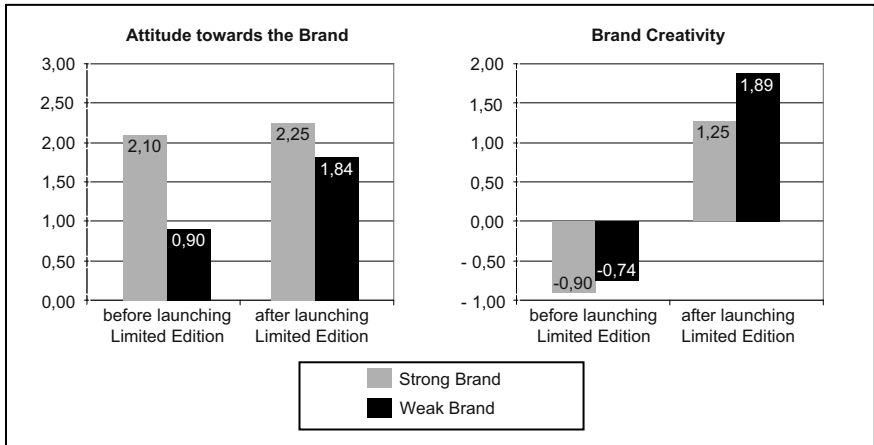


Figure 3: Results of experiment II

7 Conclusions

The results show that consumers in the low involvement-area apply a “scarce = novel”-heuristic and that they conclude from the limitation to the exclusiveness of the product. However, an intensified effect of the limitation onto the attitude and the behavioural intention only occurs for *exploration seeker*. Therefore, before a company decides to use limited editions as a new-product-strategy, it should be examined if the target group has a corresponding exploratory tendency and the desire to try new and extraordinary products. If this is not the case, it involves that the majority of consumers prefer familiar products to a limited edition. Thus, the potential of limited editions seems to be correspondingly restricted. Furthermore, the studies were able to underline the *impact of a product limitation*. To generate a positive scarcity effect at the PoS, it is necessary that customers also recognise the limitation. Therefore, it has to be ensured that according to the product design and also to the PoS-materials (e.g. trays and displays), the product limitation is communicated appropriately visibly to the consumer. The impact of a product limitation has also to be taken into account for product tests prior to a launch. To get valid test results, it is necessary to already inform the consumers in market research tests about the planned limitation of the product. Conversely, the validity of “market tests” has to be questioned where the product is initially introduced as a limited edition and later on, if sales are correspondingly successful, it will be integrated as a standard variant in the

product line. Through a constant integration in the range of products, an essential sales appeal gets lost with the limitation. It has to be assumed that a continuation of the sales figures, which the product has realised as a limited edition, will lead to excessive sales forecasts. Finally, it has been found that the brand can profit from the *reciprocal effects* of a limited edition. Limited editions are an effective strategy for brands which aim to increase the perceived brand creativity. In addition, they provide an opportunity for weak brands to improve the overall-attitude towards the brand.

8 Limitations and future research

For the generalisation of the obtained findings it has to be restrictively considered that exclusively *students* were questioned. Studies about the exploratory tendency have shown that particularly for younger consumers (Raju 1980; Givon 1984; Kumar/Trivedi 2006), or rather for those with a higher level of education (Raju 1980) an above-average tendency to explorative behaviour exists. Therefore, the above-average high tendency for exploration and therewith the acceptance of limited editions is expected for the group of students. In future studies, further sections of population can be examined concerning their acceptance of limited editions. Another restriction concerns the *cultural background*. In the above presented studies, only German test persons were questioned. Jung and Kellaris (2004) were able to show that, for example, a scarcity effect does not equally occur in all cultures, but that there are cultural differences. In a similar way, cultural differences in the exploratory tendency are conceivable. Concerning the implementation of a limited edition strategy, it would be especially interesting for internationally operating companies to know on the basis of which criteria, promising foreign markets can be discriminated from less promising. Another point, which has to be noticed, is that the range of *product categories* is restricted to frozen pizza and biscuits. The results should not be easily applied onto other product categories. With the consideration of other categories in the low involvement area, the external validity of the obtained findings could be increased. An important factor which leads to a different acceptance on limited editions in different product categories may be found in the category-related tendency for exploration.

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Appendix



Figure 4: Stimuli of experiment I

Table 1: Operationalisation of dependent variables

<i>Dependent Variable</i>	<i>Measurement</i>	<i>Cronbachs α</i>
Perceived Novelty	Measured by the following sets of adjectives: dull/exciting, routine/fresh, conventional/unconventional, predictable/novel, usual/unusual, ordinary/unique, commonplace/original (9-point scale) (Andrews/Smith, 1996)	Experiment I: $\alpha = 0,95$
Attitude towards the Product	Measured by the following scale items: good/bad, like/dislike, attractive/unattractive, likeable/dislikable, high quality/poor quality (9-point scale) (Hanson/Biehal, 1995)	Experiment I: $\alpha = 0,89$
Trial Interest	How great is your interest to try the Product X? (-4 = not interested, 4 = very interested) (Fennis/Baker, 2001)	-
Attitude towards the Brand	Measured by the following scale items: good/bad, like/dislike, attractive/unattractive, likeable/dislikable, high quality/poor quality (9-point scale) (Hanson/Biehal, 1995)	Experiment II: Before-Measurement: $\alpha = 0,90$ After-Measurement: $\alpha = 0,91$
Brand Creativity	What is your opinion regarding Brand X on each of the following attributes? 1. trendy, 2. modern, 3.cute, 4. creative, 5. fancy (-4 not applicable, 4 = applicable) (Mäder, 2005)	Experiment II: Before-Measurement: $\alpha = 0,93$ After-Measurement: $\alpha = 0,96$

How Multinational Enterprises Develop their Advertising Strategy in New EU Member States: A Qualitative View

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1 The expansion of the European Union

The European market is increasingly important in the world economy. The expansion of the European Union (EU) advanced further in 2004, by adding ten new member states, a total of 77 million people, and over 700,000 square kilometres of territory. The incorporation of eight central and eastern European countries (Estonia, Latvia, Lithuania, Poland, the Czech Republic, Slovakia, Hungary and Slovenia) and two Mediterranean islands (Cyprus and Malta) was one of the most ambitious initiatives in the five-plus-decade history of European integration. This drastic expansion has changed the way in which multinational enterprises (MNEs) operate their businesses in Europe. Because of these countries' low labour costs and investment incentives (e.g., tax reduction, construction aid), many firms have moved their production facilities from other regions to these new Member States. In particular, the Czech and Slovak Republics, Hungary and Poland have attracted almost three-quarters of foreign investment (Sheram and Soubbotina 2000), while MNEs have rapidly become the largest advertisers in these countries. To date, however, little research has been available regarding advertising or marketing strategy in this region.

The primary purpose of this study is to fill this research gap, by exploring the advertising strategies of MNEs operating in the three largest markets in the new EU member states: Poland, Hungary and the Czech Republic. We use a qualitative technique called grounded theory, proposed by Glaser and Strauss (1967). Based on this approach, we performed in-depth interviews with MNEs' senior or junior managers in the marketing or advertising departments.

The remainder of this chapter is structured as follows. We first explain grounded study as a research method, and its points of departure, based on which we then formulate our main research questions. Then, we describe the method in detail, and set out the results. In closing, we discuss the main contributions of the study, and suggest future research directions.

2 Study approach

2.1 Grounded theory

As the title implies, this research uses a qualitative approach. Traditionally, marketing researchers have tended to rely heavily on quantitative techniques, which follow a positivist epistemology. The basic tenets of positivism are (1) that every observation is based on some pre-existing theory, (2) that it is always possible to choose and select data that will support the theory, and thus (3) data collection is considered a verification method. In opposition to this positivist form of inquiry, Glaser and Strauss (1967) suggest grounded theory, which is based on constructivist epistemology. Grounded theory is defined as “a method of conducting qualitative research that focuses on creating conceptual frameworks or theories through building inductive analysis from the data” (Charmas, 2006, p. 187). Here, in contrast to positivist inquiry, (1) we make no priori assumptions, (2) present and past observations are compared constantly, and thus, (3) data collection is considered a discovery process. In grounded theory, a series of in-depth interviews are conducted to create a textual database, and to “discover” or label the variables (hereafter “categories”) and their interrelationships. Then, constant comparisons are made, in order to extract testable hypotheses from qualitative information, to which a rigorous coding process will then be applied. In grounded theory, the data analysis and the later stages of data reduction operate iteratively. Coding is a process of simultaneously reducing the data, by dividing it into units of analysis and coding each unit. Data collection, constant comparison, and coding are performed simultaneously, until the categories are saturated. This occurs when gathering new data neither adds new theoretical insights, nor reveals any new properties of the core categories. This is called the “saturation point”. In this way, initial sampling, which is used to address the initial research inquiries, should be amplified by theoretical sampling, which is used to explicate and confirm the resulting categories.

2.2 *Points of departure*

In grounded theory, no theoretical hypotheses are formulated before the empirical explorations. Furthermore, the classic grounded theorists, Glaser and Strauss (1967), even suggest delaying the literature review until after the completion of the analysis. However, we believe that it is not only important, but also necessary, to treat the extant concepts at the beginning, to enable readers to understand the extent to which prior knowledge is properly understood.

Among globalisation theorists, Alden et al. (1999) have suggested that Global Consumer Culture Positioning (GCCP) will resonate with increasingly global segments of consumers. In GCCP, the brand is defined as a symbol of a given global culture, which consumers may purchase to reinforce their membership in that segment. A specific executional technique—the soft-sell approach (exhibiting subtlety, implicitness and abstractness)—appears to be more suitable for GCCP than the hard sell approach. “Because global consumer culture is an emerging and rapidly changing phenomenon, with differing sets of signs in differing global segments, advertising using this positioning should be more effective as it communicates in a subtle, indirect, and abstract fashion,” (Alden et al. 1999, p. 79). Indeed, well over half of the GCCP ads surveyed employed the soft-sell approach. GCCP is contrasted with local consumer culture positioning (LCCP), which associates the brand with the local consumer culture. This strategy resonates with some consumer segments because they more readily identify with local attitudes, values and lifestyles. Acknowledging that we are in the relatively early stages of global consumer culture diffusion, Alden et al. (1999) proposed that LCCP—which reflects local values—is currently still used more frequently than GCCP. Indeed, their findings strongly support this hypothesis.

Second, Zou and Cavusgil (2002) proposed a theoretical model of global marketing strategy that was originally based on industrial organisation theory. Specifically, they presented a broad conceptualisation of global marketing strategy theory (GMS) that incorporates eight dimensions. These include product standardisation, promotion standardisation, distribution standardisation and pricing standardisation, in addition to other dimensions related to global integration and the concentration and coordination of value-adding activities. The GMS model contends that the fit between a company’s marketing strategy and its external environment and internal organisational resources determines the company’s performance in the global market. When external market factors and internal organisational characteristics are conducive to global marketing, a more globalised marketing strategy, such as employing a higher degree of standardisation and integration, will impact positively on the company’s global strategic and

financial performance. Using survey data, Zou and Cavusgil (2002) offered empirical support for the GMS model.

Okazaki, Taylor and Zou (2006) applied the GMS in an advertising context, and proposed a structural model of advertising standardisation that explores (1) the factors that encourage firms to engage in standardised advertising; and (2) the impact of advertising standardisation on advertising effectiveness, and on two measures of firm performance. The results of a survey of Japanese and U.S. subsidiaries operating in the EU provide support for the model, and suggest that standardised advertising could enhance a firm's financial and strategic performance when it fits the external environment and the internal resources of the firm. However, this study examined only some old EU member states (UK, France, Germany, Italy and the Netherlands) and it needs to be extended into the new frontier EU region.

On the basis of the preceding discussion, this study aims to explore international advertising strategy in the new EU member states. Specifically, we aim to address the following key questions in the Czech Republic, Poland and Hungary:

- RQ1:* What are the most relevant environmental factors that affect advertising/marketing decision making in the new EU member states, as compared to the old member states?
- RQ2:* What factors do firms consider in planning advertising/marketing strategy in the new EU member states, as compared to the old member states?

3 Method

Following the grounded theory approach, we interviewed MNEs' advertising/marketing managers or equivalent practitioners, based on which we performed coding and clustering to find the key dimensions. We did so to seek saturation points that could provide testable hypotheses. To identify firms operating in the countries, we use the listing of the "Fortune Global 500", which has been widely used in business research. We chose to seek firms that possess (1) substantial business in terms of sales volume, and (2) local subsidiaries in all three countries (i.e., Poland, Hungary and the Czech Republic). This selection procedure ensures that (1) these firms are considered to have a "global" presence in international markets in the new EU member states. Based on this list, we contacted the firms to ask for their collaboration with the study. As a result, 10, 6 and 6 firms agreed in Poland, Hungary and the Czech Republic, respectively. All interviews were conducted between October and December 2008.

4 Results

4.1 Poland

Firms perceive the Polish market as a dynamic and “young” market in growth. Company managers usually perceive that there is much growth potential, and that the level of competition is increasing. Managers responded that disposable income in Poland may be lower than in the “old” EU member states. In addition, their subsidiaries’ sales volumes have been flat, mainly because of the global crisis. However, although the Polish economy depends greatly on the world economy, the global crisis arrived there much later.

Poland is a highly regulated market, and this may be an important obstacle to marketing new products. Polish consumers are open-minded, and they seem to have similar needs to other Euro consumers. On the other hand, they are very demanding and price-sensitive. Awareness or recognition of global brands is relatively low in Poland. Local brands are strong, but they do not have global orientation in terms of marketing or advertising.

In terms of marketing/advertising strategy, HQs have strong control over local subsidiaries’ decisions. Little, if any, local modification is allowed. All firms responded unanimously that global ads are used without substantial changes (except any necessary translation), in the attempt to achieve a uniform brand image. Any locally produced ads must be approved by HQs and, if they do not fit companies’ global policy, they must be changed. Thus, localisation depends on the level of budget. Cultural influence is so strong that, in many cases, global ads may not work. Price is determined by local subsidiaries. They first tend to position their brand from local perspectives, and then analyse the level of competition, in order to set the price.

There is a strong coordination between European HQs and Polish subsidiaries in exchanging new ideas (about products, promotions and advertising etc.). When MNEs started business operations in Poland, European HQs provided the Polish subsidiaries with their accumulated experience and business solutions from other countries.

4.2 Hungary

Hungary is a much smaller market than Poland, and it seems that firms there are unlikely to standardise the advertising budget in terms of agency selection. However, as in Poland, firms unanimously agree that HQs tend to control advertising production. One manager of an IT firm responded that “we always have to fight

with the HQ about advertising development". Advertising standardisation seems to depend on the brand: almost 80% of the global brands sold in Hungary use standardised ads, and few localised ads are created. In this regard, the similarity of consumer needs may be an important determinant. When consumer needs are similar, firms may be able to use uniform ads in the same way in which they are used in other EU member states. On the other hand, different consumer needs allow more freedom in advertising strategy. Also, market size has an impact on standardisation. Due to the high production cost of television commercials, smaller markets often have no choice but to accept commercials developed in other larger markets.

In general, many senior managers favour local adaptation. There is constant negotiation with HQs, as they strongly believe that many standardised messages may not work in the local market. Advertising strategy has to be tightly connected to local consumer needs, which are often different from those in other existing EU markets. For this reason, managers tend to prefer advertising that focuses on basic brand benefits, which leads to more rational and less emotional execution.

On the other hand, ads are regionally standardised, in that some firms use only one ad for all of Eastern Europe, with any necessary minor local adaptation being allowed. Some firms responded that this regionalisation may be effective for initial awareness building for a new brand. That is, a common approach can be adopted in the Eastern markets for the stimulation and development of consumer brand attitudes.

Media effectiveness and availability are important issues in Hungary, as well as in Central Europe. Most markets are still dominated by television, for multiple reasons. First, TV is the most efficient tool for introducing major consumer brands, because of its reach. With the advent of commercial TV stations, consumers tend to watch more and more TV. Online advertising remains in its infancy and there are also major connectivity issues, including measurement and agency behaviour that is somehow less prepared to include online ads in the media plans.

4.3 The Czech Republic

Czech consumers are very price-conscious. The perception of the price-value ratio plays an important role in their buying decisions. The use of the price instrument is limited due to the proximity of the German and Austrian markets. Czech prices can be lowered by 10% at most, to ensure that they do not endanger the revenues of MNEs in the German and Austrian cross-border regions. In this

regard, the power of the brand should not be underestimated in the Czech market. Because of the lower purchasing power in the Czech Republic, consumers tend to perceive some brands as premium, and this complicates their positioning.

In some product categories (such as automobiles and office supplies) local subsidiaries are obliged to modify their HQ-led standardised concepts to enable their campaigns to be tailored to specific local market segments. A similar problem arises when they need to modify the product itself, because this necessarily demands the necessary adjustment of standardised ads. In this light, “global advertising” may have an important limitation in the Czech market.

MNEs tend to perceive the Czech market as too small to justify costly local adaptation. In this regard, one manager of a consumer goods firm responded that, although global ads predominate (almost 80%), small adaptations are sometimes allowed. In general, MNEs with a top-down organisational structure are likely to use a higher level of standardisation. Furthermore, there is a tendency for one agency to design common concepts for all nearby regions. By avoiding multiple contracts with local agencies, MNEs save substantial costs. The market also favours the standardisation approach, because MNEs tend to develop different ads for the same product.

HQs pressure their subsidiaries to adopt standardised ads in two ways: (1) by giving an explicit “order”, or by establishing a budgetary limit on a local marketing program. If local subsidiaries need some changes in standardised ads, they must pay for it, even if the modification is made by the agencies that were originally contracted by HQ. In this light, the marketing budget has become an important constraint on advertising localisation. The current global economic recession has reinforced the standardisation of advertising in MNEs’ Czech subsidiaries, because local marketing budgets have been drastically reduced.

Another factor influencing advertising standardisation is the disappearance of “country managers”. Due to organisational restructuring, MNEs have tended to reduce personnel costs. As a result, regional managers have gained more responsibility, and now cover country-level operations. Thus, advertising for the Czech market is planned and managed together with that for the markets in Slovakia, Hungary and Rumania. It is assumed these markets are very similar, and can therefore be managed as a single homogenous unit. By this same token, an advertising/campaign is tested in only one country of the region, and typically in the largest market, where the regional HQ is located. If the campaign succeeds, then it is automatically used in the entire region.

Local managers see the current proportion between the standardisation and adaptation approaches as reasonable and effective. Despite the potential problems of advertising standardisation, some firms admitted to limited knowledge of

the Czech markets, because of the important lack of hard data for particular industries. This may act as a further obstacle to the localisation of advertising.

Managers also pointed out that there is increasing country-level cooperation, in which the neighbouring markets adopt the Czech version of global ads if they think they will work. Similarly, the Czech subsidiaries can use standardised ads that have been modified by other EU member states. In this regard, managers suggested that, in standardised ads, “global concepts” are often elaborated in too much detail, which makes their modification extremely difficult. Nonetheless, local managers agree with the primary role of locally adapted advertising: to apply globally acceptable creative concepts in a local market. In essence, this requires the adequate translation and rigorous execution of the advertising campaign, and appropriate timing in the local market.

5 Limitations

We should recognise a few limitations to make our discussion more objective. First, in a multi-country collaborative project, the distance between the four participating countries was a major obstacle in terms of communication. Second, firms generally were not collaborative, and were reluctant to disclose their internal information. In this regard, it may be wiser to contact advertising agencies, which may be more willing to help our data collection.

6 Discussion and synthesis

It seems that global firms are somehow conscious (at least at the managerial level) of the limitations of “global marketing” policy, but they have no choice but to follow the HQ-led strategy. In this regard, one Czech firm warned that this paradoxical situation might have been exacerbated by the recent world economic crisis. Moreover, a lack of market knowledge—of market and industry structures, consumer tastes and preferences, buying habits, and so forth—may limit firms’ challenge to adapt specific advertising messages to local markets. We argue that this lack of market knowledge, and the resulting low level of adaptation, may have led to a sceptical attitude towards global ads. Given low brand awareness or recognition in this region, this may result in a fatal error for MNEs’ long-term profit, unless more flexible approaches are sought. Some forms of advertising supported by technology, e.g., blogging and community building, come with lower fixed costs, and are less visible than mass advertising. These may offer opportunities to localise at lower cost, without the risk of jeopardising

brand positioning in other markets. To arrive at this approach, advertisers in emerging markets will have to educate customers on using new media, and work with other constituencies (ad agencies, media companies and so forth) to establish the right infrastructure, which would allow the use of the above techniques.

Based on the above observations from the in-depth interviews with global firms, we performed a final synthesis and proposed a model for quantitative exploration. This model connects most of the important factors influencing MNEs' advertising strategy in the new EU member states.

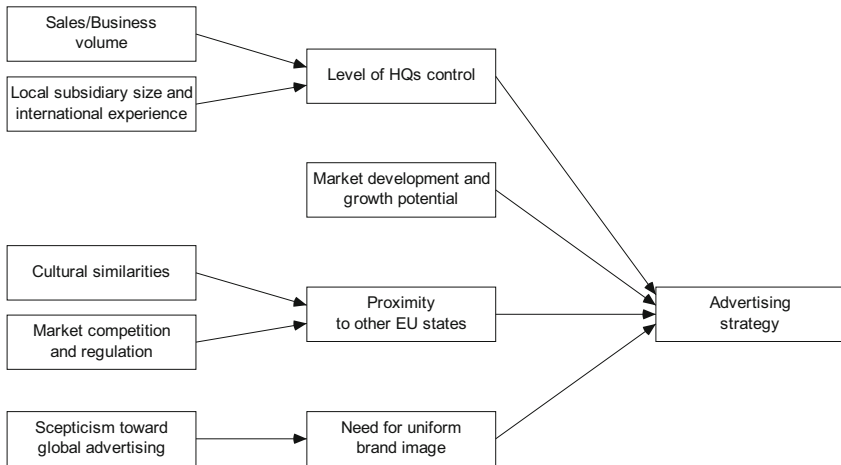


Figure 1: Proposed model

7 Future extension

In the future, saturation points must be sought with regard to our preliminary findings above. A quantitative survey may then prove an interesting extension. Based on the results provided in this chapter, we could validate the proposed model by collecting data in the new EU member states, without limiting them to the countries examined in this chapter. Such research should make a significant contribution to the literature on international marketing.

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A Call for a Broader Range of Dependent Variables in Advertising Research

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1 Introduction

Using experiments to evaluate the effectiveness of various advertising strategies has a long tradition in academic research in marketing (see e.g., Strong, 1912, for an early example). These experiments typically evaluate the effects of using a certain strategy (e.g., humor or celebrity endorsement) or executional style or elements (e.g., color or images) on a small set of dependent variables. The dependent variables in most cases are brand attitude and brand purchase intention, and to a limited extent attitude toward the ad. The dominance of these variables is demonstrated by the fact that they are the most common dependent variables in meta-analyses of advertising research (e.g., Brown and Stayman, 1992; Eisinger, 2006, 2009). This practice is problematic for at least two reasons. Firstly, it suggests a belief that advertising works by having a positive effect on either brand attitude or brand purchase intention, or both, but not by influencing other variables (Figure 1). This rather simplistic view disregards well established theories of behavior from psychology, in particular the Theory of Reasoned Action (Fishbein and Ajzen, 1975) and the Theory of Planned Behavior (Ajzen, 1991), which in addition to attitude and intention also include *subjective norm* and *perceived behavioral control* as important antecedents of behavior. It also disregards the extensive research on attitude strength which shows that *attitude confidence* moderates the relationship between attitude and behavior (see overviews in Ajzen, 1988; Fazio, 1986; Petty et al., 2007). Secondly, focusing on the effects of advertising on brand attitude or brand purchase intention makes it problematic to do research on mature brands. Consumers usually have established brand attitudes and brand purchase intentions for mature brands that are difficult to change with advertising (Machleit et al., 1993). However, if there are other important variables in an advertising context, such as subjective norms or confidence, it could be that these are easier to influence than attitudes and intentions and, thus,

that these variables are more suitable as dependent variables in research on mature brands.

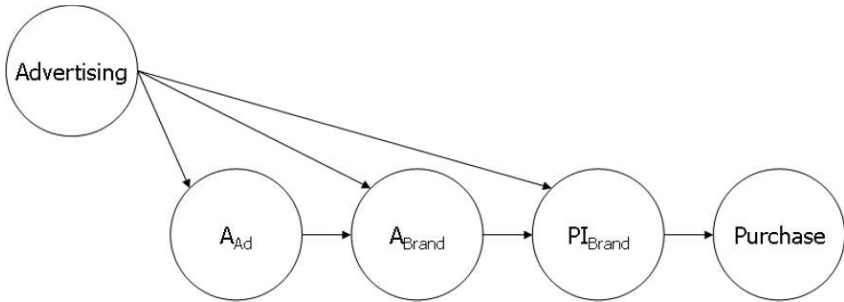


Figure 1: The model of how advertising works implied in advertising experiments

A search of all articles published in the Journal of Advertising to date shows that interest in subjective norm, perceived behavioral control and attitude confidence among advertising researchers is limited. The search revealed one article (Evans, 1978) that had included subjective norm in an advertising study and four articles (Hastak, 1990; Kirmani, 1997; Lee, 2000; Smith and Swinyard, 1988) that had included attitude confidence. The search revealed no article that had included perceived behavioral control. A notable exception to this lack of interest in advertising research is the Integrative Framework for Effective Communication (Van den Putte, 2006; see also Van den Putte and Dhondt, 2005), which builds on the Theory of Planned behavior and includes advertising strategies to influence subjective norm and perceived behavioral control. Unfortunately, this work has not been particularly influential. The article by Van den Putte and Dhondt (2005), for example, has been cited twice according to the Social Sciences Citation Index (accessed through the Web of Science, November 13, 2009).

This paper discusses the relevance of subjective norm, perceived behavioral control, and attitude confidence to advertising research and argues that they are of interest in a number of advertising contexts. It also argues that they should be included as dependent variables in advertising effectiveness research. In the following sections each construct is defined and some aspects of their interest to advertising research are discussed.

2 Subjective norm

According to the Theory of Planned Behavior (Ajzen, 1991), subjective norm is one of three antecedents of behavioral intention (Figure 2). The other two antecedent constructs according to the theory are attitude toward the behavior and perceived behavioral control. Subjective norm “refers to the perceived social pressure to perform or not to perform the behavior” (Ajzen, 1991: 188) and subjective norm is expected to have a direct causal influence on intention. The latter means that the stronger the subjective norm the stronger intention to perform the behavior.

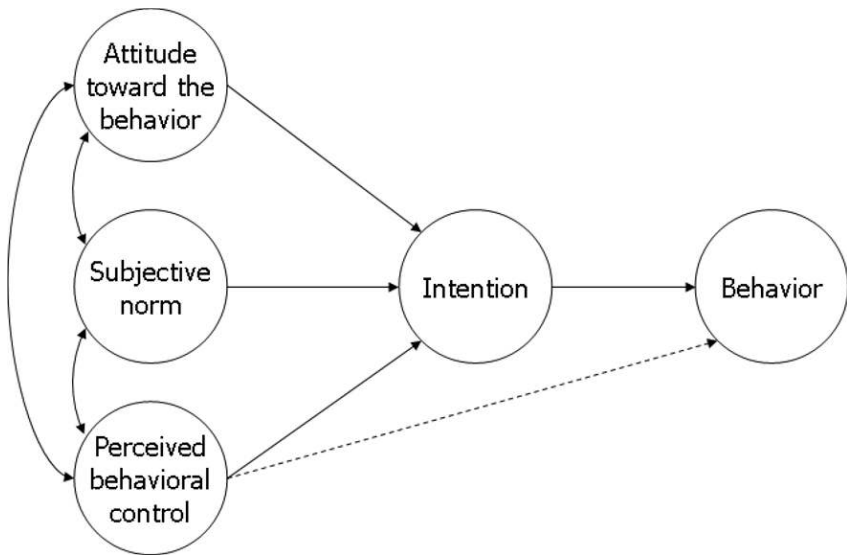


Figure 2: The theory of reasoned action (Ajzen, 1991)

According to the Theory of Planned Behavior, the relative importance of the three antecedent constructs varies across behaviors and situations (Ajzen, 1991, 2002). In an advertising context, two likely moderators of the importance of subjective norms are target audience and type of brand, that is, subjective norm is likely to be of greater importance for some target audiences and brands than others. For example, it seems likely that subjective norm is more important for teenagers than it is for older target audiences. It also seems likely that subjective norm is more important for symbolic brands, that is, brands that are “designed to

associate the individual with a desired group, role, or self-image” (Park et al., 1986: 136), than it is for functional brands (“designed to solve externally generated consumption needs”) or experiential brands (“fulfil...internally generated needs for stimulation and/or variety”) (cf. Van den Putte, 2006). Thus, it is necessary to establish the relative importance of subjective norm for a certain target audience and type of brand before this construct is used as dependent variable in an advertising experiment. This can be done using well-established measurement methods and statistical analyses (see e.g., Van den Putte and Dhondt, 2005).

A situation in which the role of subjective norm is of particular interest is the case of user imagery advertising. User imagery is “the set of human characteristics associated with the typical user of a brand” (Aaker, 1997: 348) and user imagery advertising shows a typical user and/or a typical usage situation (Sutherland and Sylvester, 2000). Given that user imagery advertising is popular with large advertisers, such as Coca-Cola or Levi’s, it seems likely that these advertisers have seen positive sales effects for this style of advertising. The question is to what extent user imagery advertising causes sales to increase by increasing subjective norm rather than by strengthening brand attitude (which is the usual assumption in advertising research).

It is also of interest to investigate what advertising strategies are better for increasing subjective norm. Although it is well established that making people aware of norms influences their behavior (e.g., Cialdini and Goldstein, 2004), recent research shows that there is substantial variation depending on what type of norm is invoked. For example, Goldstein et al. (2008) found that “provincial norms,” that is, norms that apply to the local setting and circumstances, had greater effect on hotel guests’ propensity to recycle towels than global norms, even if the latter applied to more important reference groups. This suggests that there could be differences in the effects on subjective norm depending on the type of norm that is invoked in advertising. Another advertising strategy of interest in this context is what spokesperson to use in ads. It seems likely that using “real people” in advertising would have a greater positive effect on subjective norms than celebrities or attractive models, but this needs to be investigated empirically.

3 Perceived behavioral control

Perceived behavioral control “refers to the perceived ease or difficulty of performing the behavior and it is assumed to reflect past experience as well as anticipated impediments and obstacles” (Ajzen, 1991: 188). Perceived behavioral control is expected to become increasingly important as volitional control over

behavior decreases (Ajzen, 1991; Armitage and Conner, 2001). In an advertising context this means that perceived behavioral control should be relatively more important for, say, high-priced products, which not all consumers can afford, or brands that are perceived as being highly priced. Moreover, perceived behavioral control should be relevant for brands that have limited distribution and as a consequence are not widely available.

Though perhaps of slightly less interest to advertising researchers than subjective norm and attitude confidence, there are some situations in which perceived behavioral control could be of interest. For example, if advertising portrays a brand as very exclusive, members of the target audience could feel that the brand is out of their financial reach and, as a consequence, their perceived lack of behavioral control would stop them from considering the brand. Moreover, expensive brands could offer purchase-by-installments promotions to increase the perceived behavioral control of their target audiences. There are also situations in which additional information in advertising could increase perceived behavior control. For example, if the target audience do not know where to buy a brand including information about which retailers carry the brand should increase perceived behavioral control (Rossiter and Percy, 1997, refers to this as purchase facilitation).

4 Attitude confidence

Howard (1989: 34) defines confidence as the “buyer’s degree of certainty that his evaluative judgment of a brand is correct.” This definition is in line with how attitude confidence is defined in psychology where attitude confidence typically is defined as “the degree to which an individual is confident that his or her attitude toward an object is correct” (Krosnick et al., 1993: 1132). Attitude confidence, or confidence for short, is regarded as a dimension or outcome of attitude strength (e.g., Krosnick et al., 1993; Priester et al., 2004) and confidence moderates the relationship between attitude and intention or behaviour (Ajzen, 1988; Bergkvist, 2009; Fazio, 1986). Unlike subjective norm and perceived behavioral control, there is no indication in the extensive research on confidence that the construct varies in its applicability depending on the attitude object or the situation. Thus, confidence should be equally relevant across different types of products and brands, target audiences, and situations.

Confidence is of particular interest to advertising researchers in the context of doing research on mature brands. A common problem when doing research on the effects of advertising on mature brands is that these brands have well established brand attitudes and purchase intentions that are not likely to change as the

result of one or a few exposures to an ad in an experiment (Machleit et al., 1993). However, research has shown that confidence is more susceptible to advertising than other outcome variables, such as brand attitude and purchase intention (Lehmann, 1977). This suggests that confidence could supplement or replace brand attitude and purchase intention as dependent variables in advertising experiments with mature brands.

There has been some research on what advertising strategies increase confidence. For example, it has been demonstrated that confidence increases as a result of advertising repetition (Berger and Mitchell, 1989) and product trial (Smith and Swinyard, 1983). It has also been shown that ads with unexpected information, through a process of increased message involvement, lead to higher confidence than ads with expected information (Lee, 2000), and there is research that suggests that increased knowledge leads to increased confidence (Huneke et al., 2004). However, the research on confidence-increasing advertising strategies is limited and there is ample room for further research. For example, do attribute-based benefit claims (see Rossiter and Bellman, 2005) in advertising lead to higher confidence than benefit-only claims, since the former offers more knowledge than the latter? It would also be of interest to investigate the effects of different sales promotions on confidence. In light of the many studies demonstrating how direct experience increases confidence (e.g., Berger and Mitchell, 1989; Fazio and Zanna, 1978; Smith and Swinyard, 1983), it seems highly likely that promotions in which free samples are given out should increase confidence but the effects of other types of promotions are less obvious. For example, can contests be designed in such a way that they increase knowledge about the product and, thereby, confidence?

5 Discussion

This paper argues in favor of adding more dependent variable to the ones currently used in advertising research, particularly in laboratory experiments investigating the effectiveness of advertising strategies. Currently, brand attitude and brand purchase intention seem to be routinely used and other dependent variables rarely considered. The overview and examples in this paper suggests that subjective norm, perceived behavioral control, and attitude confidence are relevant to advertising research and that they could serve as alternative or supplementary dependent variables in advertising research.

The limited interest among advertising researchers for the three constructs discussed in this paper is somewhat surprising. From an academic point of view, the Theory of Planned behavior is well established and there is ample empirical

support for it in numerous different settings (see meta-analyses in Ajzen, 1991; Ajzen, 2002; Armitage and Conner, 2001; see also De Cannière et al., 2009 for a marketing application), and its relevance in an advertising setting has been demonstrated by Van den Putte and Dhondt (2005). So it would hardly be controversial to suggest that a certain advertising strategy influences subjective norm and/or perceived behavioral control and to test this in an empirical study. Similarly, the importance of attitude confidence is well documented (see overviews in Ajzen, 1988; Petty et al., 2007) and the construct has received a fair amount of attention in marketing research (e.g., Berger and Mitchell, 1989; Bergkvist, 2009; Briñol et al., 2004; Huneke et al., 2004). Thus, it is not likely that academics would protest if any of the three constructs discussed in this paper were to be used as dependent variable when testing the effectiveness of a proposed advertising strategy. From a marketing practitioner perspective, the importance of subjective norm has not been overlooked (although this knowledge most likely is not formalized in a theoretical model). For example, Goldstein et al. (2008: 472) notes that: ‘When consumers learn that seven out of 10 people choose one brand of automobile over another, that teeth-whitening toothpaste has become more popular than its less functional counterpart, and that nearly everyone at the local cafeteria steers clear of the “spamburger surprise” entrée, they are getting information about social norms’ (see also Sutherland and Sylvester, 2000).

There is a risk of drawing two types of erroneous conclusions if only brand attitude and/or brand purchase intention are used as dependent variables when the effectiveness of an advertising strategy is tested. First, it could happen that an advertising strategy that increases brand attitude leads to a decrease in subjective norm, perceived behavioral control and/or confidence. For example, portraying a brand as an exclusive luxury brand may increase brand attitude at the same time as it decreases perceived behavioral control because the brand is thought to be too expensive by the target audience. If this advertising strategy is evaluated using only brand attitude as dependent variable the researcher will erroneously conclude that it is an effective strategy. Second, there could be advertising strategies that do not increase brand attitude at the same time as they have positive effects on subjective norm, perceived behavioral control, and/or confidence. For example, an advertising strategy that increases the target audience’s knowledge about the brand will not necessarily increase brand attitude but it is likely to increase confidence, which is a positive effect for the brand. If this strategy is evaluated using only brand attitude as dependent variable, the positive effect on confidence will not be noticed and the strategy erroneously considered as ineffective.

On a more general, academic level it is, of course, not satisfactory to work with incomplete models of the object of interest. If advertising works by influen-

cing brand attitude, brand purchase intention, confidence and, when applicable, subjective norm and perceived behavioral control, models of advertising should include all of these variables. Apart from not gaining a full understanding of how advertising works, it is also important to note that leaving important variables out of analyses can have the consequence that the importance of the remaining variables is overestimated (cf. Fishbein and Middlestadt, 1995).

The recommendation, therefore, is that advertising researchers include subjective norm (when applicable), perceived behavioral control (when applicable), and attitude confidence in studies of how advertising works and advertising effectiveness. This will lead to more relevant research being carried out and will reduce the risk of erroneous advertising strategy recommendations.

The issues discussed in this paper suggest a number of opportunities for future research. These include, but are in no way limited to, the following:

1. Given that the relative importance of subjective norm is expected to vary between situations and brands, it would be of value to identify variables that moderate the relative importance of subjective norm. It was suggested previously that target audience could be one such variable and it would be valuable to investigate whether there are differences between different age groups, gender differences, or cultural differences. It was also suggested previously that type of brand is a likely moderator of the importance of subjective norm and that it is likely that subjective norm is more important for symbolic brands, as defined by Park et al. (1986), than it is for functional and experiential brands. However, there are other ways to distinguish brands from each other that could be equally or more relevant. For example, Rossiter and Percy (Rossiter and Bellman, 2005; Rossiter and Percy, 1997) distinguish between informational and transformational advertising strategies based on eight different purchase motives (e.g., problem removal or sensory gratification). It seems likely that subjective norm is particularly important for brands where the purchase motive is social approval, that is, what motivates consumers to buy is that they seek personal recognition from others. The research on moderators of the importance of subjective norm could be modeled on the work of Van den Putte and Dhondt (2005) who used well-known measures and regression analyses to determine the relative importance of instrumental beliefs, subjective norm, personal normative belief, and affective beliefs in chocolate purchase decisions.
2. How does user imagery advertising work? User imagery advertising shows a typical user of a brand (Sutherland and Sylvester, 2000) but in most cases do not present any attributes or benefits associated with the brand. User imagery advertising could have positive effects for a brand either by influencing

- brand beliefs (e.g., “this brand is used by people like me”), which in turn influence brand attitude, and/or by influencing subjective norm. Which is the case could be elucidated in an experimental study in which the effects of user imagery advertising on brand beliefs and subjective norm are compared.
3. How price or perceived price influences purchase intention is of interest in an advertising context. Does a high perceived price have a negative effect on brand beliefs (e.g., “value for money”) or on perceived behavioral control? Or both? Whether the effect is on brand beliefs or on perceived behavioral control is important to know since the marketing communications strategy the brand should use to counter the negative effect on purchase intention is different. If the negative effect is on brand beliefs advertising strengthening either the beliefs in question or other beliefs (e.g., “high quality”) to make the net effect on brand attitude positive could be used. If the negative is on perceived behavioral control sales promotions addressing the high price could be used (e.g., payments by installment).
 4. There is a limited body of research investigating advertising strategies that increase confidence (e.g., Lee, 2000) and there are few, if any, studies investigating advertising strategies that increase subjective norm or perceived behavioral control. Some advertising strategies that could increase consumers’ confidence, subjective norm or perceived behavioral control were suggested in the respective sections above. Testing the effects of different advertising strategies in experiments is in most cases rather uncomplicated and the suggested strategies should be straightforward to evaluate.

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The Passive Shopping Stage: Keeping in Mind Brand Encounters

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1 Introduction

In marketing practice, brand managers have to split their budgets between brand advertising efforts and sales promotions. This is a tough decision and is based on several factors including the type of product and the preferences of the target consumer. In this study, the consumer purchase decision making process is conceptualized as a continuum from a passive shopping stage to an active one. Advertising messages work during the passive stage while promotion messages work during the active one. Utilizing panel data obtained from respondents in five European countries, multiple product categories were examined to identify whether pre-purchase brand attitudes determine consumer purchase decision reliance on either passive or active stage brand messages. The author investigated whether patterns hold across countries and product categories. The study also examined to what extent reliance on passive stage messages in a product category is affected by either the aggregate satisfaction or loyalty with the brands available on the market in that category.

The findings of this study help brand managers in their decision to allocate brand communications budgets. Even though the subject of brand budget allocation has been investigated before, most studies examined the use of either traditional advertising or sales promotions separately. Additionally, little research has confirmed the relationship between brand messages as purchase drivers and pre-purchase brand attitudes across multiple countries and product categories.

2 The Passive-Active Continuum

Advertising practice encompasses both the development and placement of brand messages. When crafting messages, advertising practitioners take into account how far along in the purchase decision-making process are the target consumers.

When placing messages, brand managers divide budgets between advertising and sales promotions resulting in messages being displayed far away or right at the outlet where the consumer will make the purchase.

Previously, Bucklin and Lattin (1991) noted that consumers use information encountered both inside and outside the point of purchase and modeled the dynamics of in-store promotions. They distinguished between *planned* and *opportunistic* shopping. Planned shopping is when the consumer has already decided which products/brands to purchase and opportunistic shopping occurs when the consumer has not decided on the purchases to be made and will likely be influenced by in-store promotional efforts. Extending the formation of a mental short list of brands prior to store entry, Andrews and Srinivasan (1995) modeled consumer choices outside the store and identified two stages: the *consideration stage* and the *choice stage*. The consideration stage in this two-stage conceptualization ends with the formation of the consideration set or the short list of brands of which one will be purchased, at which time the choice stage begins. While the author agrees with Bucklin and Lattin that some purchase decisions are planned while others are impulsive, this study is built on Andrews and Srinivasan's two-stage distinction as theirs is rooted more in distinguishing mental states rather than physical presence at the point of purchase.

The inclusion of mental states and processes in this study's rationale is fueled by the attention given to latent influences on human decisions including purchase decisions (Zaltman 2003). Is a brand capitalizing on pre-existing preferences or are potential customers being diverted to competitive brands while in the active shopping stage? Our contribution is that we add a pre-consideration passive stage to Andrews and Srinivasan's two active stages. A marketing communications message can be encountered during either a *pre-consideration/passive* or *consideration-choice/active* stage.

2.1 *The passive (pre-consideration) stage*

During the pre-consideration stage, preference for a brand is being built. From consumer psychology, we learn that this inclination towards a particular brand is reflected in memories, associations and feelings. Advertising practitioners label the format of promotional messages at this brand image building stage as above-the-line. Consumer memories, associations and feelings about a brand resulting from above-the-line brand efforts and previous experience with the brand can be synthesized into the consumer's brand knowledge (Keller 2003). Brand knowledge is being accumulated over time and is not related to one specific shopping occasion. Built long-term in a shopper's mind, brand knowledge is pre-existing

to the active shopping stage, whether planned or opportunistic. When brand knowledge is being built, brand-related imprints are made on the brain that are kept long-term and recalled involuntarily or consciously, depending on the type of trigger. Before entering an active shopping stage when the brand is cued, consumers are in a passive stage for that product category. At any time during the passive or pre-consideration stage, consumers will have memories of a brand (Keller 1987), will make associations related to a brand name (Low and Lamb 2000), and will have emotional reactions to the brand that turn into feelings (Edell and Burke 1987, 1989; Bagozzi, Gopinath and Nyer 1999). Once a need or want is recognized for the product category, the consumer exits the passive stage and enters the active one where brands in the product category are considered and then one is chosen and purchased.

2.2 The active (consideration and choice) stage

During the active shopping stage that covers both consideration and choice, consumers first recognize a need and then are actively moving through the purchase decision-making process which ends in an actual purchase and post-purchase behavior. During the active stage, marketing communications efforts are crafted around the consumers' shopping habits. While above-the-line advertising is still present during the active shopping stage, the consumer also encounters messages placed at the various points of purchase or other relevant brand communications outlets. Short-term advertising, usually associated with the point of purchase is labeled below-the-line by practitioners.

Once in the active shopping stage, the consumer goes through both the consideration and choice stages identified by Andrews and Srinivasan (1995). This short-term phenomenon includes both shopping around considering the various options available as well as choosing among those options. This stage happens both inside and outside the store. Accounts of retrieval in psychology suggest that marketing variables such as television and store feature advertising, aisle display and other point-of-purchase materials can act as cues for the retrieval of brands from long-term memory for inclusion into the choice set (Alba and Hasher 1983; Kahneman and Miller 1986).

2.3 The continuum

Whether the brand information a consumer encounters either shapes brand knowledge or also cues retrieval of information for consideration and choice purposes

depends on the consumer's mindset. Consumers may be actively researching the product category with a definite purchase in mind or they may just be storing the brand information (perhaps even involuntarily) for use at a later date. We can say that advertising to consumers in the pre-consideration stage is about making a sale before the sale, while messages encountered during the active stage help close the sale. Marketers strive to balance pre-consideration-appropriate with active-stage messages.

The distinction between the two stages is not clear from the consumers' standpoint. In most cases, consumers base purchase decisions on a mix of information that blends above-the-line and below-the-line brand communication sources. This study investigates variables that influence the extent to which the ultimate purchase decision (choice of brand) relies more heavily on messages acquired during the passive stage as opposed to the active one. In addition to the brand messages encountered, satisfaction with the brand and subsequently loyalty have an effect on the purchase choice. We address this in the following section.

3 Satisfaction and loyalty

Previous research has established that satisfaction and loyalty are two separate yet related constructs. Satisfaction refers to the experience a customer has had with a product (consumption/experience utility) while loyalty refers to the purchase preference (decision utility) a consumer has for a brand as opposed to others in the product category (Auh and Johnson 2005). This divergent view of satisfaction and loyalty posits that satisfaction refers more to the perception of quality a consumer has about the brand while loyalty assesses the intention of the consumer to purchase the brand weighting not only quality (acquisition utility) but also the price or "the degree to which the purchase is a good bargain or fair value" (Auh and Johnson 2005, p.36). In this study, the author examined the extent to which satisfaction and loyalty have an influence on the consumer relying more heavily on passive-stage brand messages as opposed to active-stage ones when completing a purchase. Satisfaction is addressed next, followed by loyalty.

3.1 Satisfaction

Satisfaction is usually assessed after a consumer experienced a product/brand. It is how close the product/brand came to the consumer's expectation. Satisfaction models rest heavily on expectancy-value model formulations (Fishbein and Aj-

zen, 1975; Johnson, Gustafsson, Andreassen, Lervik, and Cha, 2001), where beliefs about the quality of a product affect customer satisfaction as a type of overall evaluation. Previous literature has made the distinction between overall satisfaction and attribute satisfaction with a brand. Overall satisfaction results from overall experience while attribute satisfaction is based on assessment of performance of individual attributes (Oliver, 1993). In this study, we consider the influence of overall satisfaction on whether purchases in a product category are driven mostly by pre-consideration (passive) stage brand messages as opposed to advertising created for active shoppers in that category. Satisfaction affects customers' likelihood to repurchase (Auh and Johnson 2005). A market with satisfied consumers is one on which consumers already know which brand they want to purchase and will spend little time shopping around. Therefore, the author of this study expected product categories that have a larger base of satisfied consumers (with the brands available) will be the ones for which pre-consideration-stage messages had a greater effect. The following hypothesis was formulated:

H1: The higher the satisfaction with the brands available on a market the more that brand/product category is driven by passive rather than active stage messages.

Recent research has shown that satisfaction is an important determinant of attitudinal loyalty (Bennett et al., 2005; Rauyruen and Miller, 2007). Attitudinal loyalty focuses on the cognitive basis of loyalty and isolates purchases driven by a strong attitude from purchases due to situational constraints. Attitudinally loyal customers are committed to a brand or company and they make repeat purchases based on a strong internal disposition (Day, 1969). As attitudinal loyalty deals with the process of developing behavioral loyalty, it can predict repeat purchase intentions. The direct positive effect of attitudinal loyalty on purchase loyalty is also supported in literature (Evanschitzky et al., 2006). In addition, there is an indirect effect of satisfaction on purchase loyalty through attitudinal loyalty (Jaiswal and Niraj, 2007). To conclude, satisfaction and loyalty are separate however related concepts used in marketing practice to predict repurchases. The conceptualization of loyalty in this study is addressed in the following subsection.

3.2 Loyalty

Brand loyalty is a customer's predisposition to repurchase a particular brand from a product category (Auh and Johnson, 2005). In this study, loyalty was conceptualized as preference for a particular brand from those available in the product category at the time of purchase. Our panel respondents were recent purchasers of each of the products they answered questions about. Hence, pre-purchase preference for the brand purchased was recorded. Brand loyal consumers follow more closely the brand's communications messages (Owens, Hardman and Keillor, 2001) and are less price sensitive than non-loyals (Krishnamurti and Raj, 1991). Hence, brand loyal consumers' accumulated brand knowledge is more encompassing and they are targeted with fewer promotional efforts than brand switchers. Given that passive-stage advertising messages are part of a brand's long-term communications strategy and that active-stage messages are short-term promotional messages (usually price promotions), the following hypothesis was formulated:

H2: The higher the loyalty of consumers to the brands available on a market the more that brand/product category is driven by passive rather than active stage messages.

Next, the author looked at whether recall of brand touchpoints (encounters) before purchase has an effect on passive-stage reliance when making a purchase decision. For this investigation, over 900 recent purchasers in nine different product categories were questioned and, in addition to brand loyalty, they were also asked about the various types of brand messages they remembered. Following marketing literature (Tellis, 1988; Mela, Gupta and Lehmann, 1997), brand messages were grouped into two categories: *advertising* and *promotions*.

4 Advertising versus promotions

In a study that investigated the link between brand messages and purchase decisions, Tellis (1988) separated advertising messages from promotional ones. Advertising messages typically provide consumers with product information or a brand image and promotion messages induce the consumer to buy the product now and "close" the sale. According to Owens, Hardman and Keillor (2001), it is outdated to draw a line between advertising and promotions in terms of one having a brand-building goal only and the other having solely a sales increase objective. The researchers argue for a blending of the two goals for each market-

ing communications tool. For this study's purposes, the author considered that in practice, advertising is still being used mostly for long-term brand image building campaigns while promotions are the short-term point of purchase sales drivers.

Tellis (1988) found advertising to reinforce preference for current brands (rather than stimulate brand switching) and promotion messages to have a stronger impact on purchase decision brand choice than advertising. The relationships were mediated by brand loyalty. Therefore, both advertising and promotion messages can determine brand choice in a purchase situation. Advertising messages work for brand loyalists who purchase based on the long-term built (passive stage) brand knowledge they possess while promotion messages work for brand switchers who would attend to messages during the active stage.

To sum up, the following hypotheses were formulated:

H3: Consumers who were exposed to advertising brand messages are driven more by the passive stage in their purchase decision than consumers who were not.

H4: Consumers who were exposed to promotion brand messages are driven more by the active stage in their purchase decision than consumers who were not.

5 Method

Data for our study come from Millward Brown's Demand and Activation database and were collected online using CAWI (Computer Aided Web Interviewing) methodology during the months of February 2006 in France, Germany, Italy, Netherlands and Spain. The questionnaires took about 20 minutes to be completed and were adapted for each country.

Respondents were panel participants who were incentivized with redeemable points. The number of points awarded for survey completion was based on survey length and complexity. The points may be redeemed for items such as cash, gift certificates, music downloads, and DVDs. In-country incentive experts created a unique, localized prize catalog specific for each country.

The country respondent panels were closed to the public and recruited through certified recruiting partners. Each panelist had to provide demographic and household information, pass through data quality checkpoints, agree to the country-specific terms and conditions and privacy policy, and confirm their email address. Panelist checkpoints ensured respondents were who they said they were. Registrants who failed any of the checks were unable to join the panels and could not participate in the surveys. In addition, the company pre-

vented automated programs from joining the site through a challenge-response test and by tagging each computer with a unique ID generated by a proprietary algorithm to ensure only one registrant per computer could join the panel.

For this study, the author first looked at answers from 1194 past 6 month purchasers of a mobile phone handset from 5 countries (about 200 respondents per country). Using this cross-countries dataset, it was examined whether an increased preference for a mobile phone handset brand determined passive-stage messages to be purchase influencers.

Then, data from Germany for 9 product categories were investigated to test the loyalty-passive stage reliance relationship across product categories. This dataset also included the specific formats of the messages used by consumers to gather purchase-relevant information (advertising and promotion messages). Respondents were 935 German consumers who were recent purchasers of any one of the product categories (about 200 respondents per product category). In addition to mobile phone handsets, product categories included were: soft drinks, detergents, beer, insurance, cars, Internet services, banking and hi-tech.

So, the author was interested in respondents' pre-purchase brand preference, passive-active stage reliance when making the purchase, as well as the specific formats of the messages used by consumers to gather purchase-relevant information. The pre-purchase preference measure used asked consumers their level of preference for a brand before they actively started shopping for the most recent purchase in the product category. The passive-active stage measure asked respondents to indicate on a 10 point continuum whether the brand purchased was decided upon entirely because of what they wanted already or determined entirely by influences while deciding. Then, the respondents checkmarked all brand message tools they remembered being exposed to for the purchased brand from television commercials to direct mail coupons. The tools were then assigned to either advertising or promotion and a score was computed for each.

Additional information about shopping decision process length and demographics was also collected.

6 Results

As stated in the first two hypotheses, the effects of satisfaction with the brand (hypothesis 1) and brand loyalty (hypothesis 2) on passive-stage reliance were investigated first. This effort encompassed five European countries and was done for the mobile phone handsets category. Participants in the cross-countries panel were evenly split by gender, out of 1194 respondents, 587 (49.16%) were males and 607 (50.84%) were females. In terms of age, 366 (30.65%) were be-

tween 16 and 30 years old, 525 (43.97%) were between 31 and 50 years old and 303 (25.37%) were over 51. Respondents were evenly split by gender in each country with an oversampling of the 31 to 50 years old by age. Detailed sample demographics are presented in Table 1.

Table 1: Panel demographics for mobile phone handsets in 5 countries

<i>Country</i>	<i>Gender</i>		<i>Age</i>			<i>Total</i>
	<i>Male</i>	<i>Female</i>	<i>16-30</i>	<i>31-50</i>	<i>51+</i>	
Germany	110	111	66	95	60	221
France	81	109	56	91	43	190
Italy	154	142	123	115	58	296
Spain	142	135	68	134	75	277
Netherlands	100	110	53	90	67	210
Total	587	607	366	525	303	1194

In order to investigate the effects of brand satisfaction on passive-stage message reliance, the satisfaction measure ($\alpha=.878$) was obtained through factor analysis (factor loadings: .882, .919, and .889). Regression analysis results ($R^2=0.4\%$, $p=.02$) show a significant relationship between brand satisfaction and passive-active stage reliance, however one that does not explain much of the variance or placement along the continuum. This means that even though brand satisfaction is taken into consideration when shopping, it does not weigh enough in the purchase decision process to make the consumer pay less attention to active-stage messages and rely just on passive-stage ones.

In conclusion, the first hypothesis was weakly supported as brand satisfaction turned out to be a significant but not strong determinant of the type of messages consumers use when deciding on which brand of mobile phone handsets to purchase.

Next, the following hypothesis posited brand loyalty to have an effect on passive-stage reliance. Regression analysis across the five countries shows loyalty is a significant determinant of the type of messages consumers attend to while in the market for mobile phone handsets ($R^2=27.1\%$, $p=.004$). Given this regression analysis result for the mobile phone handset category across the five countries, the second hypothesis was further tested per country as well as per product category using nine product categories in Germany.

6.1 Brand loyalty effect on passive-stage reliance per country

Per country, brand loyalty explained up to a third of the reliance on passive stage rather than active stage messages, from 29% of passive-stage reliance in Germany to 12.6% in The Netherlands. R squared for each country is presented in Table 2.

Table 2: Loyalty effect on passive-active continuum placement for mobile phone handsets in 5 countries

<i>Country</i>	R^2	F	p	N
Germany	.290	89.52	.000	221
France	.255	64.201	.000	191
Italy	.211	78.496	.000	295
Spain	.290	112.223	.000	277
Netherlands	.126	29.972	.000	210
Across 5 Countries	.231	357.22	.000	1194

Multiple analysis of variance results from analyzing the mobile phone handsets datasets from each of the five countries show that the higher the loyalty or pre-purchase preference for the brand bought by consumers on a market, the purchases in that category rely more heavily on passive-stage influencers (see Figure 1).

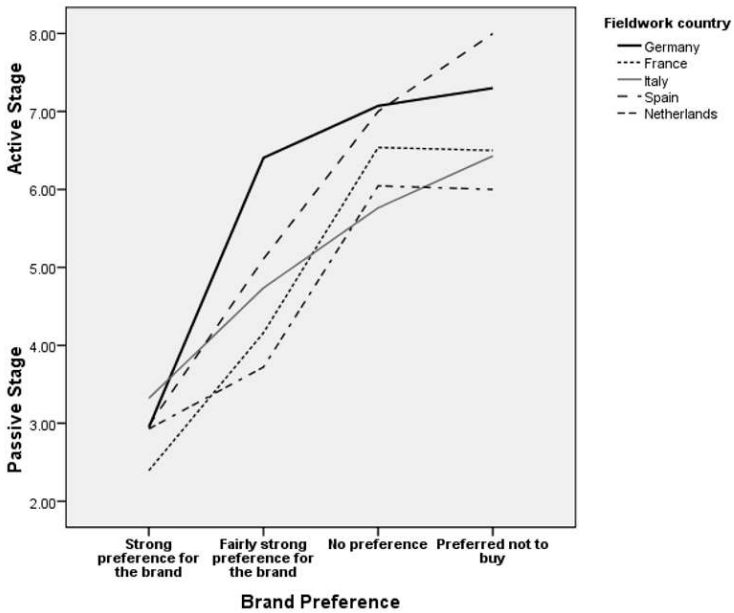


Figure 1: Brand loyalty effect on passive-active continuum placement for the mobile phone handsets category in five countries

Hence, the second hypothesis about brand loyalty having a positive effect on passive-stage message reliance was supported for the mobile phone handset category for each of the five countries included in the study.

6.2 Brand loyalty effect on passive-stage reliance per product category

For the across-product categories study in Germany, out of 935 respondents, 463 were males (49.5%) and 472 were females (50.5%). In terms of age, 242 were between 16 and 30 years old, 425 were between 31 and 50 years old and 268 were over 51.

When looking at the German data for nine product categories, multiple analysis of variance confirmed the positive relationship between pre-purchase brand preference and reliance on pre-consideration or passive stage information when processing purchase choice (see Table 3 and Figure 2). This is the most

important finding of the study as it shows the second hypothesis being supported for nine different product categories.

Table 3: Brand preference effect on passive-stage reliance for 9 product categories in Germany

Product category	R ²	F	p	N
Soft Drinks	0.17	17.167	.000	255
Detergents	0.20	21.43	.000	261
Mobile Phones	0.372	40.256	.000	208
Beer	0.175	19.774	.000	284
Insurance	0.329	26.357	.000	165
Cars	0.225	8.214	.000	89
Internet Services	0.211	19.534	.000	223
Banking	0.161	10.01	.000	161
HiTech	0.203	15.462	.000	186

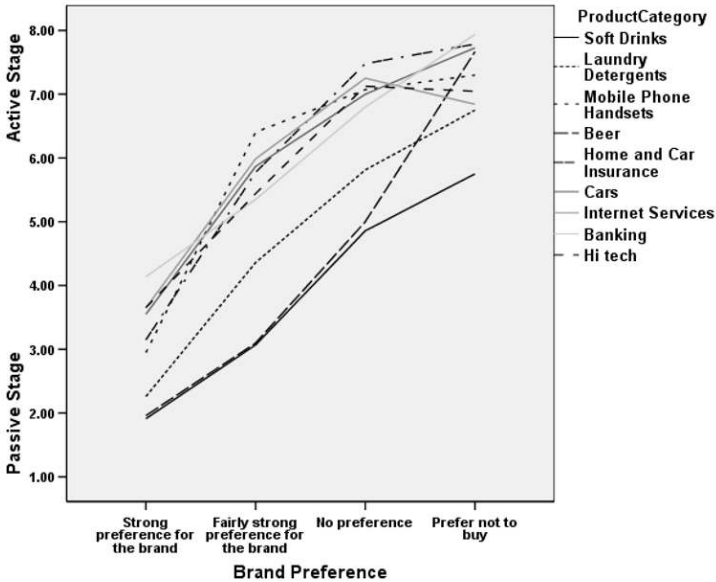


Figure 2: Brand loyalty effect on passive-stage reliance for 9 product categories in Germany

Next, the brand touchpoints remembered for the brand bought were examined. Recall of advertising brand messages as opposed to promotion brand messages effects on passive-active continuum placement were investigated. The third hypothesis proposed that those who recall advertising messages for the brand bought relied more on the passive-stage when deciding which brand to purchase than those who do not recall any advertising message. In a similar fashion, the fourth hypothesis posited that those who recall promotion messages relied more on active-stage messages for the brand they purchased than those who do not recall any promotion messages. T-tests results in Table 4 show the difference on passive-active continuum placement between groups that have been exposed to either advertising or promotion messages and those who have not. Promotion message exposure made a significant difference in 5 out of the 9 product categories while advertising message exposure made a significant or close to significant difference for all five categories for which data were recorded.

Table 4: Advertising and promotion effects on passive-active continuum placement for 9 product categories in Germany

<i>Product category</i>	<i>Recall of Marketing Effort (Y/N)</i>	<i>Promotions</i>			<i>Advertising</i>		
		<i>Mean</i>	<i>t</i>	<i>p</i>	<i>Mean</i>	<i>t</i>	<i>p</i>
Soft drinks	No	9.55	3.097	0.006	9.58	1.962	0.05
	Yes	7.12			8.82		
Laundry detergent	No	9.11	3.681	0.000	9.06	3.336	0.00
	Yes	7.49			7.42		
Beer	No	9.47	2.793	0.008	9.58	3.157	0.00
	Yes	8.15			8.42		
Mobile phone handsets	No	6.69	-0.269	0.788	7.01	1.834	0.06
	Yes	6.81			6.11		
Insurance	No	7.09	0.955	0.341	missing	missing	missing
	Yes	6.62					
Car manufacturer	No	5.94	-1.254	0.213	missing	missing	missing
	Yes	6.80					
Internet services	No	6.81	2.212	0.028	missing	missing	missing
	Yes	5.92					
Banking	No	6.86	1.83	0.069	missing	missing	missing
	Yes	6.04					
Hi-tech	No	6.53	2.38	0.018	6.34	1.806	0.07
	Yes	5.55			5.55		

7 Discussion

Assessing the effect of marketing communication variables, such as (various forms of traditional) advertising and (in-store) promotions, on consumers' purchase decisions has been a highly researched topic in the marketing discipline. The topic has gained importance with the rise of promotional expenditures, globalization of brands and the push for accountability/justification of choices made when allocating promotional budgets.

This study conceptualized the consumer purchase decision making process as a continuum from a passive shopping stage to an active one. The passive shopping stage was added as one that comes prior to Andrews and Srinivasan's (1995) consideration and choice active shopping stages. During passive shopping, brand knowledge is built over time through memories, associations and feelings. Active shopping stage appropriate brand messages are those likely encountered at the point of purchase or while actively researching product information. Panel data were examined across multiple product countries and categories to investigate the relationship between satisfaction with and loyalty to the brands on a market and the reliance on passive-stage messages. The study found that reliance on passive-stage messages is affected to lesser extent by consumers' satisfaction than by consumers' brand loyalty.

Previous studies on brand loyalty provide evidence that loyal customers have lower price sensitivity due to factors such as perceptions of unique value, trust and affect in their preferred brand (Jacoby and Chestnut, 1978). Hence, to maximize revenue, brand managers should opt for brand-building advertising messages as opposed to price promotions in passive-stage driven markets that have a larger number of loyal customers. Advertising and promotion messages were confirmed to work best as passive-stage and active-stage purchase drivers respectively. This finding was not supported across all nine product categories under investigation. Further research could investigate product categories that likely blend advertising and promotion message goals in one format.

To sum up, brand managers spend budgets on above-the-line efforts in passive-stage-driven product categories when consumers already had the chance to experience the product. Sales promotions, in-store displays, direct mail, and word-of-mouth generating efforts should be a priority in active-stage-driven ones.

Limitations of this study include reliance on self-report data, the lack of refinement of the satisfaction measure as well as the lack of information on competition intensity. Jones and Sasser (1995) posit industry structure as an explanation for increasing and decreasing returns of satisfaction. In markets with intense competition, satisfaction shows increasing return and any decline in satisfaction

results in rapid drop in loyalty. Hence, merely satisfied and completely satisfied customers exhibit dramatically different levels of loyalty. Streukens and de Ruyter (2004) have similar findings in the context of the relationships between service quality, satisfaction, value and behavioral intentions.

The findings are relevant to brand managers when splitting budgets between sales and marketing. Brand revenue depends on both great brand building activity during the passive stage and superior sales activation during the active stage. Our passive-active shopping continuum is a flexible framework for marketers to understand how their brands work, which communications channels will work hardest for them, and to provide guidance on how best to allocate their budgets.

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Part II

Advertising and Communication Content

Missing for One, Unique for the Other - How Missing Attributes Affect Brand Evaluation

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1 Abstract

Today consumers are over flooded with information on brands, products, and product attributes. At the same time information is not always fully available for all alternatives in a purchasing situation. In this context it is important to understand how missing product attribute information influences the evaluation of branded alternatives. The results of three experiments demonstrate that brands can take advantage of this type of asymmetric information. The first experiment revealed that the evaluation of a weak brand product can be enhanced due to missing attribute information of the competitive product of a strong brand. The second experiment indicated that the mere uniqueness of an attribute has no impact on product evaluation. The third experiment showed that enhanced processing fluency of the target attribute leads to more extreme preferences for superior alternatives.

2 Purpose of the study

The impact of missing information on information processing and evaluation of alternatives has been analyzed in marketing science and psychology in many directions such as inference formation and levels of evaluation deductions (e.g., Lee, 2002; Dick et al., 1990; Mantel and Kardes, 1999). Nevertheless, missing information has never been explicitly explored in combination with brand evaluation. Since branded products are usually supported by information regarding product attribute performance, this combination is relevant both for marketing science and product and brand management. In the example shown in Figure 1 the two digital cameras are presented with a number of common attributes (e.g.

number of pixels) and some attribute information is only available for one alternative but not for the other, e.g. Canon - memory capacity, Sony - monitor size.

The consumer now has to make assumptions if the Sony camera also offers a built-in memory and, if so, how much capacity is available. Missing attribute information may cause suspicion about the performance of the alternative. The question is if brand image may also be influenced by missing information.



Figure 1: Example for a combination of brands and missing attributes in point-of-sale communication.

Missing attribute information may be interpreted by the consumer as uniqueness of the alternative. In the purchasing situation the consumer has to infer if the respective attribute of a branded product is unique only in the specific situation, e.g. alternatives with the same attribute are out of stock. The attribute may also be unique for the whole market which is the case for innovations or it may also be relatively unique because the value of the attribute is the highest available. An example for the latter case is the competition among digital camera brands for the highest number of pixels.

The aim of this study is to understand how missing or vice versa unique attribute information impacts comparisons of branded products. Different levels of uniqueness and relevance of attributes are taken into account. Comparisons based on comparable information depth are likely to be processed differently

than those based on missing information. Consequently, a deeper analysis of information processing needs to be conducted in order to understand the mechanisms behind missing information processing and brand evaluations.

3 Theoretical background

3.1 Elaboration of missing attributes and brands

If information for a product alternative is missing, consumers are forced to infer a value for the missing information, independently of the existence of further comparable alternatives (Cowley, 2006). Sirdeshmukh and Unnava (1992) argue that the mere presentation of an attribute category without any values is sufficient to initiate the inference process. One condition for the inference process has to be fulfilled: the fact that some sort of information is missing must be recognized by the individual. Therefore, the unique attribute needs to be sufficiently salient and or vivid (Bohner, 2002). Missing sensitivity or “omission neglect” (Kardes and Sanbonmatsu, 2003) may also be caused by the fact that subjects derive relevant information from image factors that are associated to a specific brand (Anderson, 2007; Esch, 2008). This brand schema will be adjusted only if the differences between stored brand-related values and real values are considered to be high.

For weak brands such an elaboration process of default values does not exist so that attribute information has a stronger impact on evaluations.

Elaborating strong versus weak brands, relevant versus irrelevant, and present versus missing attributes implicates the question how intense their processing is and which impact different factors have on the overall evaluation of an alternative. The dual process models of persuasion: the Elaboration Likelihood Model (ELM, Petty and Cacioppo, 1981, 1986) and the Heuristic-Systematic Model (Chaiken et al., 1989) describe the different processing modes induced by cues and information. According to ELM, messages are either centrally or peripherally elaborated depending on the intensity of cognitive processing. Format and processing factors determine the final processing mode. Brands are processed as peripheral cues by heuristics which are derived from past experience, social image, recommendations, etc. and are thus leading to fast and eased decision making (Maheswaran et al., 1992). Whereas brands are processed as peripheral cues, attributes are processed on a more intense central route of elaboration. The relevant question is how missing information finds entrance into the elaboration of alternatives. The fact that information is missing can be heuristically interpreted as a peripheral cue: missing information = worse alternative. This

would support the notion that subjects do not infer values for missing information. Instead, they consider the fact that information is missing as a negative cue of the respective alternative (Simmons and Lynch, 1991).

The question if central processing leads to better evaluations than peripheral one is subject to an ambivalent discussion (Haugtvedt et al., 1994; Petty and Wegener, 1999; Sengupta et al., 1997). This discussion can be resolved by preference theories. Coombs and Avrunin (1977) describe how preferences change if the benefit of an alternative increases. Preferences evolve along a concave curve: “Good things satiate – bad things escalate” (p. 224). Additional benefits lose their attractiveness with increasing intensity and quantity. In this sense strong brands are already positively loaded. Therefore, providing additional attribute information which is missing for other alternatives should have little impact on brand evaluation. Weak brands in turn should take more advantage of the uniqueness of attributes than strong brands since their initial benefit is lower (Chernev, 2007; Nowlis and Simonson, 1996).

H1: Weaker brands are over-proportionally better evaluated against strong brands if they are presented with attribute information which is missing for strong brand alternatives.

3.2 Uniqueness and triviality as influencing factors of the elaboration of missing attributes

Missing attributes can be unique only in the decision situation. The consumer can infer a value for the missing attribute based on other attributes of the same alternative or based on other alternatives (Ross and Creyer, 1992). For example, missing information about fuel consumption of a car model is usually correlated with its horse power or average fuel consumption of alternative models in the same class.

Attributes can also be unique if they exist only for one alternative (absolute uniqueness). The innovation of ingredients in skin care products like Q10 additives, caviar, silk, etc. may serve as examples as long as the innovator uniquely offers these ingredients. But uniqueness does not automatically imply that the attribute is a benefit for the consumer. The premium brand LaPrairie sells its skin cream with ‘Original Encapsulated Caviar Beads’ for around 150 US \$ per 50g (Figure 2). But even LaPrairie admits that to some extent it is up to the consumer to believe in a positive effect of caviar on eye-wrinkle prevention (Winkler, 2003).



Figure 2: Example for trivial product attributes: La Prairie’s Skin Caviar Cream with ‘Original Encapsulated Caviar Beads’ and spoon

On the other hand, numerous findings in consumer research indicate that unique attributes, even objectively trivial, can enhance the attitude towards a product alternative (Broniarczyk and Gershoff, 2003; Brown and Carpenter, 2000).

Such trivial attributes should be by nature irrelevant to consumers. Therefore, the positive impact of an irrelevant attribute on consumer evaluations stays in contrast to the ELM notion that the relevance of attributes determines the mode of elaboration (Petty and Cacioppo, 1986). According to ELM, the uniqueness itself should not be of value to customers.

H2: Uniqueness of an attribute itself does not enhance the attitude towards an alternative.

3.3 The impact of missing attributes and brands on processing fluency

Two alternatives with the same level of information (number and type of information) are more easily processed than if information is missing for one alternative. Consequently, inconsistent information reduces the ability of the consumer to compare two alternatives. If the ability and/or motivation to process information is reduced, the relevance of peripheral cues increases (Petty and Cacioppo, 1986). This would imply that a unique attribute is less likely to be elaborated than a common attribute.

In general, the elaboration of a stimulus is characterized by a variety of inner mental processes that are not directly linked to the content of the stimulus itself. The same content can cause different mental activations, e.g., the speed of elaboration and the mental effort can vary (Jacoby and Dallas, 1981; Mandler, 1980). The ease of processing is commonly described by processing fluency (Bohner, 2002; Winkielman et al., 2003). The higher the processing fluency, the

higher the perceived familiarity of the target item (Whittlesea, 1993). Familiarity in turn goes in line with an illusion of increased truth. Information appears to be more truthful, e.g., if it is presented for a second time (Novemsky et al., 2007; Parks and Toth, 2006). Truth again leads to an enhanced attitude towards the target (Lee and Labroo, 2004). If unique attributes are able to support the attitude towards brands, then the eased processing of attributes will lead to a better evaluation of the attributes and consequently of the target object. The manipulation of the fluency of the target attribute that is existent for one alternative and missing for the other may thus lead to even more favorable evaluations.

H3: The higher the processing fluency of an attribute, the more positive the attitude towards the alternative possessing information on this attribute in comparison to the alternative missing the attribute.

The three hypotheses were tested in three experiments described in the next paragraphs.

4 Experiments

4.1 Experiment 1

The primary goal of this experiment was to test the impact of missing information on the evaluation of two alternatives with differently strong brands.

Method: We exposed university students to descriptions of two consumer product alternatives of the same product category. The involvement was manipulated by the category selection: low-interest product category fruit yogurts versus high-interest category digital cameras. Product involvement is a valid category of involvement in the context of product alternative comparisons (Kroeber-Riel et al., 2009).

The stimuli consisted of the respective brand logos of the two alternatives followed by three unrelated filler attributes that were identical for each alternative and the target attribute information which was missing for one alternative (Figure 3). Highly relevant attributes were “fruit content” for yogurts and “ratings from independent consumer tests regarding photo quality” for digital cameras. Irrelevant attributes were “number of self-timer modes” for cameras and “origin” for fruit yogurts. The selected attributes were of relative uniqueness for the alternative where information was present. An inference for both product categories is possible: the presented yogurts should contain fruits and the digital cameras should have some rating for photo quality.

The stimuli were intended to represent product descriptions, e.g., in internet shops or at the POS.

Canon RICOH		
Focal length	Threefold zoom	Threefold zoom
Weight	185 g	185 g
Number of exposure programmes	10	10
Picture quality (according to independent consumer test institute)		Very good

Figure 3: Stimuli example

After reading the information about the product pairs the subjects were asked to evaluate each alternative.

Participants: One hundred and twenty-five students participated at a large German university for a small incentive (age 20 to 26 years, $M = 23.3$, 46.3% female).

Materials: In a pretest, sixty-one students were asked to evaluate their involvement into different product categories. The scale to measure product involvement consisted of five items based on Zaichkowsky's involvement scale (Zaichkowsky, 1985). The results showed that digital cameras were significantly higher involving than yogurts ($p \leq .01$). To derive strong brands for the two product categories participants were instructed to name all brands that came to mind when asked to think of yogurts and digital cameras followed by an aided brand evaluation. Brand strength was measured ($\alpha = .787$) using four seven-point scales (Bräutigam, 2004): "top-of-mind" brand awareness ("I know the brand very well/ not at all"), overall evaluation of the brand ("I like the brand very much/ not at all"), sympathy ("very sympathetic/ not at all sympathetic"), and a cognitive component ("offers very good/ bad quality"). Conclusively, subjects had to state attributes that come into their mind when thinking of the different product categories followed by a rating of their respective relevance on an eleven-point scale ("very relevant/ irrelevant") (Mantel and Kardes, 1999).

Procedure: After being exposed to the stimuli the participants of the main study evaluated attitude towards each alternative on four seven-point scales anchored by "I like very much/ not at all", "very likable/ not at all likable", "offers

very good quality/ offers very bad quality”, and “very reliable/ very unreliable” ($\alpha = .865$). In the next step subjects were asked to state the relevance of the attributes as in the pretest, followed by demographic information.

Results: Analyses were conducted using a $2 \times 2 \times 2$ ANOVA (brand strength of the alternative where the attribute information is missing: high vs. low; involvement: high vs. low; attribute relevance: high vs. low). The ANOVA showed main effect of brand strength ($F(1, 249) = 7.388, p < .01$). An interaction effect was measured for the factors brand strength and attribute relevance ($F(1, 249) = 5.342, p < .05$). Thus, hypothesis 1 was confirmed. The analysis of between subject effects revealed the detailed impact of brand strength, product involvement and attribute relevance (Figure 4). Involvement into the product category had no impact on the results. Even for the less involving product category yogurts the attitude towards weak brands was influenced by missing attribute.

Discussion: The experiment produced results partially consistent with the Elaboration Likelihood Model. Strong brands are usually preferred to weak brands. Irrelevant attributes, even if missing, can not interfere with these preferences. But when the alternatives are not clearly comparable due to the lack of relevant attributes, the central processing of attribute information becomes more relevant. Weaker brands can gain in attractiveness supporting Hypothesis 4. This is also in line with the predictions from the preference theory (Coombs and Avrunin, 1977). On the other hand, the results show that even for less involving product groups like yogurts missing relevant attribute information leads to a better evaluation of weak brand alternatives, thus indicating central route processing instead of mere cue based evaluation. This result supports the notions of the Unimodel (Kruglanski and Thompson, 1999) that even at lower levels of involvement attribute information may be processed.

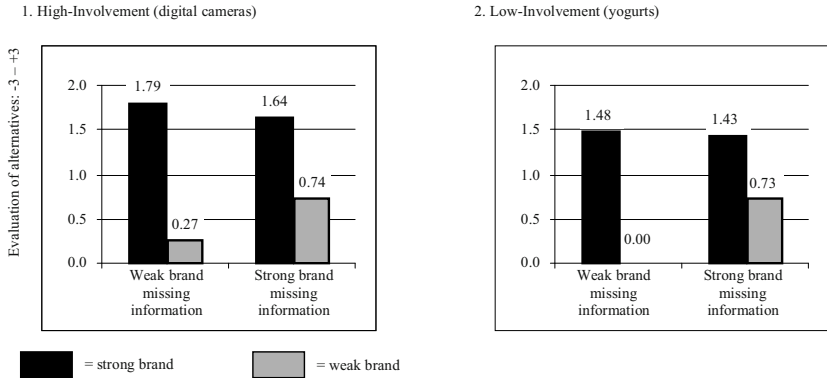


Figure 4: Evaluations for high versus low involvement branded products with one alternative missing relevant attribute information

In the high involvement digital camera category the weak brand was evaluated significantly better when presented with an attribute that was missing for the strong brand¹ ($p \leq .05$). Similar results were obtained for the low-involving product category yogurt² ($p \leq .01$). The evaluation for the strong brands in both situations did not differ significantly³ ($p > .05$). The results for a less relevant attribute showed no significant impact in any of the manipulations ($p > .05$).

4.2 Experiment 2

The primary goal of the second experiment was to test the impact of absolute attribute uniqueness (as opposed to relative uniqueness in the first experiment) on the evaluation of two alternatives with differently strong brands.

Method: The method followed the same approach as in the first experiment with the exception that subjects were additionally required to evaluate the perceived uniqueness of the attribute.

1 Digital camera: Mweak brand; missing attribute = .27; Mweak brand; attribute present = .74, $F(1, 249) = 3.98$

2 Fruit yogurt: M weak brand; missing attribute = .00; Mweak brand; attribute present = .73, $F(1, 249) = 8.17$

3 Digital camera: Mmissing attribute = 1.64, Mattribute present = 1.79, $F(1, 249) = .42$; Fruit yogurt: Mmissing attribute = 1.43, M attribute present = 1.48, $F(1, 249) = .04$

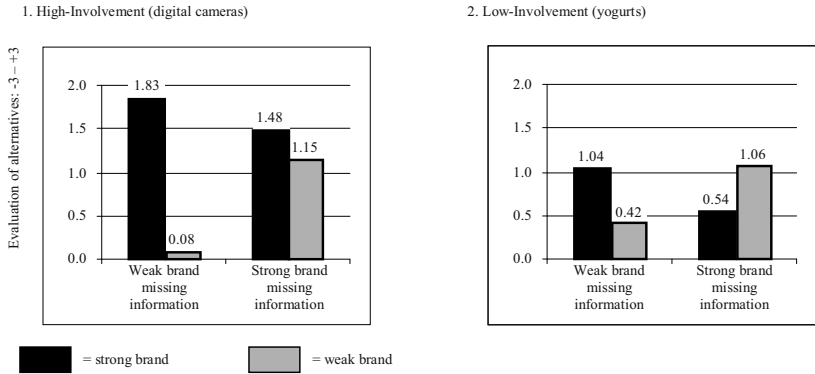
Participants: One hundred and thirty students participated at a large German university for a small incentive (age 20 to 27 years, $M = 24.7$, 55.6% female).

Materials and procedure: In a pretest, seventy-three students qualified unique attributes for the main experiment. After an open question to name attributes which subjects would consider as unique in the sense of absolute uniqueness, a list of objectively unique attributes was presented. Participants had to evaluate the perceived uniqueness (“This attribute is unique in the product category”) for each presented attribute. The evaluation of relevance was the same as in the first experiment. The pretest delivered “highest photo quality in the market” as relevant unique attribute and “E-mail function to send photos with the camera” as less relevant unique attribute for digital cameras. For yogurts, “reduces the risk of stomach and bowel cancer” was perceived as significantly more relevant than “product packing maintains 24-hours cooling” ($p \leq .01$). The brands and filler attributes used in the second experiment were the same as in the first experiment.

Results: Analyses were conducted with a $2 \times 2 \times 2$ ANOVA (brand strength where attribute information is missing: high vs. low; involvement: high vs. low; relevance of the unique attribute: high vs. low). The test between subject factors revealed, as in the first experiment, a significant impact of brand strength ($F(1, 259) = 14.18, p \leq .001$) and attribute relevance ($F(1, 259) = 28.16, p \leq .001$). Also, the interaction effect of brand strength and attribute relevance was replicated (Figure 5, $F(1, 259) = 11.04, p \leq .001$). The main finding was that unique but less relevant attributes had no impact in any of the manipulations⁴ supporting hypothesis 2 that uniqueness itself does not deliver additional value.

4 Strong brand/high involvement: $M = 1.49$ with the attribute vs. $M = 1.31$ without it, $F(1, 259) = .45$; weak brand/high involvement: $M = .40$ vs. $M = .30$, $F(1, 259) = .14$; strong brand/low involvement: $M = 1.11$ vs. $M = 1.33$, $F(1, 259) = .64$; weak brand/low involvement: $M = .69$ vs. $M = .98$ respectively, $F(1, 259) = 1.12$; $p > .05$.

1) relevant unique attributes



2) less relevant unique attributes

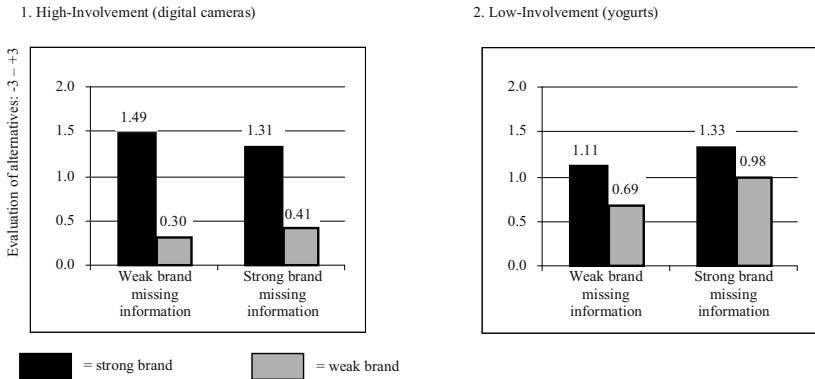


Figure 5: Evaluations for high versus low involvement branded products with one alternative missing a relevant unique attribute

Discussion: Again, the results clearly indicated that the weak brands can take more advantage of an attribute unique to the subjects. In the case of a less involving product category, obviously, a more intense elaboration of the target attribute took place than in the first experiment. Otherwise, the stronger brand

would have been preferred in either of the manipulation situations. But as it turned out, the weaker brand was favored over the stronger brand when associated to a relevant and unique attribute. A further outcome of this experiment was that, in line with the Hypothesis 5, the uniqueness itself did not deliver any benefit to the customer. In neither of the situations did the less relevant but unique attribute produce a significant impact on the evaluation of strong or weak brand alternatives. Using the ELM terminology, uniqueness is not a peripherally elaborated cue.

4.3 Experiment 3

The third experiment was conducted to analyze the relevance of processing fluency related to brands with missing attributes. According to ELM, options which are easy to compare are elaborated more intense on the central route of processing in contrast to options which are harder to compare. Whereas strong brands support subjects to form attitudes, missing information reduces the processing fluency. Increased fluency should lead to a better overall evaluation (Kivetz and Simonson, 2000; Labroo et al., 2008). By enhancing the processing fluency of the target attribute the negative impact of missing information might be diminished.

Method: Processing Fluency can be manipulated on subjective and objective levels (Bohner, 2002; Winkielman et al., 2003). Subjective fluency describes conscious experience of eased processing through higher speed, preciseness and less effort of elaboration, objective fluency reflects on the mental process of enhanced fluency. Several forms of subjective fluency have been detected in fluency research. Goal Fluency (Lee and Labroo, 2006) describes the congruence of the subject's goals and the extent to which a target fulfils these goals. The higher the fulfilment, the higher the goal fluency. Novemsky et al. (2007) describe preference fluency as the ease that subjects perceive when making decisions. Response Fluency (Janiszewski and Chandon, 2007) reflects the ease that is perceived when subjects plan a reaction cognitively. Finally, Retrieval Fluency indicates the difficulty to recall information from the memory (Janiszewski and Chandon, 2007).

Apart from retrieval fluency, two further manipulations have been widely used in past research: conceptual and perceptual fluency. Conceptual Fluency reflects the ease of elaboration at the level of semantic knowledge structures related to the target object (Whittlesea, 1993). Semantic predictions such as the completion of phrases or poems support conceptual fluency. Influencing elaboration efforts on lower levels of visual stimulus features and shapes is the target of

perceptual fluency (Lee, 2004; Whittlesea, 1993). For example, the presentation of a McDonald’s logo enhances the processing of the target object: ketchup. Although used in many experiments, the distinction between these two constructs has been either negated by other researchers (Erb et al., 2005, p. 69; Marohn and Hochhaus, 1989) or they were combined (Labroo et al., 2008). In the third experiment such a combination of conceptual and perceptual manipulation was applied but in this case with perceptual priming of a conceptual feature – the target attribute.

In the case of digital cameras and the target attribute ”quality of photos”, subjects saw one photo with high quality and the same photo lacking sharpness and with manipulated colours (Figure 6). For yogurts and the target attribute “fruit content” participants saw the picture with a bowl of strawberries and the second picture with only one strawberry (Figure 7). The control group received a non-related comparison task (delusion task of Müller-Lyer, cf. Kroeber-Riel et al., 2009).

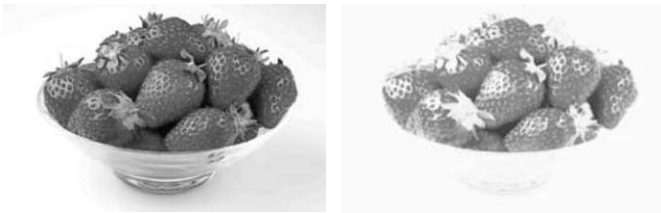


Figure 6: Manipulation of fluency for target attribute ‘photo quality’ (digital cameras)



Figure 7: Manipulation of fluency for target attribute ‘fruit content’ (yogurts)

Participants: Two hundred and sixty-eight students at two large German universities participated for a small incentive (age 19 to 27 years, $M = 24.1$, 52.3% female).

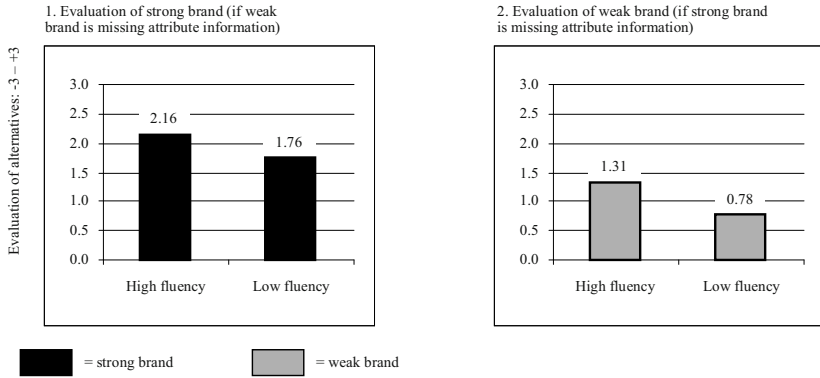
Materials and procedure: The brands and attributes were the same as those used in the first experiment. Additionally, participants had to conduct comparison tasks to ensure processing of the exposed photos. For picture quality as target attribute of digital cameras subjects had to evaluate which of the presented photos they would prefer. For the fruit content subjects had to state their preference for any of the two amounts of fruits.

Results: Analyses were conducted using a $2 \times 2 \times 2$ ANOVA (brand strength where attribute information is missing: high vs. low; involvement: high vs. low; processing fluency: high vs. low). In contrast to the first experiment, in the enhanced processing fluency situation both weak and strong brands with the target attribute, opposed to the second alternative without the attribute information, were better evaluated, supporting Hypothesis 3. For digital cameras, the value for the strong brand increased by one point⁵ ($p \leq .001$) whereas for yogurts the difference was only marginally significant ($p = .09$). The weak brands were again better evaluated if presented with the unique attribute⁶ ($p \leq .001$). The inferior alternatives did not receive better evaluations if the fluency of the target attribute was supported (Figure 8, $p > .05$).

5 Mdigital cameras; strong brand = 2.16 vs. 1.13, $F(1, 267) = 31.15$; Myogurts; strong brand = 1.67 vs. 1.39, $F(1, 267) = 2.19$;

6 Mdigital cameras; weak brand = 1.31 vs. .43, $F(1, 267) = 16.09$, Myogurts; weak brand = 1.45 vs. .59, $F(1, 267) = 14.00$

1) high involvement products (digital cameras)



2) low involvement products (yogurts)

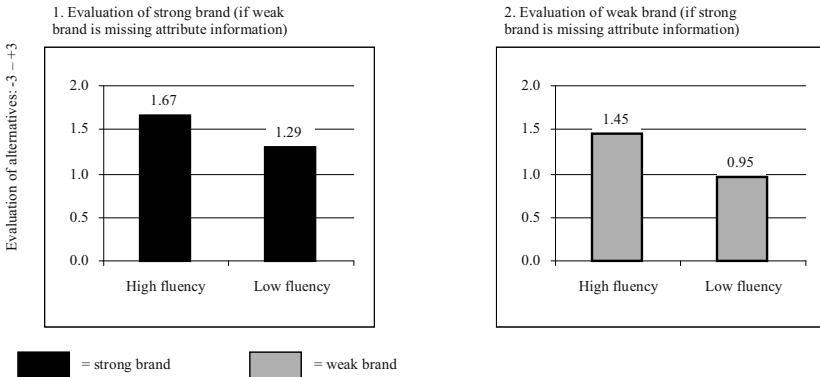


Figure 8: Brand evaluations at different fluency levels

Discussion: The results derived in the third experiment clearly indicate that the reduced processing fluency caused by a missing attribute can be enhanced by perceptual priming of the target attribute. This applies only for the superior alternative. The subject’s awareness is focused more intensively on the target attribute leading to a more intensive processing and in turn, to a more extreme evaluation of the alternative. The inferior alternative with missing attribute information

receives similar evaluations independent of the fluency level. In contrast to the first two experiments even strong brands were more favorably evaluated if the target attribute's fluency was supported. A further result of this experiment is that by enhancing the processing fluency of the target attribute the lower brand equity of a brand could be compensated by the attribute missing for the stronger competitor. In the case of high-involving product the difference of the evaluation between the two brands was .14 points. For yogurts, the weaker brand was even favored against the strong brand (+.07 points).

4.4 General Discussion

In general, strong brands are preferred to weak brands regardless of missing or unique attributes. When the alternatives are not clearly comparable due to the lack of relevant attributes, the central processing of attribute information becomes more relevant. Weaker brands can gain in attractiveness. The results also indicate that even for less involving product categories like fruit yogurts missing relevant information leads to better evaluations of competitive products.

Furthermore, uniqueness of an attribute itself does not deliver any benefit to the consumers. Using the ELM terminology, uniqueness is not a peripherally elaborated cue. This adds important insights to past research results, e.g., on trivial and thus objectively irrelevant attributes (e.g., Broniarczyk and Gershoff, 2003). There are clear indications that an attribute that has no such measurable utility may be still beneficial to the individual.

Enhanced fluency leads to more extreme results on the side of the alternative possessing information regarding the target attribute. The results derived in the third experiment clearly indicate that both weak and strong brands can take advantage of enhanced processing fluency. In extreme situations (enhanced fluency and relevant unique attributes) the attitude towards the weaker brand may be even higher than for the strong brand.

Further research should focus on the evaluation task. Past research indicates that the result of a decision depends on whether an option is exposed together or in the absence of alternatives (e.g., Bazerman, 1999).

There are unlimited combinations to manipulate the effect of missing attributes on brand evaluations: the number of attributes and alternatives may vary, the type of attributes, the presentation style – products vs. product descriptions, on-shelf vs. off-shelf –, the type of evaluation task – direct comparison vs. independent evaluation, etc.

The applied manipulations represent the ones most widely used in research and practical situations. Nevertheless, the use of only positive attributes and attribute

values may reduce the generalizability of the results. The preference theory by Coombs/Avrunin (1977) may be inverted by the use of negative attributes leading to a sharper and significant decrease in the attitude towards strong brands when presented with a negative attribute that is missing for the weak brand and vice versa. This would support experiments conducted by Mittal, Ross, and Baldasare (1998) indicating asymmetric results for positive vs. negative attributes.

A further field for future research may be seen in the number of missing attributes. If one alternative lacks a high number of attributes, the preference curve assumed by Coombs/Avrunin (1977) may change to a single-peaked function. This could result in a declining evaluation of the superior alternative (i.e. derived by a heuristic that from a certain point, superiority is unrealistic or accompanied by a premium price making two alternatives incomparable).

Finally it may be argued that at lowest levels of involvement, e.g. by reduced situational involvement, only the brand as a peripheral cue is processed. The possibility to detect missing information may be critical for its impact on brand evaluation. An empty space in a list of most important product attributes in an internet product comparison may lead to different results than missing attribute information in some long newspaper article about digital cameras.

5 Managerial implications

For marketing managers the results from the presented experiments indicate that unique attribute information, if tactically applied, can be an effective means to add value to weaker brands. But the results also lead to the conclusion that less can be more in the sense that only subjectively relevant attributes are processed. Not every attribute presented on products fulfil this basic condition. The uniqueness of attributes itself is often seen as a successful differentiation factor for products. This was proven to be false. Uniqueness must be supported by the relevance for the consumers in order to have a positive impact on product evaluations. Simply adding information to product descriptions aiming to be unique is not successful.

Supporting strong brands by presenting attributes missing for other alternatives does not lead to significant improvements. Attribute processing can be intensified and thus its relevance increased only by stressing the unique attribute through communication, e.g. at the point of sales. In this case even strong brands take advantage of unique attributes.

The current results provide insights into the reasons of the success of retailer brands in less involving product categories such as toilet paper: if brand power is lacking the impact of product attributes becomes more relevant.

Product attributes, thus, should not be seen only from the point of view of their original information function but also as an effective means of communication allowing differentiation of brand alternatives.

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Impact of Threat Appeals on Ad Evoked Fear and Message Credibility: The Role of Prime, Frame and Dead Relatedness

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1 Abstract

This study investigates the impact of the threat level (death-related or body harm related) and gain and loss framed messages in a public service announcement (PSA) threat appeal, as well as the impact of the valence of the media context in which the PSA is embedded in a sample of 266 young Belgian adults. The PSA threat level and the combination of negative message framing, negative context priming and high-threat messages have a significant effect on evoked fear. Evoked fear plays the strongest role in the development of message credibility, more than cognitive factors such as perceived threat and coping efficacy.

2 Purpose of the study

Threat appeals are “persuasive messages designed to scare people by describing the terrible things that will happen to them if they do not what the message recommends” (Witte, 1992, 329). Many studies have explored how threat appeals (sometimes called fear appeals) impact attitude and behavioural intentions and many studies have investigated the impact of threat levels on threat appeal efficacy, especially in the context of social profit public service announcements (PSA’s) (e.g., Roskos-Ewoldsen et al., 2004, Witte and Allen, 2000). However, research on the antecedents of evoked fear and threat are scarce (Cauberghe et al., 2009). This study aims to add to existing knowledge (i) by studying the (combined) impact of the valence of the prime (programme context), loss and gain message framing and the type of the threat appeal (death-related or body harm) on evoked fear and perceived severity of the threat and (ii) by studying to

what extent evoked fear and perceived severity contribute to ad credibility. These research questions were studied in an experimental design in which Belgian respondents were exposed to a death or non-death related threat appeal with a positively (gain frame) or negatively valenced (loss frame) base line, preceded by a positive or negative affective prime.

3 Conceptual framework and hypothesis

In the past, various models have tried to explain the underlying mechanism of how threat appeals work. Drive models (Janis, 1967) attribute the effectiveness of threat appeals to evoked fear. In the Protection Motivation Theory (PMT, Rogers, 1975, 1983) four independent cognitive responses mediate the impact of a threat appeal on coping attitudes, intentions and behaviour: *perceived severity*, an individual's beliefs about the seriousness of the threat, *perceived susceptibility* or *probability of occurrence*, an individual's beliefs about his or her chances of experiencing the threat, *perceived response efficacy*, an individual's beliefs as to whether a response effectively prevents the threat, and *perceived self efficacy*, an individual's belief in his or her ability to actually perform the recommended response. Perceived severity and susceptibility represent the perceived level of threat, perceived response-efficacy and self-efficacy represent the perceived level of efficacy. According to the PMT, threat messages lead to these cognitive responses and consequently to protection motivation which, in turn, has an impact on attitudes and coping intention and behaviour (Witte, 1992). In the original models of Rogers, the fear-as-emotion component was rejected. However, already in the Ordered Protection Motivation (OPM) Model (which postulates that certain evaluation checks must occur prior to other evaluation checks) fear regains a possible substantial role. Although Rogers still believes that fear is unnecessary, the OPM points at the emotional state of fear as an increasing factor for attention and believability and eventually as a factor increasing the likelihood of coping appraisal (Tanner, Hunt, and Eppright, 1991). Various authors conclude that perceived threat (severity and susceptibility), perceived response- and self-efficacy, and evoked fear are three possible independent responses to a threat stimulus (Strong and Dubas, 1993; Cauberghe et al., 2009). The impact of context and message factors on evoked fear as well as perceived threat will be investigated, as well as the effect of evoked fear, perceived threat and perceived coping efficacy on message credibility.

In the present study, message threat was manipulated by presenting the consequences of drunk driving, either by pointing at bodily harm (relatively low threat) or by referring to death (relatively high threat). We expect high threat

messages to evoke more fear and perceived severity of threat. Since the messages did not differ in terms of susceptibility (probability of occurrence) and coping efficacy, we do not expect any effects on these cognitive appraisal factors.

H1: A high threat (death depicting) message generates more evoked fear and perceived severity of threat than a low threat message (depicting body damage).

An advertisement rarely appears isolated. More often it is inserted in a specific media context such as a radio or a television program, or a newspaper or magazine article. A specific context can serve as a prime. A prime can be both cognitive and affective. According to the Cognitive Priming principle (e.g., Herr, 1989; Yi, 1990a, 1990b, 1993) and the Affect Transfer theory (e.g., De Pelsmacker, Geuens and Anckaert, 2002) cognitive and affect reactions evoked by the context transfer to a subsequent advertising message. In the present study, negatively and positively valenced media contexts (newspaper article) were used. Given that fear can be described as a negative ad evoked emotion, we expect that a negative valenced prime will lead to a higher feeling of fear and perceived severity than a positive prime. This leads to the following:

H2: A negative prime will lead to more evoked fear and perceived severity than a positive prime.

Advertising messages can be positively (gain) or negatively (loss) framed. Scheufele (2004) defines framing as a technique to emphasize specific aspects of reality and assigning specific attributions, evaluations or decisions to recipients. There is evidence that the framing valence (positive/negative) has a concordant evaluation effect on the framed topic. For instance, Brewer et al. (2003) show in their study on media influence on attitudes toward foreign countries, that the framing valence of the news story shapes the direction of the foreign country evaluation. People who read a story that framed a country as an American ally in the drug war were more likely to draw a positive association between this country and the war on drugs. McLeod and Detenber (1999) found in a study about the coverage of an anarchist protest, that a more negative versus a more positive portrayal of the protesters led viewers to have a more critical attitude towards the protest. It should be noted that in some cases a negative frame might be preferred. In a number of health communication studies about for instance HIV (Kalichman and Coley, 1995) and mammography screening (Banks et al., 1995), a negative framing condition showed a higher effect in terms of getting a HIV

test or obtaining a mammography. As Keller and Lehman (2008) indicate in their meta-analysis, literature suggest that behaviour that is framed in terms of costs (loss frame) leads to a higher intention to engage in preventive health than whether it is framed in terms of benefits (gain frame) even when it is about objectively two equivalent situations (Rothman and Salovey, 1997). In the present study, positive (gain) and negative (loss) framed PSA threat messages were used. We expect loss frames to elicit more fear and perceived threat:

H3: A negatively framed threat message leads to more evoked fear and perceived severity of threat than a positively framed threat message.

We expect that these factors will reinforce each other in their effects on evoked fear and perceived severity. We propose that in case of a negative prime or frame a high threat message will lead to more ad evoked fear and perceived severity than a low threat message. We do not make specific hypotheses for the other conditions as they are mixed by combination (positive prime/frame with a low or high threat level). The Mood Congruency-Accessibility Hypothesis (Bower, 1981; Goldberg and Gorn, 1987; Perry et al., 1997; De Pelsmacker et al., 2002) states that positive/negative responses to the medium context are expected to increase positive/negative thoughts leading in turn to positive/negative advertisement effectiveness. In line with this, Kamins et al. (1991) developed their Consistency Effects Model, which also recommends using congruent moods between medium context (prime) and embedded advertisement. This congruency hypothesis in which congruent elements are more easily accessed and processed is also expected to hold for the frame that accompanies the advertisement. Hence, we expect this congruency effect on evoked fear and severity of threat to occur for combinations of negative prime or frame and the level of threat of the message. Thus, we hypothesize:

H4: In case of a negative prime, a high threat message leads to more evoked fear and perceived severity of threat than a low threat message.

H5: In case of a negative frame, a high threat message leads to more evoked fear and perceived severity of threat than a low threat message.

Various context and message factors may affect evoked fear and perceived severity, but to what extent are these processing variables relevant for message persuasion? The Protection Motivation Theory (Rogers, 1983) assumes that four cognitive appraisal variables, i.e. perceived severity, susceptibility, response-efficacy and self-efficacy impact message effectiveness. Additionally, there is overwhelming evidence of a positive relationship between evoked fear as such

and message persuasion (Strong and Dubas, 1993; King and Reid, 1990; Quinn et al., 1992; LaTour and Rotfeld, 1997; Thornton et al., 2000; Dillard and Anderson, 2004). Moreover, recently Cauberghe et al. (2009) found that evoked fear has a positive effect on message persuasion above and beyond cognitive appraisal factors. Therefore we expect:

H6: Evoked fear, perceived severity of threat, susceptibility to threat, response-efficacy and self-efficacy have a positive effect on message credibility.

4 Data collection

A 2X2X2 full factorial design was set up with ad threat level (bodily harm vs. death-related), prime (positive vs. negative), and message frame (positive vs. negative) as manipulated factors. On the basis of a pretest four different PSA messages against drunk driving were created and two different priming contexts were selected. Each message consisted of four sections: The first two sections were identical for all ads: (a) the heading (*'Young, but drunk behind the wheel'*) and (b) the endorsing institute (Belgian Institute for Traffic Safety). The sections that were varied were the threat appeal factor (picture) and the frame factor (text). A jury of three collected two threat level pictures, six different primes (three positive and three negative) and four frames (two positive and two negative). A pre-test for the three experimental factors was conducted with 96 participants. They all saw one threat level ad, three primes and four frames in a different sequence (four different surveys). With respect to the threat level factor manipulation, the respondents were asked to indicate on a three item 7 point Likert scale the extent to which the death concept was central in the ad (based on Maheswaran and Meyers-Levy, 1990: *'this advertisement confronted me with death'*, *'this advertisement evoked death thoughts in me'*, *'I believe that this advertisement puts death centrally'*, $\alpha = .79$). The pre-test indicated that the high (death-related) threat appeal scored significantly higher ($M = 5.31$, $SD = 0.86$) than the low (bodily harm) threat appeal ($M = 3.49$, $SD = 1.29$), $t(92,18) = 8.255$, $p < 0.001$). A word completion task (Cox and Arndt, 2007), in which for 18 words some letters were given and where the open letters had to be filled in by the respondents was also administered. These words could be death related or not. Comparing the percentages of death related completed words and taking into account the results of a one-sided t-test on the number of death related words for the two advertisements indicated a successful manipulation of the death relatedness of the advertisement (high threat ad ($M = 1.00$) scored significantly higher than the low threat ad ($M = .61$, $t(94) = 1.773$, $p = .04$)). Hence, the pre-test indi-

cated that the selection of the high threat level picture (a self composed picture showing death elements, i.e., a mother crying over a coffin), and the selection of the lower threat level picture (a face loaded with scars as shown in a previous PSA (South-Ayrshire Council, 2007) was acceptable.

With respect to the frame selection, four frames were rated on a six item seven point scale containing gain frame items (e.g., *'this slogan refers to the benefits of not driving drunk'*) as well as loss frame items (e.g., *'this slogan refers to the losses of drunk driving'*). The four frames were: *'drunk behind the wheel, the hangover comes later on'* (loss frame), *'There is still a lot to happen in your live ... Don't use alcohol behind the wheel'* (gain frame), *'having a good time without alcohol is also possible... Don't use alcohol behind the wheel'* (gain frame), and *'Being drunk behind the wheel destroys more than you like'* (loss frame). On the basis of the pretest, the following frames were selected: *'There is still a lot to happen in your live ... Don't use alcohol behind the wheel'* ($M=4.20$, $SD=.89$) and *'Being drunk behind the wheel destroys more than you like'* ($M=2.99$, $SD=.79$). With respect to the primes, six newspaper articles were pre-tested in order to select a positively and negatively valenced emotional context. A three-item seven point semantic differential scale was used to measure the emotional valence (e.g., the article evokes positive feelings versus the article evokes negative feelings). A positively valenced article was chosen with the headline *'Belgian people are happy'* ($M=2.43$, $SD=1.23$). For the negatively valenced prime, an article entitling *'Man abused his spouse for years'* ($M=6.20$, $SD=.81$) was used. Manipulation checks were carried out in the main study and reported hereafter.

The three experimental factors were used as independent variables in the first analysis. As dependent variables in the first analysis, ad evoked fear was measured by the six-item 7-point Likert scale based on Fleur and Steenkamp (2004), e.g., *'the message made me feel scared, fearful, worried'*, ($\alpha=.82$), and perceived severity (Witte, 1992, 1994) was measured using a 3-item 5-point Likert scales (e.g., *'I believe a car accident is severe'*, $\alpha=.86$). In the second analysis, evoked fear and perceived threat are used as independent variables, as well as the three other cognitive factors as outlined by Witte (1992,1994): perceived probability of occurrence (e.g., *'I run the risk of getting involved in a car accident'*, $\alpha=.75$), response efficacy (e.g., *'By drinking alcohol-free avoids car accidents'*, $\alpha=.81$) and self-efficacy (e.g., *'I am capable to drink no alcohol to avoid a car accident'*, $\alpha=.69$). The dependent variable in analysis 2 is message credibility and was measured with a four item 7-point Likert scale (Putrevu and Lord, 1994) ($\alpha=.80$).

A combination of an online snowball and convenience sampling was used to compose a sample of teenagers and young adults (age ranging from 15 to 32

years). Each of the 266 participants was randomly exposed to one of the eight experimental conditions, making it a between-subject design. Participants were told that they had to look closely at the prime (article) and PSA and were told that the research was about drinking alcohol. The questionnaire ended with socio-demographic questions and participants were thanked for their cooperation. The sample consists of 47.4% males; median age is 22. Most of the participants had a driver's license (77.1%).

5 Results

5.1 Manipulation checks

For the manipulation checks the same measurements as in the pre-test were used. There was a significant difference between the message threat levels ($\alpha=.75$), indicating successful manipulation of the low threat ($M = 3.24$, $SD = 1.32$) and the high threat level ($M = 4.36$, $SD = 1.18$), $t(264) = 7.255$, $p < 0.001$). With respect to the framing valence ($\alpha=.62$), there was a significant difference in valence between the negative (loss) frame ($M = 2.96$, $SD = .81$) and the positive (gain) frame ($M = 3.82$, $SD = .78$), $t(264) = 8.754$, $p < 0.001$). Finally, there was also a successful manipulation of the affective valence of the prime ($\alpha=.98$). The negative affective prime ($M = 1.65$, $SD = .85$) differed significantly from the positive prime ($M = 5.20$, $SD = 1.30$), $t(223,184) = 26.264$, $p < 0.001$).

5.2 Analysis 1

In the first analysis, the effect of threat level, frame and prime on evoked fear and perceived severity of the threat were analysed using two separate ANOVA's. A death related (high threat) level evoked more fear ($M=4.18$, $SD=.094$) than a low threat level (bodily harm) message ($M=3.83$, $SD=.097$, $F(1,258)=6.602$, $p=.011$). H1 is supported with respect to evoked fear. There was no main effect of threat level on perceived severity. There were no significant main effects of message frame or context prime on either evoked fear or perceived threat. H2 and H3 are not supported.

Planned contrasts were used to analyze the effect of a combination of prime and threat level and of frame and threat level. In case of a negative prime, a high threat ad ($M = 4.30$) evoked more fear than a low ad threat ($M = 3.68$, $p = .001$, see Figure 1), supporting H4 with respect to evoked fear. In case of a negative frame, a high threat ad ($M = 4.37$) led to more fear than a low threat ad ($M =$

3.84, $p = .006$, see Figure 2), supporting H5 for ad evoked threat. No support for H4 and H5 was found for severity of threat.

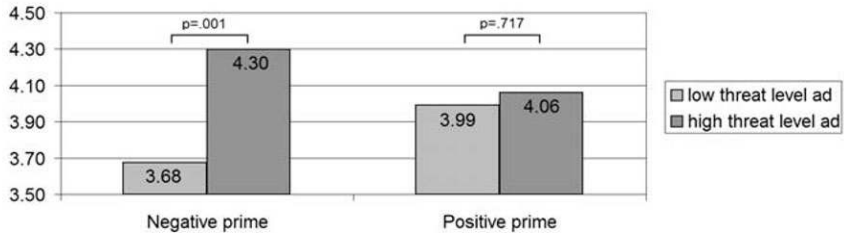


Figure 1: Means of self-reported ad evoked fear for prime x ad threat level interaction

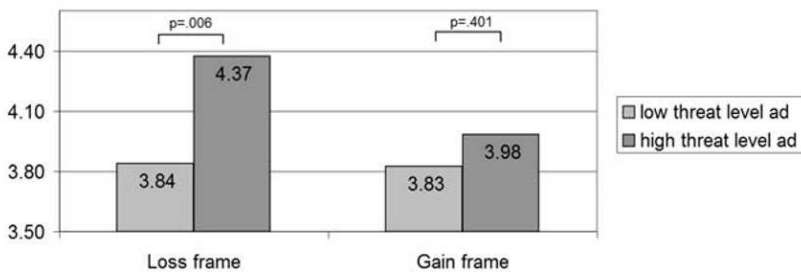


Figure 2: Means of self-reported ad evoked fear for frame x ad threat level interaction

5.3 Analysis 2

In this analysis the effect of evoked fear and perceived severity, susceptibility, self-efficacy and response efficacy on message credibility is tested using regression analysis (H6). The results are shown in Table 1. The model is statistically significant ($R^2 = .196$, $F(5,260) = 13.928$, $p < .001$). Ad evoked fear has a positive and significant effect on message credibility ($B = .211$, $t(265) = 4.197$, $p < .001$). Also perceived severity has a positive, but smaller, effect on message credibility ($B = .093$, $t(265) = 3.601$, $p < .001$). There was no significant effect of

perceived susceptibility. Both for perceived response efficacy ($B=.034$, $t(265) = 1.940$, $p = .053$) and perceived self efficacy ($B=.032$, $t(265) = 1.728$, $p = .085$) have a small and marginally significant effect.

Table 1: Regression results for ad credibility as a function of ad evoked fear and cognitive appraisals

Variable	<i>B</i>	<i>SE B</i>	<i>B</i>	<i>Sign.</i>
Constant	1.323	.526		.012
Ad evoked fear	.211	.050	.236	.000
Perceived severity	.093	.026	.233	.000
Perceived susceptibility	.023	.018	.074	.196
Perceived response efficacy	.034	.018	.122	.053
Perceived self efficacy	.032	.019	.105	.085
R^2_a			.196	
<i>F</i>			13.928 ($p < .001$)	

Dependent Variable: Ad credibility

6 Discussion, conclusions and suggestions for further research

A remarkable conclusion is that message and context related factors only seem to impact evoked fear and not perceived severity. A death-related high threat message evokes more fear than a body harm related one, and a negative context prime or a negatively (loss) framed message combined with a high threat ad evokes more fear than combined with a low threat. Evoked fear is thus not only impacted by the level of threat in the message, but is also enhanced by the negative valence of other message and context elements. This confirms earlier research (e.g., Cauberghe et al., 2009). The fact that severity of threat is not impacted may be due to the fact that most people would agree that drunk driving

poses a severe threat, and that neither the nature of the message nor its context has an impact on this commonly agreed upon perception. Further, in this study evoked fear is by far the most important determining factor of message credibility. This confirms earlier studies in that evoked fear has been repeatedly found to be positively related to message outcomes (LaTour and Rotfeld, 1997; Thornton et al., 2000; Dillard and Anderson, 2004). Equally importantly, evoked fear appears to have an impact on message outcomes that is unrelated to cognitive appraisal factors such as perceived threat and coping efficacy. This nuances the assumptions of the Protection Motivation Theory (PMT) that primarily cognitive factors affect messages outcomes, and that evoked fear only plays a mediating role in the formation of these cognitive appraisal variables. The fact that evoked fear plays a predominant role in the formation of message acceptance confirms earlier empirical work on the modification of the PMT (Cauberghe et al., 2009).

Advertising practitioners should be aware of the fact that not only the level of threat in a message, but also the valence of message framing and media context factors play an important role in the processing of threat appeals and ultimately in message acceptance. Scaring people, by means of the right combination of message and context factors, can be a very effective way to enhance message credibility, even more than careful argumentation that leads to cognitive message appraisal.

This study was carried out in the context of a well-known traffic safety problem (drunk driving). Future research could also focus on relatively unknown and novel issues. Maybe the effect of PSA's for these issues has more impact on cognitive appraisal factors which, in turn, might have a greater impact on message outcome. Also, the focus of this study was evoking fear by means of manipulating threat. Future research should also concentrate on manipulating probability of occurrence (susceptibility) and coping efficacy factors to assess to what extent they have an impact of evoked fear and message outcomes. Extension to other media such as roadside billboards is also recommended. Finally, most threat appeal studies were conducted in a social-profit context. It would be interesting to explore to what extent these results also hold in a commercial context.

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Appendix: advertisements

Headline: ‘Young, but drunk behind the wheel!’.

The baseline for the ads on the left is: ‘Being drunk behind the wheel destroys more than you like’ and for the ads on the right: ‘There is still a lot to happen in your life ... Don’t use alcohol behind the wheel!’.

Bodily harm – negative message frame:



Bodily harm – positive message frame:



Death-related – negative message frame:



Death-related – positive message frame:



Racial Perceptions in Social Marketing: The Function of Fear and Efficacy in HIV/Aids Communication

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1 Abstract

Advertising is normally targeted at a homogeneous target market. In countries where the population is characterized by a wide variety of different racial groups, advertising is however often targeted at a fairly heterogeneous audience. This study investigates whether different racial groups perceive fear appeals pertaining to HIV/Aids communication differently. The role of fear and efficacy are examined to ascertain the influence of different levels of fear appeals. The findings of this paper indicate differences among racial groups pertaining to levels of fear and efficacy experienced after exposure to high fear appeals compared to other appeals.

2 Introduction

The effectiveness of advertising is strongly influenced by its ability to target a very specific, preferably homogeneous, target market or target audience. Marketing communication is evolving to an era of tailored messages targeted at individuals and more sophisticated segmentation of target audiences. Since South Africa's population is characterised by a wide variety of different racial groups, advertising in South Africa is often targeted at a fairly heterogeneous audience with a standardised message, consequently not producing the desired effect. The Aids pandemic in South Africa is a major concern and the main advertising campaign loveLife does not seem to be producing the expected results. The increase in various social problems and behaviours has forced many practitioners to reconsider the use of fear appeals in social advertising, because it seems that other types of advertising appeals are not having the intended behavioural effect (Tay, Ozanne and Santiono, 2000).

Fear as an advertising appeal for HIV/Aids prevention campaigns has not been used in South Africa before and is the focus of this study. South African young adults reside in a country with diverse racial groups and cultural backgrounds. The more knowledge about their feelings and fears about HIV/Aids become available, the more effective marketing communication can be developed. Overall marketing communication campaigns must be tailored to the specific needs of adolescents and the promotion of safer sexual behaviour should be at the core of HIV/Aids programmes, since they are embarking on their sexual lives and are therefore open to behavioural change interventions.

3 Theoretical background

Fear is a negative emotion and is associated with a high level of arousal. It is caused by a threat that is perceived to be substantial and personally relevant to individuals (Easterling and Leventhal, 1989; Ortony and Turner, 1990). The fear appeal literature indicate that fear can be described by mood adjectives, including feeling frightened, anxious, or nauseous, and also via ratings of concern or worry (LaTour and Tanner, 2003; LaTour and Rotfeld, 1997; Henthorne, LaTour and Natarajan, 1993; Rogers, 1983). Fear thus motivates actions aimed at reducing these unpleasant emotions (LaTour & Zahra, 1989; Tanner, Hunt and Eppright, 1991), it also relates to risk-taking behaviour which is now often addressed by social marketing efforts (Tudor, 2003).

A number of approaches are used for advertising campaigns and promotional efforts to influence or change behaviour. These appeals range from humor to self-idealisation to the use of fear (Belch & Belch, 2004). The use of fear as an advertising appeal raises the question on the appropriate severity of the threat. As a result many marketing researchers, believing that it is too difficult to implement properly, have questioned the use of fear appeal advertising messages (Rotfeld, 2000). Different models to improve the effectiveness of fear appeal have been proposed. Tay, Ozanne and Santiono (2000) recommend the utilization of fear appeals should be segment specific as fear appeals have been found to influence various population segments differently (Quinn et al., 1992; Burnett and Wilkes, 1980; Burnett and Oliver, 1979 cited in Tay et al, 2000). Segmentation may be based on a variety of variables including age, sex and their involvement in the behaviour under investigation (such as smoking, drunk-driving or unprotected sexual contact).

Individuals need to be encouraged, reinforced, and supported to change their high-risk behaviour into healthy behaviour in order to prevent the spread of HIV/Aids (Fishbein, 2000; Lee and Green, 1991). Three variables in particular,

namely attitude, norms and self-efficacy, are the function of underlying determinants. These determinants include beliefs about the outcome of behaviour, social and normative prescriptions within that population, and specific barriers to these actions. External influences should be included when evaluating these beliefs: cultural background, perceived vulnerability to infection and personality traits may have a mediating influence on attitudes, norms and self-efficacy beliefs (Fishbein, 2000). Culturally sensitive interventions have been found to more effectively create behaviour changes in high-risk populations such as adolescents. This finding implies that interventions which are based on sound theoretical knowledge of behaviour change (e.g. social learning theory, the health belief model, and self-efficacy theory) and which also take into account cultural beliefs and attitudes are more likely to succeed (Levinson, Sadigursky and Erchak, 2004).

Based on Leventhal's danger control/fear control framework, the Extended Parallel Process Model (EPPM) is an expansion of previous fear appeal theoretical approaches (Janis, 1967; Leventhal, 1970; Rogers, 1975, 1983 cited in Witte, 1992). According to the EPPM threat motivates action, and perceived efficacy determines whether the action taken controls the danger (protective behaviour) or controls the fear (inhibits protective behaviour). Individuals typically weigh their risk of actually experiencing the threat against actions they can take that would minimize or prevent the threat (Witte, 1992, Witte, 1994, Witte, 1998). Efficacy is an environmental or message signal that may lead to perceived efficacy, which relates to an individual's cognitions about efficacy. Messages that portray efficacy focus on the effectiveness of the suggested response (i.e., response efficacy), and on the target audience's ability to carry out the suggested response (i.e., self-efficacy) (Rogers, 1983). Similarly, perceived response efficacy refers to an individual's beliefs that a response effectively prevents the threat (i.e. "I believe condoms prevent HIV contraction"), and perceived self-efficacy refers to an individual's belief in his or her ability to perform a recommended response (i.e. "I think that I can use condoms to prevent HIV contraction") (Rogers, 1983).

If results indicated high threat and low efficacy, theory indicates that the intervention was failing, because it was promoting fear control responses. Conversely, if the results of a survey indicated high threat and high efficacy, then the intervention was producing the desired actions (Witte and Allen, 2000). Individual differences however influence the assessment of threat and efficacy. Individuals evaluate the components of a message relative to their prior experiences, culture, and personality characteristics. Differing perceptions in different individuals influence consequent outcomes (Witte, 1992). Marketing communication has to take into account the cultural and economic fabric of society, with different types of people from different races (Lane, King and Russell, 2005:144).

Research on race and marketing communication interventions suggest that race groups differ in responses to communication, advertising effectiveness and attitudes towards messages (Dines and Humez, 1995:114).

Marketing communication campaigns in South Africa and internationally aim to educate people about HIV/Aids and to lower the risk of HIV infection. During 2005, Aids claimed an estimated 2.4 to 3.3 million lives. Sub-Saharan Africa accounts for a third of these deaths, impacting negatively on economic growth by destroying human capital (UNAIDS, 2006, AVERT, 2005). The Aids pandemic in South Africa is a major concern. According to Irwin (2003) research shows that about 50 percent of HIV infections in South Africa are transmitted to people before the age of 20, with more than 5 million HIV positive people in a country with 46 million people.

Every HIV/Aids prevention campaign has its own goals, depending on the country where it is applied. In countries, like South Africa, where HIV/Aids is a major problem and growing fast, anti-Aids campaigns are mostly used to change people's behaviour to safe sexual behaviour. In other parts of the world, where HIV/Aids is not a rapidly growing disease, the goals of anti- Aids campaigns are more focussed toward support from people to fight against the disease worldwide or to gain financial support from the public, government and businesses (Stop Aids Now, 2006).

LoveLife is South Africa's major multi-million dollar HIV/ Aids prevention campaign (US\$12 million/annum), launched in 1999. It follows an informational appeal approach and is an educational campaign that emphasizes condom use and "positive sexuality" (Green, 2004, cited in Green and Witte:248). LoveLife does not seem to be producing the expected results, and became the world's first organisation to have its funding discontinued by the Global Fund to Fight Aids, Tuberculosis and Malaria, during December 2005. The cut reflects debate about the effectiveness of loveLife's HIV-prevention programme and the viability of behaviour-changing Aids education (Peng, 2006).

4 Research objectives

The focus of this research study is on the use of fear appeal advertising pertaining to HIV/ Aids and whether the use of fear increases the likelihood of adopting appropriate behaviour among different racial groups. It examines the influence of high, medium, and low/no fear appeal based advertising on fear and efficacy levels. Witte's (1992) Extended Parallel Process Model (EPPM) was replicated to test interventions and evaluate efficacy outcomes. Fear arousal was measured via self-rating of mood adjectives that have been used in other fear appeal studies

(LaTour and Tanner, 2003; LaTour and Rotfeld, 1997; Henthorne, LaTour and Nataraajan, 1993).

5 Hypotheses development

Literature indicates that the utilization of fear appeals should be segment specific as fear appeals have been found to influence various population segments differently (Tay, Ozanne and Santiono, 2000). Furthermore, threat motivates action, and perceived efficacy determines whether the action taken controls the danger or controls the fear (Witte, 1992, Witte, 1994, Witte, 1998). In order to test different levels of fear appeal and the influence on fear arousal for different racial groups, the following hypotheses were proposed: Ho1: Fear arousal is not influenced by the level of fear appeal and racial group; Ha1: Fear arousal is influenced by the level of fear appeal and racial group.

6 Research methodology

A comprehensive literature review on the use and effect of fear appeal advertising was followed by a qualitative study

6.1 *Exploratory research*

This study explored in-depth responses via focus groups. Nine print advertisements and ten television commercials were pre-tested to ascertain whether the different levels of fear (low, medium and high) were actually present. Respondents in the four focus groups from different races and gender rated each advertisement according to the level of fear. Finally advertisements were ranked on a continuum of low/no fear to high fear. Advertisements were shown from low to high fear to prevent desensitizing respondents. A selection of advertisements was made from various sources including fifty different websites using a key word search for 'HIV/ Aids advertising', and all the main South African and international campaigns for HIV/ Aids prevention. The advertisements had not been seen by respondents previously, except for the two South African LoveLife advertisements used. This would therefore not have significant implications in relation to halo effects. The main criteria for using advertisements included: the age of the people in advertisements had to be between 18 and 30 years of age; and advertisements had to include different ethnic and gender groups.

6.2 *Experimental design*

Based on the results from the qualitative research three advertisements including low, medium and high fear appeals for print and television were selected for use in the quantitative research. A pre-test post-test, 3 X 2 between subjects, experimental design was used to collect data from 360 respondents. The presentation of various fear appeal advertisements was the experimental intervention while the likelihood of changing behaviour based on fear and efficacy is measured as the outcome.

Respondents were given a self-completion questionnaire with questions based on a risk behaviour diagnosis Likert scale (Witte, 1998) prior to any intervention and the same behaviour scale post-intervention. Three experimental groups were exposed to print advertisements, and three to television advertisements, as an intervention. Each cell was exposed to only one type of appeal, namely low, medium, or high fear respectively. Fear arousal was measured post-intervention by having respondents rate mood adjectives to indicate the fear experienced based on the advertisement. Efficacy measurements included response efficacy (effectiveness of suggested response, i.e. "Using condoms is effective in preventing HIV infection") and self efficacy (ability to carry out the suggested response, i.e. "I am able to use condoms to prevent getting HIV infection").

6.3 *Data collection and sample*

This study was based on the racial groups used by the South African national government for the South African population. Mid-year estimates (2005) of the South African population indicate that the Black African race make up the majority of the country's population, 79.6%, followed by White 9%, Coloured 8.7% and Indian or Asian 2% (Statistics South Africa, 2006). Adolescents between the ages of 18 and 24 years, from the three main racial groups within South Africa were identified as the study population. In the target group, 15-24 years old, the HIV prevalence amongst males are 9.2% and amongst females 33.3 % (Avert, 2005).

A convenience sample was drawn from the target population in the Western Cape. Respondents represented educated, middle to upper income groups. The focus on this specific population group can be explained based on their similarity to South Africa's major HIV/ Aids advertising campaign loveLife's target audience, as well as that this group is sexually active. The sample size of 360, as depicted in Table 1, included 60 respondents per experimental cell with a 50:50 split of male and female respondents, and 20 respondents per racial group.

Table 1: Experimental group sample

Type of appeal/ Type of advertisement	Low fear appeal	Medium fear appeal	High fear appeal
Print advertisement	60 respondents	60 respondents	60 respondents
Television advertisement	60 respondents	60 respondents	60 respondents

7 Major findings

Reliability of mood adjectives used to measure fear was confirmed with a Cronbach alpha score of 0.8. The reliability of the Extended Parallel Process Model was established by using Cronbach alpha tests on the individual questions measuring efficacy for both pre- and post-tests, with scores ranging between 0.6 and 0.7. Efficacy measures included both response efficacy and self efficacy. These measures were conducted for both condom usage and safe sexual behaviour. Repeated measures analysis of variance performed for all advertisements and time (pre- and post tests) pertaining to the variables efficacy condom usage and efficacy safe sexual behaviour indicated a non-significant interaction (not strictly 5%). This could be expected since respondents were only exposed to an advertisement intervention once.

7.1 Fear

An important theme that emerged from the exploratory qualitative research is that, although not in the teenage category, this age group (18-24 years) clearly demonstrated a sense of “invincibility” – that “nothing can happen to them”. During the qualitative study it emerged that HIV/ Aids was generally seen by adolescents as a disease that affects mainly rural areas. It was also perceived as a disease more common amongst black people, a perception mostly held by white respondents. The disease was additionally perceived as more prevalent amongst homosexual or gay people, a view expressed mainly by males.

Based on an in-depth discussion about feelings and emotions regarding HIV/Aids, as well as their chances of being infected, the following conclusions, illustrated in Figure 1, were eminent. It seemed that a continuum from denial through fear to avoidance was prevalent. This indicated that, although respondents were denying the existence of HIV/Aids, they experience fear and know that it could result in death.

Commenting on the level of fear used in the print and television advertisements, and the way they felt about it, the following were evident. Different trends were identified amongst the different genders and it seems that females are more likely to succumb to fear than males. This trend poses a challenge to social marketers as both genders have to be influenced by HIV/ Aids campaigns.

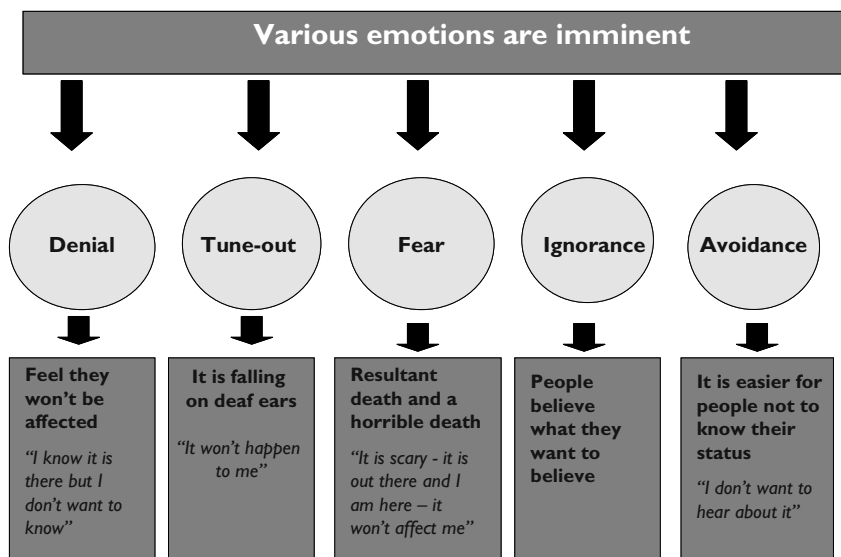


Figure 1: Emotions related to HIV/Aids

Female respondents from white, coloured and black racial groups believed that medium and high fear advertisements would influence their sexual behaviour. Male respondents from white and black racial groups said that medium fear and informational advertisements highlighting statistics are scary and likely to influence their sexual behaviour. Coloured and some white respondents indicated that medium and high fear appeal advertisements will influence their sexual behaviour. Finally the different print and television advertisements were ranked

on a continuum of low/no fear to high fear. The final selection of advertisements for the exploratory research was based on these rankings.

ANOVA comparisons and univariate tests of significance indicated significant interaction for fear and advertisement type, namely print and television ($p < 0.0000$), fear and type of advertising appeal ($p < 0.0001$), as well as fear and race ($p < 0.01$). The interaction for fear and advertisement type indicated that respondents experienced higher fear after viewing television than printed advertisements. This could be due to the fact that television is a combination of visual and audio, whilst print is only visual. The interaction for fear and type of advertising appeal indicated that respondents experienced the lowest level of fear from low fear appeal advertisements and the highest level of fear from high fear appeal advertisements.

The means plot, Figure 2, for fear and race denotes that all race groups experienced similar levels of fear when exposed to low fear appeals. Black respondents experienced the highest level of fear when exposed to medium fear appeals, with white and coloured respondents experiencing similar levels of fear. Coloured respondents experienced the highest level of fear when exposed to high fear appeals, with black and white respondents experiencing similar levels of fear.

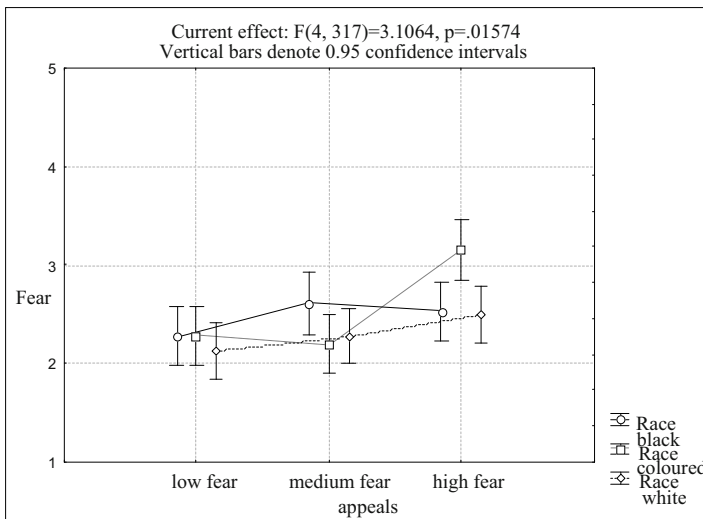


Figure 2: Means plot for fear and race

It is evident that white respondents' fear increased gradually from low to high fear appeals, whilst coloured respondents' fear increased substantially after exposure to high fear appeals. Black respondents' fear increased gradually to medium fear appeals and their fear level stayed similar after this.

7.2 *Efficacy condom usage*

Response efficacy (the degree to which the recommended response effectively prevents the threat of HIV/ Aids from occurring), and self-efficacy (the degree to which the respondents perceive their ability to perform the recommended response to prevent the threat of HIV/ Aids) scores were combined to form the efficacy construct (Witte, 1992:12, Witte, 1994:118, Witte, 1998). In this study, efficacy was measured for condom usage and safe sexual behaviour.

According to the EPPM, threat motivates action, and perceived efficacy determines whether the action taken controls the danger (protective behaviour) or the fear (inhibits protective behaviour). Individuals typically weigh their risk of actually experiencing the threat against actions they can take that would minimise or prevent the threat (Witte, 1998; Witte, 1994:118; Witte, 1992:12).

ANOVA comparisons and the use of Tukey HSD post hoc tests for significant differences between cells indicated that pre-and post-tests for all race groups and advertisements pertaining to efficacy in terms of condom usage resulted in a significant interaction for time and fear ($p < 0.007$). The means plot, Figure 3, for time and fear denotes respondents' efficacy showed a downward movement after exposure to medium and high fear appeals, and an upward movement when exposed to low fear appeals. Medium and high fear appeal exposure thus caused respondents to be more afraid of HIV/ Aids and less in control (lower efficacy) in terms of condom usage in general and believing they can easily use condoms to prevent HIV infection.

The results of the qualitative study confirm these findings. In the qualitative study respondents reported that low fear appeal advertisements had little impact on them and that such advertisements are not likely to affect their behaviour. The high fear appeal advertisements had the biggest impact and respondents remarked that it was highly possible that high fear appeal advertisements would affect their behaviour. Response efficacy indicates how the threat of HIV/ Aids can be prevented from occurring, and respondents' comments on HIV/ Aids communication requirements included "*We need precautions to take in order to prevent it, especially from a young age. They can't stop it so they have to give a solution.*" Self efficacy denotes the perceived ability to perform the recommended response, by using condoms in this instance. Here respondents' com-

ments on HIV/ Aids included “*It is scary and I think it is out there and I am here – it won’t affect me.*” This could imply that respondents do not believe they are at risk, or that they believe they can use condoms to prevent HIV/ Aids infection.

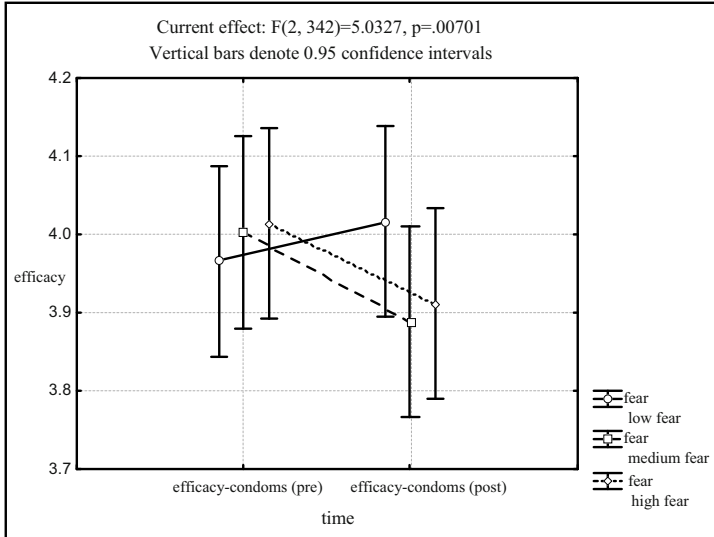


Figure 3: Means plot for time and fear

7.3 Efficacy safe sexual behaviour

Efficacy measures for safe sexual behaviour included combined scores of self-efficacy and response efficacy. ANOVA comparisons and the use of Tukey HSD post hoc tests for significant differences between cells indicated that pre-and post-tests for all race groups and advertisements pertaining to efficacy in terms of safe sexual behaviour resulted in a significant interaction for advertisement, fear and race ($p<0.006$). Differences evident included coloured respondents in four of the six groups had lower efficacy levels in terms of safe sexual behaviour, whilst black and white respondents had similar efficacy levels in the same groups. No significant time effect was noted, which indicates that respondents’ efficacy in terms of safe sexual behaviour didn’t change after exposure to the various fear appeal advertisements.

Concurring with previous research, if perceived efficacy is high, the action taken will control the danger (protective safe sexual behaviour). Respondents

would weigh their risk of actually experiencing the threat (high fear appeal) against actions they can take that would minimise or prevent the threat (Witte, 1998; Witte, 1994:118; Witte, 1992:12), and in this instance revert to safe sexual behaviour.

Fishbein (2000:129) pointed out that self-efficacy is one variable that can be seen as a function of underlying determinants. These determinants include beliefs about the outcome of behaviour, social and normative prescriptions within a population, and specific barriers to such actions. Therefore external influences should be included when evaluating the following beliefs: cultural background, perceived vulnerability to infection and personality traits which may have a mediating influence on attitudes, norms and self-efficacy beliefs. In this instance, it is evident that cultural background does not have a major mediating influence on self-efficacy, which forms part of total efficacy, pertaining to safe sexual behaviour.

The results of the qualitative study revealed stronger mediating influences based on feedback from respondents after levels of self-relevance and feelings about HIV/ Aids were discussed. White and black racial groups stated that they have a chance of being infected if they have casual sex; however some in contrast indicated that it will never happen to them.

8 Implications and conclusions

The findings of this study suggest that changing adolescents' sexual behaviour in the midst of the HIV/ Aids pandemic can be achieved by using fear appeal advertising. From this study it is evident that racial characteristics play a major role in reaction to fear appeals. It is however important to note that different approaches can be used to solve the problem of HIV/ Aids communication's effectiveness in changing behaviour. The problem is not easily solved and when this approach is placed in a larger societal context other approaches apart from targeted advertising campaigns aimed at specific racial groups can be used. Other approaches could include investigating respondents' susceptibility to HIV/ Aids or investigating message content to improve effectiveness.

From the exploratory qualitative research an understanding of the influence of racial group on the persuasive power of fear appeal advertising and how this differs on type of fear emerged. Overall respondents agreed that they will change their behaviour and be more careful (safe sex and abstinence) after exposure to medium and high fear advertisements. Fear and realism are important elements in HIV/ Aids communication and should be considered for future advertising development.

The different influence of fear and efficacy in HIV/ Aids communication is also apparent. All respondents experienced similarly low levels of fear from low fear interventions, which could decrease the likelihood of adopting safe sexual behaviour, whilst different reactions to medium and high fear appeals were experienced. Medium and high fear appeals did not decrease efficacy levels substantially. Medium and high fear appeal exposure caused all respondents to be slightly more afraid of HIV/ Aids and less in control (lower efficacy) in terms of condom usage in general, and believing they can easily use condoms to prevent HIV infection. Overall, efficacy levels were however still high enough after exposure to medium and high fear appeals for respondents to believe they can use condoms to control HIV/ Aids infection. If efficacy is high, but threat low, as per the low fear appeal advertising, a message is required that increases the perception of threat to motivate respondents to act. It seems that low fear appeals did not have the intended effect. The medium and high fear appeal advertising had the intended effect in terms of influencing respondents' perception that they are at risk, but still believing they are able to control the danger of HIV/ Aids infection by using condoms

This situation supports the notion that respondents would weigh their risk of actually experiencing the threat (high fear appeal) against actions they can take that would minimise or prevent the threat of HIV/ Aids infection. The exploration of targeted advertising campaigns for racial groups seems evident and will increase the effectiveness of the said campaigns. Black and white respondents require even higher fear appeal messages to obtain higher fear levels, and increase perceived vulnerability to HIV/ Aids if they are to adapt to safe sexual behaviour. These respondents also have high efficacy levels and combined this will direct positive behavioural changes. However, coloured respondents experienced higher levels of fear after exposure to high fear appeals, and are motivated to act, but have lower efficacy perceptions, and don't think they can practice safe sexual behaviour. They need messages that increase their perceptions of efficacy.

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Music in Advertising: Effects on Brand and Endorser Perception

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1 Abstract

The ability of music to create differentiating effects on subjects' impressions of product endorsers and brands of an advertisement were examined based on the theory of 'musical fit'. Subjects ($N = 405$) listened to one of three versions of a radio commercial in which the music varied in each version. The music selections differed in style, tempo, rhythm, etc., but matched product and message of the commercial in terms of 'musical fit'. After listening to the commercial, subjects rated the endorser's personality via the external version of a personality inventory. Impressions of the brand were measured using Likert-type scales. The results concur with previous findings: depending on musical style, music can lead to significantly different impressions of the endorser as well as the brand.

2 Theoretical background

2.1 The power of music to evoke memories and emotions

Marketing is resorting more and more to the music industry and its stars to generate more effective brand communication strategies. Recent research in marketing attributes this tendency to the strong influence that music can exert over the brain and its subsequent repercussions in purchasing behaviour through its powerful effects on the emotions (Levitin, 2007; Konecni et al., 2008; Winkler et al., 2009; Bruini and Chalmers, 2009). According to Trehub (2003), music is the language that has the greatest force of persuasion for consumers, and one of its main objectives is to evoke emotions.

A scientific analysis of the emotional responses associated with music has revealed that these have three basic components (Scherer, 1993): *the individual's subjective experience, expressive or observable behaviour and the physiological response*. Thus, research into the feeling of emotion as regards music has shown through self-reports that people have a subjective emotional experience when they listen to music (Krumhansl, 1997; Sloboda, 1992; Waterman, 1996); they present the component of expressive behaviour of emotion towards music, as there are people who cry or display certain facial expressions recorded by means of an electromyogram (Witvliet and Vrana, 1996); and there are also studies that report the existence of physical reactions due to the emotion felt towards music, whereby people, when they listen to music, record differences in their cardiorespiratory response in accordance with the emotions it triggers, such as sadness or happiness (Nyklicek et al., 1997).

Levitin (2007) lays out a possible neural basis for the relation between music and emotions. He observed that the cerebellum, typically associated with non-conscious timing and movement, appeared to take an active role in tracking the beat of a song, and more amazing, the cerebellum becomes active in response to liking or finding music familiar. Levitin posits that, like the responses to sexual stimulation and drug consumption, music increases the release of hormones in the brain, mainly endorphins (dopamine and adrenaline) and oxytocin, giving rise to activity in the circuits of the brain associated with the autonomous nervous system. It can faithfully produce physical reactions such as perspiration, sexual excitation and trembling or shivering in the spinal column.

Music also has a great power to evoke memories (e.g., Gabrielsson 2001; Sloboda 1992). Indeed, research has shown that music is one of the main memory-stimulating recourses or factors in ads (Krumhansl, 1991; Snyder, 2000). The music that accompanies advertising is a great help in remembering the brand (Wallace, 1994). According to North et al. (2004), brands that are clearly defined by a given type of music are 96% easier to remember for consumers than those which use no sound of any kind.

2.2 *The musical effects in advertising*

The role music plays in advertising must be considered carefully because it attracts attention, transports implicit and explicit messages, generates emotions and helps one retain information. Previous explanations of musical effects in advertising can be attributed to three predominant concepts in advertising research (Zander, 2006): the classical conditioning paradigm, the Elaboration Likelihood Model (ELM) and the concept of musical fit.

a. The classical conditioning paradigm

Classical conditioning implies that pairing a product (neutral stimulus) with a well-liked piece of music (unconditioned stimulus) will produce an association between the two, and therefore a preference for the product (a conditioned response). One of the most popular experiments regarding the effects of music in advertising was Gerald J. Gorn's experiment (Gorn, 1982). In keeping to the classical conditioning approach, he paired a light blue or a beige coloured pen (neutral stimulus) with both well-liked and disliked music (unconditioned stimulus). Seventy-nine percent of the subjects chose the pen with music they liked – a conditioned reaction. Further studies by Bierley et al. (1985) and Tom (1995) supported Gorn's results, but other examinations (Allen and Madden, 1985; Pitt and Abratt, 1988) did not arrive at the same conclusions. It was not possible to create such conditioned responses for products of higher personal relevance like condoms. Middlestadt et al. (1994) doubted that studies using the classical conditioning paradigm could measure affective reactions to music. They found that music was able to spotlight different features of products, to influence the recipients' feelings, and as well to influence their beliefs. Scherer and Zentner (2001) defined the affective changes that music is supposed to produce in the listener and identified the determinants of the listening situation including the musical structure of the piece, relevant listener state and trait characteristics, and respective context.

b. The ELM

The ELM by Petty and Cacioppo (1981) and the involvement-concept connected with it examined the topic in more detail and provided an integral basis to explain contradictory findings. ELM postulates two ways of changing or creating one's attitudes: a central route and a peripheral one. In theory, attitudes are defined as general evaluations of ourselves, other persons, objects or facts. These general evaluations rely on behavioural, affective and cognitive experiences and influence our behaviour, our emotions, our preferences and our knowledge. Attitudes are influenced through the central route when one has the motivation, opportunity and ability to carefully process information about a product. Then, the likelihood of elaboration is high and the person is in a state of high involvement with the product. If there is no motivation, opportunity or ability to process the product information, the peripheral route of persuasion remains in the foreground. Here, attitudes are formed less by active thinking about the object and its characteristics than by positive or negative associations with the object caused by music. The person in this case is in a state of low involvement with the product and conditioning effects are more likely. In a state of high involvement, the tendency of music to evoke emotion should disturb the recipients' purpose to elabo-

rate the information within a commercial. The ELM was supported by several studies involving cues other than music (e.g. Petty et al., 1983; Stuart et al., 1987). Related musical effects were examined by Park and Young in 1986. As predicted by the ELM, music influenced subjects best in a state of lower involvement and disturbed subjects in a condition of high involvement. Recently, Olsen (2002) showed that information without sound is recalled better than information highlighted with music. Along the lines of the ELM, Chebat et al. (2001) described a model predicting that the effects of music on attitudes are moderated by cognitive processes (number of thoughts and depth of information processing). However, the authors warn that enhancing cognitive activity is no panacea, since they found that higher activity is associated with lower attitudes.

c. The idea of musical fit

MacInnis and Park (1991) argued that music that fits the ad, that interacts with the recipients' individual perception of its relevance or appropriateness towards the central ad message and product, may also have a positive effect on consumers in a state of high involvement: when elements of a stimulus set correspond with other items in the set, the individual parts are not perceived as separable, do not compete with one another for cognitive resources, and hence create 'emergent meaning'. In their experiment, the authors emphasized that music conforming to the commercial and its elements was able to change high-involvement consumers' attitudes positively because it literally 'undercoated' their convictions about the commercial's content. Thus, music here was less effective in influencing the attitudes toward the advertisement (as the classical conditioning approach would suggest) than by transporting and activating (further) relevant information. Hung (2000, 2001) considered the process by which consumers use music to create meanings. Her results indicated that the recipients' knowledge of cultural texts form a reference point for reading commercials. Music in congruent ads reduced 'noise' by reinforcing the connecting cultural context to communicate meanings (see also Mattila and Wirtz, 2001).

Different musical styles may provide different information for the same product. For example, either a rock song or a classical work could be used in a commercial for a car, which is considered as a typical high involvement product (Baker, 1993; Kroeber-Riel, 1993). The rock song would probably underline consumers' beliefs about the power, speed and competitiveness of the car, whereas the classical piece might emphasize beliefs about its interior trim, luxury and elegance. According to the idea of musical fit, both versions would make sense in their aim to transport relevant information about the car because both are congruent. The focus of this study is to examine what exactly happens when appropriate pieces of music are selected.

3 Objective and hypothesis

How strongly can music that is fitting and message congruent influence a commercial? Can different product- and message-corresponding musical styles sway recipients' perceptions in different ways? The purpose of this study is to demonstrate how different but congruent musical styles can create different effects on our cognitions and emotions towards the content of an ad. Moreover, the product endorser as a person was rarely of interest in the previous literature. But is it not the endorsers who representatively come into contact with the consumer? Is it not they who give a product and a company an imaginary face with their look, their voice and their personality? And is music in the position to modify our perception of the endorser, which in turn affects our image of the product? Is music in the position to determine our first impression of a person and the related brand? How does music influence our appraisal of an endorser's personality and the perceived character of the brand?

The following are the hypotheses used in the study:

H1: Different but fitting (congruent) music leads to different impressions of the product and endorser.

H2: Different but fitting (congruent) music leads to different impressions of the brand.

4 Research design

4.1 Subjects and design

In order to address the research hypotheses, personal interviews were conducted on a sample of 405 individuals (187 males and 218 females) aged 16 to 65, selected through random sampling (street interviews), and establishing age quota (50% between 16 and 40 years old, 50% between 41 and 65). 135 people were assigned randomly to each of the three groups. An experimental design was chosen. Subjects were assigned to one of three versions of a radio commercial for a brand of mineral water with the fictitious name 'Avora'. The versions differed in the selection of music. A lively, joyful and easy-listening piece by Alec Gould (1998) entitled 'Soft Shoe' was added to the commercial presented to group 1 (Music I). In the booklet accompanying the CD, the genre of this piece is described as 'entertainment' and 'amusing swing'. Group 2 listened to a different version of the commercial. Slow, calm and contemplative music was in the background. The title of Mladen Franko's (2001) composition is 'Worth to Re-

member'; it is described as an 'introspective, thoughtful piano ballad' (Music II). Despite being really different in character (see Table 1), both pieces were considered as individually congruent with the commercial's content in terms of musical fit. Music I highlighted the refreshing and sportive aspect of the mineral water, whereas Music II emphasized its health and relaxation aspects. Group 3 was the control group and listened to a non-music version of the radio spot. The decision on which two music pieces to use was made in collaboration with the experienced team of a professional advertising agency.

4.2 Variables measurement

The development of measurement scales and indicators was based on the literature and several qualitative focus group sessions. Brand perception was measured as a multi-item construct on 10-point Likert scale (Osgood et al., 1957; Ertel, 1969; Aaker, 1997). On the other hand, to record data considering the test persons' impressions towards the endorser, the approved personality inventory *Gießten Test* (GT) (Beckmann et al., 1990) was used. Thus, the impression subjects had of the endorser was measured with a semantic differential scale of bipolar antagonisms, with scoring from -3 to +3.

5 Research findings

An analysis of variance (ANOVA) was performed to test hypotheses H1 and H2. The results obtained are set out in Tables 2 and 3, respectively. These results allow us to confirm, firstly, that different but fitting (congruent) music leads to different impressions of the product and endorser (H1).

Thus, the results obtained highlight the existence of significant differences between the mean values obtained for each of the dimensions analysed (relating to the perception of the *endorser*) in each of the versions of the advertisement. Specifically, and in keeping with the concept of "musical fit", the subjects who listened to the version of the advertisement with music I (*Soft Shoe*), with greater tonality and faster tempo, perceived the *endorser* as happier and more nervous, restless, impatient, youthful, creative, sporting, enthusiastic and daring, compared to the second musical version (*Worth to Remember*). On the other hand, the individuals exposed to this second version of the advertisement, with less tonality and slower tempo, perceived the *endorser* as calmer and more relaxing, patient, delicate, sympathetic, understanding, disciplined, mature and more trustworthy, compared to musical version I. Likewise, the results obtained also

confirmed hypothesis 2; that is, different but fitting (congruent) music leads to different impressions of the brand. In this case, significant differences were also noted between the mean values obtained for each of the constructs analysed (relating to the perception of the endorser) in each of the versions of the advertisement. While the subjects exposed to the first version of the advertisement (*Soft Shoe*) perceived the brand as more energetic, exciting, refreshing, youthful, sporting and festive, compared to the second version, the music II (*Worth to Remember*) created a more delicate, soft, relaxing, mature, and natural impression of AVORA.

6 Conclusions

The most important discoveries of this study complement the current state of research. Music has the ability to modify the impression that listeners of a radio commercial have of the product and endorser. Attributes like youthful, calm and level of understanding were attached differently to the same endorser depending on the style of the music chosen. Furthermore, impressions of the brand could be manipulated by means of specific music pieces. Depending on the music used, the brand imparted either softness and delicate or energetic and vigorous. The study was able to show that not only the differentiation between well-liked and disliked music, which was made in other studies, leads to different reactions, but also that different but *product-message-congruent* music in terms of the ‘musical fit’ approach has its own differentiating effects. For the advertising practitioner, the findings of this study advise that it is not simply about creating general effects in terms of “let’s take some beautiful music to make people buy our stuff”. Under the condition of fit, music has to be considered and used in a more differentiated way. Music plays a highly evocative role to create and reinforce associations and emotions with the brand. The advertiser should pay special attention to the appearance of elements that enable positive emotions to be linked with the endorser and the brand and avoid those that could trigger negative factors or rejection of the brand. Connections between a piece of music and a commercial are quickly learned (‘mere exposure’). Thus, products advertised seem to be identified rather quickly with a certain piece of music. It’s music that makes a brand identifiable.

Table 1: Description of the music pieces used

Music I: "Soft Shoe"	Music II: "Worth to Remember"
<i>Composer:</i> Alec Gould (1998) <i>Style:</i> Amusing swing <i>Key/harmonization:</i> 79% major <i>Tempo:</i> 115 beats per minute; constant	<i>Composer:</i> Mladen Franko (2001) <i>Style:</i> Piano Ballad <i>Key/harmonization:</i> 56% minor <i>Tempo:</i> 70 beats per minute; ritardando (last 2 bars)

Table 2: Mean value differences (perception of product endorser; H1)

		Music I (Soft Shoe)	Music II (Worth to Remember)	Without Music
Relaxing, calm / Nervous, restless	Mean	1,16	-1,69	-1,30
	F.	146,315		
	Sig.	,000		
Immature / Mature	Mean	0,90	1,76	1,21
	F.	10,537		
	Sig.	,000		
Vigorous, sporting / Delicate, weak	Mean	-0,47	0,36	-0,30
	F.	10,023		
	Sig.	,000		
Obstinate / Sympathetic, understanding	Mean	0,47	1,44	0,13
	F.	34,433		
	Sig.	,000		
Discipline / Indis- cipline	Mean	-0,83	-1,67	-1,70
	F.	19,351		
	Sig.	,000		
Impatient / Patient	Mean	-1,04	1,16	-1,47
	F.	98,660		
	Sig.	,000		
Reliable, trustwor- thy / Unreliable	Mean	0,79	-0,13	-0,13
	F.	15,016		
	Sig.	,000		
Happy / Sad	Mean	-0,24	0,55	1,09
	F.	23,772		
	Sig.	,000		

		Music I (Soft Shoe)	Music II (Worth to Re- member)	Without Music
Enthusiastic, energetic / Lan- guid, depressed	Mean	-0,77	0,45	0,94
	F.	40,502		
	Sig.	,000		
Old / Youthful	Mean	1,05	-0,97	-1,18
	F.	93,757		
	Sig.	,000		
Daring / Reserved	Mean	-0,27	0,41	0,32
	F.	9,210		
	Sig.	,000		
Sociable / Unsocia- ble	Mean	-0,29	-0,04	0,30
	F.	4,113		
	Sig.	,017		
Unfamiliar / Famil- iar	Mean	0,28	-0,22	-0,56
	F.	8,167		
	Sig.	,000		
Untidy / Tidy	Mean	0,94	1,19	1,24
	F.	1,697		
	Sig.	,185		
Non affectionate / Affectionate	Mean	1,19	-0,31	-1,36
	F.	87,918		
	Sig.	,000		
Shy / Bold	Mean	0,48	-0,29	-0,15
	F.	10,789		
	Sig.	,000		
Unsatisfied with oneself / Satisfied with oneself	Mean	0,52	0,27	0,16
	F.	2,065		
	Sig.	,128		
Creative / Non creative	Mean	0,22	0,56	0,97
	F.	8,106		
	Sig.	,000		

Table 3: Mean value differences (brand perception; H2)

		Music I (Soft Shoe)	Music II (Worth to Remember)	Without Music
Soft	Mean	5,13	6,30	5,18
	F.	18,300		
	Sig.	,000		
Delicate	Mean	5,24	6,56	5,48
	F.	22,300		
	Sig.	,000		
Relaxing, Calm	Mean	5,35	6,81	6,04
	F.	19,227		
	Sig.	,000		
Mature	Mean	5,37	6,09	6,19
	F.	5,525		
	Sig.	,004		
Natural	Mean	6,13	6,79	6,51
	F.	4,195		
	Sig.	,016		
Healthy	Mean	6,24	6,86	6,63
	F.	3,713		
	Sig.	,025		
Energetic	Mean	5,37	4,10	4,29
	F.	15,702		
	Sig.	,000		
Exciting	Mean	4,71	3,53	3,47
	F.	15,910		
	Sig.	,000		
Refreshing	Mean	6,24	5,39	5,19
	F.	9,888		
	Sig.	,000		
Sporting, vigorous	Mean	5,21	4,03	4,03
	F.	14,307		
	Sig.	,000		
Youthful	Mean	5,06	3,95	3,97
	F.	12,925		
	Sig.	,000		
Festive	Mean	4,80	3,27	3,33
	F.	24,104		
	Sig.	,000		
Environmentally friendly	Mean	6,36	6,67	6,35
	F.	1,266		
	Sig.	,283		
Tasty	Mean	5,04	4,73	4,25
	F.	5,317		
	Sig.	,005		

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Discography

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An Investigation of Alternative Explanations for the Positive Effect of a Presenter's Attractiveness on Persuasion

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1 Purpose of the study

Physical attractiveness – which is primarily determined by a person's facial attractiveness and is automatically and rapidly evaluated “at a glance” (see Olson and Marschuetz, 2005) has a very powerful influence on the person's ability to persuade others, even when the person is not trying deliberately to persuade. For example, physically (facially) attractive students receive better grades in school, are more likely to be hired as a result of job interviews, tend to be paid more when they get the job, and are much more likely to win political elections than their less attractive peers (see Hamermesh and Biddle, 1994; Cialdini, 2009). When the person is deliberately trying to persuade, people are more likely to agree with the opinion expressed by an attractive person (see Chaiken, 1979; Horai, Naccari, and Fatoullah, 1974) and are more likely to buy products offered by an attractive as compared to a less attractive person (see Ahearne, Gruen, and Jarvis, 1999; Reingen and Kernan, 1993). Attractive presenters also have a persuasive advantage in advertising – and this advantage does not only show when they endorse beauty-enhancement products (see Patzer, 1985; Praxmarer, 2006; Till and Busler, 2000). The purpose of this study is to investigate alternative explanations for this positive effect of an advertising presenter's facial attractiveness on persuasion.

Patzer (1985) explains the positive effect of the presenter's facial attractiveness on persuasion with the positive effect of attractiveness on perceived expertise and trustworthiness (this effect is called “Patzer Effect” in the present paper). Expertise and trustworthiness are, of course, the two defining characteristics of source credibility and are therefore critical in regards to the presenter's persuasiveness (see McGuire, 1969 and also Rossiter and Percy's 1987, 1997 VisCAP model of presenter effects). Patzer (1985) uses attribution theory to explain how

attractiveness boosts perceived expertise and trustworthiness and by that implicitly assumes that the presenter's attractiveness prompts conscious cognitive-response inferences about their expertise and trustworthiness. Thus, according to Patzer, the positive effect of attractiveness on perceived expertise and trustworthiness is receiver aware. However, even though several studies have reported that attractiveness positively affects perceived credibility, individuals deny that the physical attractiveness of another person influences their evaluations (Cialdini, 2009, p. 146). This may point to the fact that the "Patzer Effect" is not receiver-aware, as Patzer suggests, but subconscious. Thus, powerful as the effect of attractiveness on perceived expertise and trustworthiness may be, it is not clear how it emerges. The present study was conducted to test whether the effect of facial attractiveness on perceived expertise and trustworthiness is conscious or subconscious.

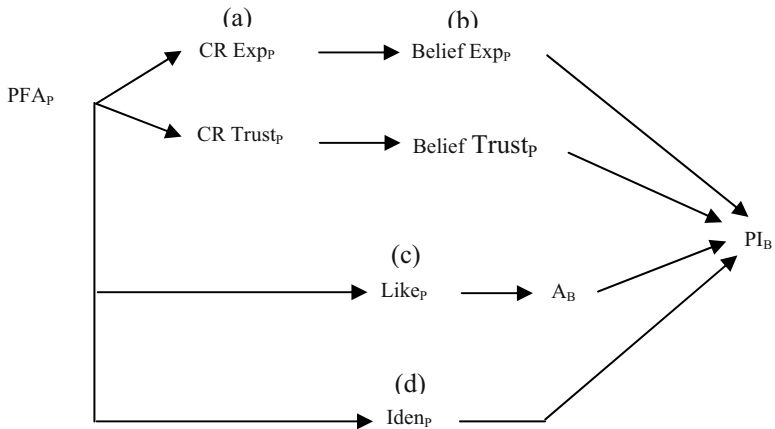
In addition to the Patzer Effect (either conscious or subconscious), the present study examines the effects of facial attractiveness on liking of the presenter and role-model identification, because likeability and ideal-self similarity also determine a presenter's persuasiveness (see the VisCAP model by Rossiter and Percy 1987, 1997). The VisCAP model identifies expertise, trustworthiness (objectivity), likeability, and ideal-self similarity as characteristics determining a presenter's persuasiveness. If facial attractiveness positively affects the perceptions of these relevant presenter characteristics, it positively affects persuasion. Thus, there are four main possibilities that may singly or jointly explain how facial attractiveness influences persuasion. The explanations tested in this study are: (a) a conscious effect of facial attractiveness on perceived expertise and trustworthiness, whereby the attractiveness of the presenter prompts conscious cognitive-response inferences about the presenter's expertise and trustworthiness; (b) a subconscious effect on perceived expertise and trustworthiness, whereby attractiveness persuades via beliefs about the presenter's expertise and trustworthiness but without conscious cognitive responses; (c) an "affect transfer effect" whereby attractiveness increases liking of the presenter which in turn transfers to a more favorable attitude toward the brand; and (d) a "role-model identification effect" whereby attractiveness increases ideal-self similarity.

2 Theoretical background

Figure 1 shows the four main possibilities that may singly or jointly explain the effects of a presenter's attractiveness on persuasion, and that are tested in this study.

(a) *Conscious Patzer Effect*

Patzer (1983, 1985) amassed plenty of evidence that highly attractive individuals are perceived by others – who don’t know them – to have many positive personality characteristics (for a recent meta-analytic review, see Langlois et al. 2000). Patzer theorized that physical attractiveness works through a conscious (i.e., receiver-aware) process of inference that the presenter is both expert and trustworthy and used attribution theory to explain these effects. Expertise and trustworthiness are the two defining characteristics of source credibility. It should be noted that Patzer wrongly included liking of the communicator as a component of source credibility. This is wrong because liking is a component of the other main presenter characteristic, which is attraction (see McGuire, 1969 and Rossiter and Percy, 1987, 1997).



- PFA_P: Physical (facial) attractiveness perception of the presenter
- CR Exp_P: Cognitive response indicating that the presenter is an expert (open-ended)
- CR Trust_P: Cognitive response indicating that the presenter is trustworthy (open-ended)
- Belief Exp_P: Belief that the presenter has *high* expertise
- Belief Trust_P: Belief that the presenter is *highly* trustworthy
- Like_P: Likability of the presenter
- Iden_P: Identification with the presenter as a role model
- AB: Attitude toward the brand
- PI_B: Brand purchase interest

Figure 1: Possible paths and steps (parenthesized) explaining the effect of the presenter’s physical attractiveness on persuasion.

If the effect of attractiveness on perceived expertise and trustworthiness is a conscious effect, then this process should be evidenced by significant mediating effects for conscious and spontaneous cognitive responses about the presenter's high expertise and high trustworthiness which, in turn and respectively, should flow through to subsequent belief ratings of high expertise and high trustworthiness of the presenter, via step (a) in Figure 1. The process, in summary, is physical attractiveness perception → cognitive responses about the presenter's expertise and trustworthiness → beliefs about the presenter's expertise and trustworthiness → brand purchase interest.

(b) Subconscious Patzer Effect

A fascinating aspect of the effect of physical attractiveness on persuasion is that receivers are apparently unaware that they have been susceptible to it and when it is pointed out to them, they vehemently deny that it could have happened. This was evidenced most dramatically in an early study of the federal election in Canada (reported in Cialdini, 2009, p. 146) where it was found that not only did facially attractive candidates receive more than two and a half times as many votes as facially unattractive candidates but, when questioned afterwards, none of the voters thought that the candidates' attractiveness had any influence on their vote and almost three-quarters of them strongly objected to the interviewer's implication that it could have influenced their vote. This raises the possibility that the effect of attractiveness on perceived expertise and trustworthiness could be "subconscious," that is, that it could occur without the receiver's awareness. However, it would still have to be an effect via perceived expertise and trustworthiness because voters would only rationally vote for a candidate if they thought the candidate was an expert in political matters and was honest (trustworthy). If the effect of attractiveness on perceived expertise and trustworthiness is subconscious, then there should be a direct effect of physical attractiveness on the expertise belief and the trust belief that is not mediated by conscious cognitive responses about the presenter's expertise and trust. This process would operate via step (b) in Figure 1, bypassing step (a). In summary, the path is physical attractiveness perception → beliefs about the presenter's expertise and trustworthiness → brand purchase interest.

(c) Affect Transfer Effect

The physical attractiveness of the presenter could alternatively operate noncognitively – through "affect transfer" or, more technically, "1-trial human evaluative conditioning" (see Rossiter and Bellman, 2005). Research on the physical attractiveness effect has shown that facially attractive people are automatically rated (by strangers) as more likable (see Horrai, Naccari and Fatoullah, 1974; Koernig

and Page, 2002) and also that high facial attractiveness “primes” fast positive evaluative reactions of “goodness” (see Olson and Marshuetz, 2005). Liking of the presenter could therefore transfer directly to a favorable evaluation of the brand, which should increase brand purchase interest. The path in this “affect transfer” process would therefore be physical attractiveness of the presenter → liking of the presenter → attitude toward the brand → brand purchase interest.

(d) Role-model identification effect

Liking, the previously discussed effect, is one of the two components of source or presenter attraction (again see McGuire, 1969 and Rossiter and Percy's VisCAP model). The other component of attraction is role-model identification (called just “similarity” by McGuire, 1969 and “ideal-self similarity” in the VisCAP model). In Rossiter and Percy's VisCAP theory of presenter characteristics, role-model identification is postulated as overriding and supplanting “mere” likability when the brand choice proposed by the presenter is “high risk,” or highly involving. The “role-model identification effect” therefore constitutes a separate path via step (d) (see Figure 1) which does not operate through brand attitude but rather represents a process something like “I'll buy whatever this positive role model uses” in order to appear to be more similar to the role model. This process can therefore be summarized as physical attractiveness perception → role-model identification → brand purchase interest.

There is a fifth possible (and very likely) process not shown in Figure 1 that would explain how physical attractiveness works and this is by increasing attention to the advertisement. An unpublished study by Huhmann, Franke, and Mothersbaugh (2009) found that the inclusion of a person or people in magazine ads increases the average attention (Starch noted) score from 49% without people to 53%, and that the inclusion of a celebrity in the ad, the vast majority of whom are highly facially attractive, boosted the average attention score to 69%. However, attention to the ad can only increase persuasion through its “multiplier” effect on one (or more) of the above processes and, in itself, it is not an explanation of how physical attractiveness works. Accordingly, in the present experiment, attention to the ad is therefore controlled by applying the usual “laboratory” situation of forced exposure.

The present study distinguishes the four most plausible explanations of why physically (facially) attractive presenters are persuasive. All four paths are tested simultaneously because it is possible that more than one path or process is statistically significant.

3 Method

3.1 Stimuli

The aim of this study is to test whether or not the effect of attractiveness on perceived expertise and trustworthiness is conscious or subconscious and how attractiveness affects the four relevant presenter characteristics. According to Patzer (1985) the effects of attractiveness can be tested with any presenter and all types of products (Patzer 1985). Hence it should work even for a highly “transformational” (social approval or prestige) product and it should work when the presenter is a famous celebrity who is more likely to be identified with as a positive role model than to necessarily be perceived as highly credible.

A study with print ads was conducted to test the alternative explanations. The explanations are tested by using celebrity presenter ads for a luxury product – men’s and women’s expensive wristwatches. Existing “real-world” advertisements for wristwatches showing highly (facially) attractive celebrity presenters are used. The celebrities are Brad Pitt and Uma Thurman, both for TagHeuer (Figure 2 shows the advertisements).



Figure 2: Ads used in the main study and probe study

In this paper the effects of perceived (measured) presenter attractiveness are studied (see PFAP in Figure 1). Previous studies show strong individual differences in attractiveness judgments and demonstrate that interjudge agreement is usually moderate to low (Hönekopp, 2006; Little and Perrett, 2002; Thornhill and Gangestad, 1999). Therefore, an attractiveness manipulation is not essential for the estimation of the proposed effects since this perception is measured per individual.

3.2 *Main study: sample, procedure, and measures*

One hundred and twelve students participated in the main study (44% female). Subjects were only confronted with a same-sex ad, because role model identification is likely to occur for same sex presenters only (male consumers, for instance, do usually not want to appear similar to a female presenter). Participants were asked to look at the ad as they would normally do and then to fill in the questionnaire.

To establish whether or not advertising receivers make conscious inferences from a presenter's attractiveness to their expertise and trustworthiness the questionnaire measured cognitive responses first. Participants were asked to write down the thoughts that they had while looking at and reading the ad (CR ExpP and CR TrustP in Figure 1). All remaining variables of interest (see Figure 1) are concrete and clear to the raters. Therefore, single-item measurers were used (Bergkvist and Rossiter, 2007). In order to avoid common method bias, the measures were very different from each other. Facial attractiveness of the presenter is measured with a bipolar seven-point rating scale ("very unattractive," "quite unattractive," "slightly unattractive," "neutral," "slightly attractive," "quite attractive," "very attractive"). The presenter's perceived expertise is measured on a four-point unipolar scale ("none", "limited/or just average", "better than average", "true expert"). Perceived trustworthiness is measured on a three-point unipolar scale ("I would never trust this person", "It depends – I might trust this person if the product they are advertising is inexpensive, but not trust this person if the product is expensive", "I would trust this person whatever the product is"). Likeability of the presenter is measured on a bipolar eleven-point scale ("very dislikeable" to "very likable"). Identification with the presenter as a role model is measured on a bipolar eleven-point scale with the end labels "not at all" and "yes, definitely". The item is "Do you think most students of the same sex as the person in the advertisement would see this person as someone they'd like to be like (in looks and dress)?" Perceived quality of the brand (represents ABrand in this study) is measured on a bipolar eleven-point scale

(0-10) with the end labels “very poor quality” and “absolute top quality”. Finally, brand purchase interest is measured on an unipolar four-point scale (“Based on what you can see of the product in the ad, how much interest do you have in owning this particular brand and model of wristwatch? Assume you could afford it or someone would buy it for you as a special gift”; “not interested,” “somewhat interested,” “moderately interested,” “definitely interested”).

3.3 Probe study: Sample and Procedure

In addition to the main study, eighteen students filled in a probe questionnaire after looking at one of the two ads. To further establish whether the Patzer Effect is a conscious or a subconscious process, participants were subjected to “contingency awareness” probing. As in the main study participants were asked to write down the thoughts that they had while looking at and reading the ad. Furthermore, participants were asked what thoughts came to mind about the presenter and why they think the advertiser selected this particular presenter.

4 Results

Table 1 shows the mean values and standard deviations for all variables measured in the main study. The scales that were used to measure the constructs are provided in section 3.2. Even though only one male and one female presenter were used in this study, perceived presenter attractiveness varies sufficiently. As expected, participants rated the quality of the existing luxury product (AB) as high (7.53). However, brand purchase interest for the watches was moderate, most respondents expressed that they are only “somewhat interested”.

Table 1: Mean values and standard deviations (main study)

	PI _B	A _B	PFA _p	Belief Exp _p	Belief Trust _p	Like _p	Iden _p
Mean	2.13	7.53	1.60	2.54	1.81	2.30	6.68
Std. Dev.	.98	1.82	1.15	.83	.74	2.00	1.92

4.1 *Conscious or subconscious Patzer Effect*

To provide evidence for a conscious "Patzer Effect", respondents should have expressed spontaneous cognitive responses about the attractive presenter's high expertise and trustworthiness. Even though many participants rated the two presenters as highly attractive in the main study, neither in the probe study nor in the main study did any of the respondents explicitly mention the presenter's high expertise or trustworthiness. The probe study additionally asked respondents what they think about the presenter and why they think the advertiser selected this specific presenter, but respondents did neither come up with presenter expertise nor trustworthiness. Thus, the cognitive responses observed in this study do not provide evidence for a conscious Patzer Effect.

Very few respondents of the main and the probe study expressed thoughts that may implicitly be related to high presenter expertise or trustworthiness. Examples of positive implicit mentions are "he can probably afford many luxury watches" and "Uma Thurman is wearing the watch – probably the watch has high quality". Some respondents concluded that the watch must be "expensive and high quality" because the celebrity was endorsing the watch.

Respondents of the main study, who rated the presenter's facial attractiveness as high, evaluated the presenter's expertise and trustworthiness more favourably than respondents who did not find the presenter attractive. Thus, facial attractiveness has a positive effect on perceived presenter expertise and trustworthiness. The beta coefficients of the two linear regression models (perceived attractiveness → perceived expertise; perceived attractiveness → perceived trustworthiness) are .314 ($p < 1\%$) for the dependent variable expertise and .238 ($p < 1\%$) for the dependent variable trustworthiness (p one-tailed). The correlations of all variables measured in the main study are shown in Table 2.

Overall the results of the main study and the probe study suggest that individuals ascribe higher expertise and trustworthiness to other individuals if they find them physically attractive, but they do not seem to do this willingly and may not realize that they do so. Thus, the positive effect of facial attractiveness on perceived expertise and trustworthiness may not be conscious as Patzer (1985) suggests but subconscious. The findings of this study are in line with previous findings that showed that people deny the influence of another person's physical attractiveness on their judgements (Cialdini, 2009, p. 146).

Table 2: Correlations of the variables (main study)

	PI _B	PFA _p	Belief Exp _p	Belief Trust _p	Like _p	Iden _p
PFA _p	.293**					
Belief Exp _p	.162	.314**				
Belief Trust _p	.293**	.238*	.356**			
Like _p	.261**	.535**	.364**	.349**		
Iden _p	.170	.552**	.234*	.235*	.403**	
A _B	.368**	.387**	.122	.181	.256**	.144

Notes: ** $p < .01$, * $p < .05$

4.2 *The effects of facial attractiveness on perceived expertise, trustworthiness, likeability, and role-model identification*

In addition to the question whether or not the Patzer Effect is conscious, this study tests whether facial attractiveness increases likeability and role-model identification and tests the model shown in Figure 1. Because conscious inferences about the presenter's expertise and trustworthiness were absent (see 4.1), we estimated the model (Figure 1) without CR ExpP and CR TrustP using partial least square. Table 3 shows the path coefficients (standardized). R² of the overall model is .20.

As discussed above, the effects of a presenter's attractiveness on perceived expertise and trustworthiness are significant. Furthermore, perceived attractiveness boosts perceived likeability of the presenter and role-model identification. Thus, a presenter's facial attractiveness has a positive effect on the four presenter characteristics, which mainly determine the presenter's persuasiveness.

Table 3: Results of the main study (path coefficients)

	Coefficients
PFA_p → Belief Exp_p	.31**
PFA_p → Belief Trust_p	.24**
PFA_p → Like_p	.54**
PFA_p → Iden_p	.55**
Belief Exp _p → PI _B	.03
Belief Trust _p → PI _B	.21*
Like _p → A _B	.26**
A _B → PI _B	.32**
Iden _p → PI _B	.07

Notes: ** $p < .01$, * $p < .05$

The relevant findings of this study are the positive effects of facial attractiveness on perceived expertise and trustworthiness (both without conscious inferences), likeability, and role-model identification. Attractiveness is able to increase persuasion, because it positively affects each presenter characteristic that may be relevant for persuasion.

Whether or not a certain presenter characteristic affects persuasion in a specific situation depends on the product advertised (see the VisCAP model by Rossiter and Percy 1987, 1997). However, at least one of the four presenter characteristics, which attractiveness influences, always determines persuasion (Rossiter and Percy 1997).

4.3 *The effects of perceived expertise, trustworthiness, likeability, and role-model identification on persuasion*

For an evaluation of the overall quality of the model ($R^2=.20$), it is important to note that the dependent variable was respondents' interest in "owning this particular brand and model of wristwatch" (see section 3.2.). This dependent variable provides a very strict test, because it is not sufficient if respondents find the brand attractive because of the presenter, they also have to find the particular

model of wristwatch pleasant. (Our open responses showed that quite a few subjects criticized the size or form of the watch).

In this study, trustworthiness and likeability of the presenter (the latter via attitude toward the brand) positively affect brand purchase interest, while expertise and role-model identification do not (see Table 3). The VisCAP model (Rossiter and Percy 1997) explains how the effects of the four presenter characteristics on persuasion depend on product type and our results seem to be against the VisCAP model. If the luxury wristwatches endorsed in the ads were perceived as transformational high-involvement products, role-model identification should have been the major presenter characteristic influencing persuasion, but this was not the case. However, there are several possible explanations for the absence of an effect of role model identification on persuasion. Our measure may have weakened the effect, because this study asked respondents if they think that the presenter is a role model for other students of the same sex. Therefore, subjects' responses may not express whether or not they personally would like to be like the presenter, which may be relevant for the motivation to buy the product the admired person wears. It is also possible that among our student subjects luxury watches were not perceived as transformational high-involvement products. Involvement is the perceived functional or emotional risk of choosing a brand (Rossiter and Bellman, 2005 p. 114) and depends on the target group involved (or sample). For parts of the students watches may not be high-involvement products, because the type of watches students think of may not involve great (emotional or functional) risk. This may explain why liking influenced persuasion but role-model identification did not. Furthermore, parts of the students may have perceived the watch as informational product – as a necessity and not so much as social approval (transformational) accessory. However, if the watches were perceived as informational products, presenter expertise should have influenced persuasion, which it did not. This finding is not only against the VisCAP model (if the product was perceived as informational) but also against Rossiter and Bellman's (2005) celebrity presenter model. It is possible that purchase interest for the well known luxury brand was not related to presenter expertise, because the luxury product was perceived to be of high quality anyway and respondents did not use the presenter's expertise as a cue for the brand's quality.

5 Discussion

Several studies have reported positive effects of a presenter's attractiveness on persuasion. This study contributes to a better understanding of how the presenter's facial attractiveness persuades. Our results suggest that a presenter's attrac-

tiveness increases perceived presenter expertise and trustworthiness in a subconscious way—with no conscious inferences. Furthermore, our findings show that perceived attractiveness boosts likeability of the presenter and role-model identification. Thus, facial attractiveness positively affects each of the four presenter characteristics that may be relevant for persuasion. Because at least one of the four presenter characteristics is always critical in regards to persuasion (see the VisCAP model by Rossiter and Percy 1997), attractiveness should generally increase a presenter's persuasiveness.

This study produced some interesting additional findings. The presenter's likeability and trustworthiness positively influenced purchase interest, but expertise and role-model identification did not. This finding may be against the VisCAP model. However, since we did not measure involvement and individuals' buying motives (informational or transformational) in our sample, we cannot test the VisCAP model (see section 4.3 of this paper).

The celebrity presenter's trustworthiness influenced persuasion which is contrary to Rossiter and Bellman's (2005) celebrity presenter model. Rossiter and Bellman (2005, p. 178) argue that celebrity presenters are usually only perceived as moderately trustworthy, i.e. there is not much variance in celebrities' perceived trustworthiness. This study did not consider trustworthiness ratings across different celebrities (which may not differ) but trustworthiness ratings across different respondents. Because different receivers evaluated the celebrities differently in regards to their trustworthiness, there was variance and a positive effect of trustworthiness on persuasion showed.

6 Future research

In this study respondents did not express spontaneous cognitive responses about the attractive presenter's high expertise and trustworthiness. This suggests that the Patzer Effect is a subconscious process. However, it is possible that receivers make conscious cognitive responses about the presenter's high expertise or trustworthiness for beauty-enhancing or beauty-repairing products. For these products may the presenter's attractiveness function as "receiver-aware" information about their expertise and trustworthiness. For a stricter test of whether or not the Patzer Effect is conscious, future studies should use beauty-enhancing and beauty-repairing products.

We could not test the VisCAP model, because we did not measure respondents' involvement and buying motives. Rossiter and Bellman (2005, p. 152) argue that the classification of products depends on the target group. Future studies should measure the characteristics needed to classify the products according

to the VisCAP model (and the Rossiter-Percy-Bellman Grid), because only then can the full model shown in Figure 1 be tested in a meaningful way. Future studies should test the model (Figure 1) with the different product categories described in the VisCAP model. A test with different products should show that attractiveness influences persuasion for all product categories (because it affects the four central presenter characteristics) – but via different paths.

This study showed that if an individual finds the celebrity more attractive they also find them more likable. Because we used celebrity presenters, whom respondents knew before they saw the ad with the attractive face, we did not control for the order of respondents' perceptions. Thus, based on our study, we can, in the strict sense, not speak of effects but only about relationships (correlations). Theory suggests that respondents evaluated the celebrity as more likeable, because they found them attractive, but it is also possible that people evaluated the celebrity as more physically attractive, because they liked them more. Future studies should test our model with unknown (non-celebrity) presenters.

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Part III

Advertising and Computer Games

Game Outcome and In-Game Advertising Effects

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1 Introduction

Although the computer game industry celebrated its 50th birthday in 2008 with its first game “*Tennis for Two*”, it shows no signs of aging. While the film industry is facing a considerable decline, the computer game sector is booming with a turnover of 2.29 bn. euros in Germany in 2007 and an increase of 29% compared to the previous year (BIU 2008). The American computer game industry even recorded an increase in turnover of 43% last year. As the German market is still very much in its infancy compared to England, it seems likely that sales will rocket here, too (PricewaterhouseCoopers 2006).

It therefore comes as no surprise that marketing has also discovered computer and video games. More and more companies are advertising their brands, products and sales messages in computer games. In these times where television is losing its dominant position as the primary medium used by young adults, computer games seem to provide the ideal platform for reaching the target-group. Consequently, as far as the analysts, games manufacturers and marketers are concerned, advertising and product placements in computer games have not yet reached their peak by a long shot and are set to become increasingly important in years to come.

Academic research is also increasingly turning its attention to this marketing communication practice (cf., Daugherty 2004; Glass 2007; Hang and Auty 2007; Schneider and Cornwell 2005). Based on the emerging body of research in this field, our study expands on what is already known in two aspects: firstly, several studies have been published in recent years on the acceptance of advertising in computer games (in-game advertising) and their impact on the (implicit and explicit) recollection of brands (Hernandez et al. 2004; Nelson, Keum, and Yaros 2004; Schneider and Cornwell 2005). Despite this, however, very little is known about how consumers process brands in computer games and the impact

that in-game advertising can have on the attitude towards the brand advertised (Daugherty 2004; Nelson et al. 2004; Nelson, Yaros, and Keum 2006; Yang et al. 2006). These findings are not only relevant in practice but could also broaden our understanding of how in-game advertising works. Consequently, this study examines the impact of in-game advertising on the attitude towards the advertised brand and the attitude towards the computer game with brand recall as the central impact factor.

Secondly, the influence of game outcome on the impact of in-game advertising has largely been ignored up to now. However, many computer games are based on the principle of competition, meaning that the outcome of the game, i.e. the prospect of victory and the threat of defeat, constitutes a key element in the games. Furthermore, Drengner (2008) demonstrated that, in sport sponsorship, a victory has a positive impact on the players' and spectators' mood but that a defeat puts them in a more negative state of mind. The effect of game outcome on the impact of in-game advertising is therefore obvious. Consequently, we varied the game outcome experimentally in this study to examine its influence on the attitudinal effects of advertising in computer games.

2 Hypotheses development

2.1 The influence of game outcome on the player's mood

If the influence of game outcome on the players is thematized, it is mostly its impact on the players' mood. We proceed from the assumption that winners are likely to feel better than losers (Ward, Hill, and Gardner 1988).

This supposition was confirmed in Holbrook et al.'s study (1984), which examined the possible affective consequences of playing a (non-computer) game. Here, students played verbal or visual versions of a game where the aim was to reach a "space vessel" in a safe "land". The players were not given tangible rewards or penalties for success or failure, but rather received performance feedback during the game. Nevertheless, the successful players (winners) experienced more "pleasure" than those who performed worse (Holbrook et al. 1984).

Hill and Ward's study (1989) also revealed that the outcome of a game can influence the players' mood. In this study, the players were randomly assigned to either luck, skill, or control conditions. The test people in the luck conditions were informed that winning or losing would depend on chance; in the skill condition, the players were told that success or failure would depend on ability. However, all the test people from these two groups were told that they had performed the task better than usual, regardless of their actual score. The test people

in the control conditions played the game but were not given any particular information or feedback. In the results, the test people with positive feedback exhibited significantly more positive mood scores than the control subjects, regardless of whether the win was attributed to luck or skill. The luck vs. skill condition did not appear to have any significant influence on the mood reported.

The results were subsequently replicated several times, e.g. for lottery tickets (Ward et al. 1988) or sports sponsoring (Drengner 2008): The results of the studies support the assumption that a negative game outcome has a negative impact on the consumers' moods, whereas winning has a positive effect on mood. While a contextual study still remains to be done, we can assume that the known pattern will also appear here. This leads us to the following hypothesis:

H1: If players finish a game as a winner (vs. loser), their mood improves (deteriorates) compared to before the game.

2.2 The influence of game outcome on the attitude toward the advertised brand

Besides generating brand awareness, improving the brand attitude is frequently the aim of brand placement in computer games (Nelson 2005). Indeed, the results of some studies also indicate that brands are perceived more positively through their placement in computer games. For example, Glass (2007) recorded implicit brand attitudes by way of an implicit association test directly after playing a computer game that contained advertising. As a result, the participants evaluated the brands advertised in the game more positively than the brands not advertised in the game. Other studies produced similar results (cf., Mau, Silberer, and Constien 2008; Nelson et al. 2006).

Precisely what influence game outcome has on the attitude toward the advertised brand has barely been investigated to date, however. Nevertheless, the assumptions of the dual process models, such as the elaboration likelihood model (according to which the mood experienced during the game influences the formation of attitude toward the advertised brand as a peripheral cue, Petty and Cacioppo 1981) or the dual mediation model (according to which the affective appraisal of the computer game influences the attitude toward the brand advertised, MacKenzie, Lutz, and Belch 1986) for instance, suggest that a negative game outcome (losing) goes hand in hand with a negative appraisal of the advertised brand. By the same token, winning results in a positive attitude toward the advertised brand (Ward et al. 1988). From this follows our assumption that winners perceive the advertised brand more positively than losers.

H2: If players win the game (vs. lose), their attitude toward the advertised brand improves (deteriorates) compared to before the game.

2.3 The influence of game outcome on the attitude toward the computer game

Ward et al. (1988) refer to the results of various studies that have used success/failure at a task as mood manipulations (Isen and Shalcker 1982; Isen et al. 1978). According to this, test people who complete a task successfully experience a more positive mood and assess stimuli more favorably than the control subjects. Playing a computer game can also be regarded as a task, the successful accomplishment of which is associated with positive feelings (cf. H1). Ward et al. (1988) conclude from this that “winners are likely to feel better than losers, and have a better attitude toward the ...the game itself, the odds of winning the game...” As a result, we expect that:

H3: If players win a game, they have a better attitude toward the game than players who lose it

3 Method

The study was arranged in a between-subject design with the factor game outcome (winning vs. losing vs. control group). The motor racing game “Racing Simulation 2” was chosen for this study because none of the test people knew it, meaning that previous learning effects did not play a significant role. Moreover, advertising is common in this kind of game in the form of advertising boards. This should minimize artifacts due to the acceptance of in-game advertising (Hernandez et al. 2004; Nelson 2002). The game setting was varied in such a way as to exclusively place advertising boards for the brands Red Bull and Jägermeister along the course in equal proportions.

The game outcome factor was operationalized in three categories during the game, namely through positive, negative or no feedback: In the winner conditions, the test people were told beforehand that the fastest time in which someone of the same age, educational background and computer game experience had completed the course was 4:55 minutes. This value was considerably higher than the actual average time of 3:38 minutes ascertained in a preliminary study with other test people. The actual time needed was clearly displayed at the top of the screen the whole time. In addition, the test people were given positive feedback on their performance at two fixed points during the game. After completing a

third of the course, the player was told, “wow, you’re doing really well!” and after two thirds, “I didn’t expect you to be so fast. After all, this is a tough course!” In the losing conditions category, the fastest time was given as 1:55 minutes beforehand. There was also feedback at the same points but it went “hey, you have to be faster than that or you’ll lose!” (first third) and “you’re way behind on the clock!” (second third). Under control conditions, the test people were not given any feedback or a time to beat.

The test people came from a university campus under the pretense that they people were needed for a special computer game for a national benchmark test on hand-eye coordination. In all, $N = 63$ people took part by this means and were divided into the various test conditions (winners $n = 22$, losers $n = 22$, control group $n = 19$), $n = 30$ male. They were each given a packet of sweets for their trouble.

First of all, the participants answered some preliminary questions on their mood as well as their familiarity with and attitude toward the brands Red Bull, Volvic and Jägermeister. Volvic was included in the questionnaire to test memory effects over the course of the study through the pre-interview for the two brands actually advertised in the game. The test people then played the game “*Racing Simulation 2*” on the course setting “*Germany*”. The test ended with a post-interview. Here, the players’ recollections of the brands placed, attitudes toward the brands and the game, and their intentions to buy were recorded. All attitudinal measures were based on Batra and Ahtola (1990). The participants’ mood was determined using the two parallel version of the MDBF directly before and after playing the game (Steyer et al. 1997).

4 Results

4.1 Players’ mood

In Hypothesis 1, we assumed that the mood of the players who finish the game positively improves and that players with a negative game outcome are in a worse mood after playing the game than beforehand. In order to test this hypothesis, a repeated measurement ANOVA was conducted with the players’ mood as a within-subject factor and the three conditions winning, losing and control as a between-subject factor (see figure 1). As expected in the hypothesis, the analysis revealed a highly significant interaction effect for mood x game outcome ($F(2, 42) = 18.03, p < .001, \eta^2 = .462$): The mood of the winners really improved significantly after playing the game, whereas the losers felt worse afterwards. In the conditions without any feedback, the mood did not change signifi-

cantly (within-subject test: Winner $T(16) = 2.39$, $p = .029$, Cohen's $d = 1.20$; loser $T(13) = 4.84$, $p < .001$, $d = 2.69$, control group $T(13) < 1$). The results therefore support the assumptions made in Hypothesis 1.

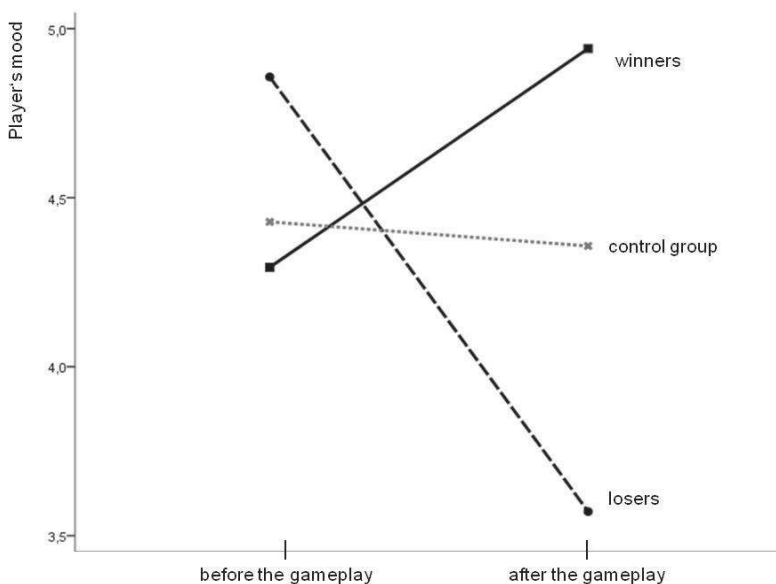


Figure 1: Change in the player's mood subject to the outcome of the game

4.2 Attitude toward the advertised brand

With regard to the attitude towards the advertised brand, in hypothesis 2 we surmised that winners rate the advertised brands more positively than losers. A repeated measurement ANOVA with the attitude towards the brand as a within-subject factor and the three conditions winner, loser and control as a between-subject factor (see figure 2a, b, c) was conducted for each of the three brands considered. For the two advertised brands, the results show the suspected interaction effect attitude toward the brand x game outcome (Jägermeister $F(2, 41) = 7.14$, $p = .002$, $\eta^2 = .258$; Red Bull $F(2, 41) = 7.48$, $p = .002$, $\eta^2 = .267$): In the case of players with a positive game outcome, the attitude toward the advertised brand improved after playing the game whereas players with a negative game outcome rated the brand worse afterwards. In the control group, no significant

change in the attitude toward the game could be detected (within-subject test: Jägermeister winner $T(15) = 2.71, p = .016$, Cohen's $d = 1.40$; loser $T(13) = 2.19, p = .047, d = 1.21$, control group $T(13) < 1$; Red Bull winner $T(15) = 3.61, p = .003$, Cohen's $d = 1.86$; loser $T(13) = 2.45, p = .029, d = 1.36$, control group $T(13) < 1$). The attitude toward the brand not advertised, Volvic, did not change significantly subject to the outcome of the game ($F(2, 41) < 1, p = .431$). These results support Hypothesis 2.

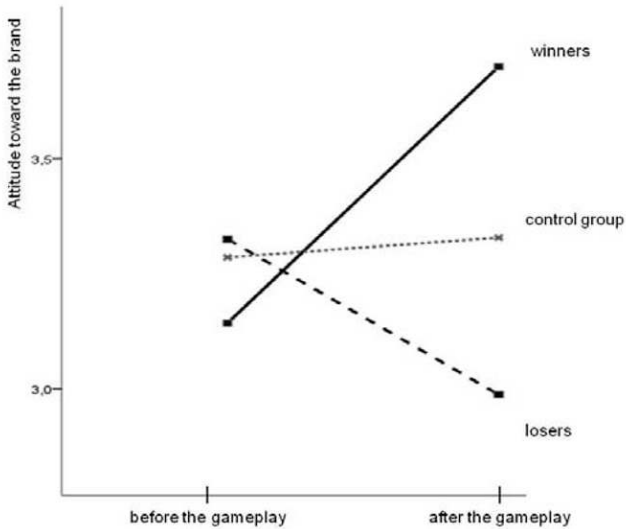


Figure 2a: Changes in the attitude toward the placed brand for Jägermeister

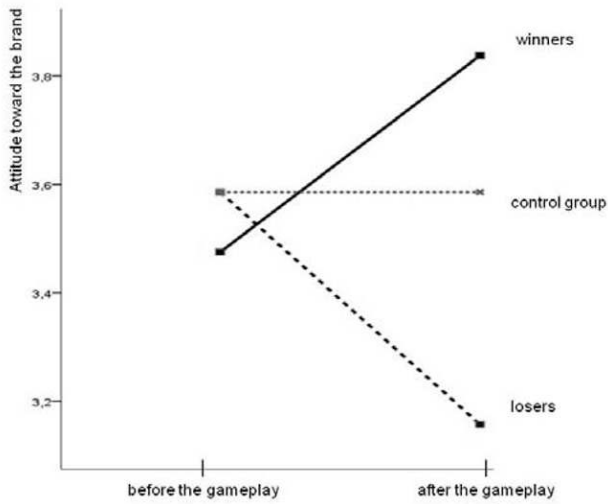


Figure 2b: Changes in the attitude toward the placed brand for Red Bull

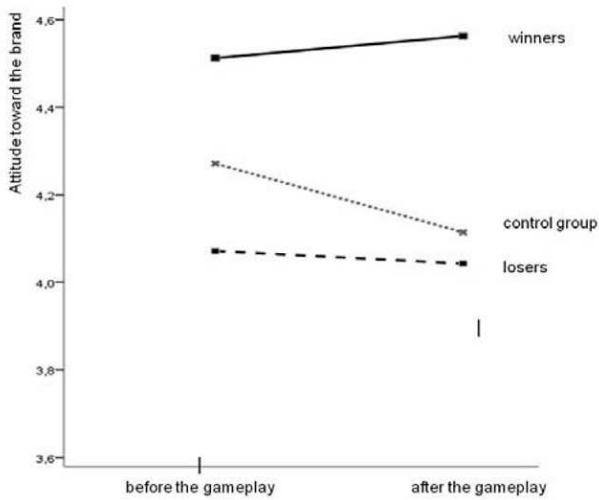


Figure 2c: Changes in the attitude toward the non-placed brand for Volvic

4.3 Attitude toward the computer game

In hypothesis 3, we surmised that winners rate the game as better than before whilst losers rate it as worse. An ANOVA was conducted, with the attitude towards the game after playing as a within-subject factor and the three conditions winner, loser and control as a between-subject factor. The winners really rated the game as better than the losers and the control group ($F(2, 41) = 3.91, p = .028, \eta^2 = .160$; significant group differences according to Bonferroni-Post hoc Test between winner ($M = 3.03, SD = 0.96$) and loser ($M = 2.21, SD = 0.77$)). These results support Hypothesis 3.

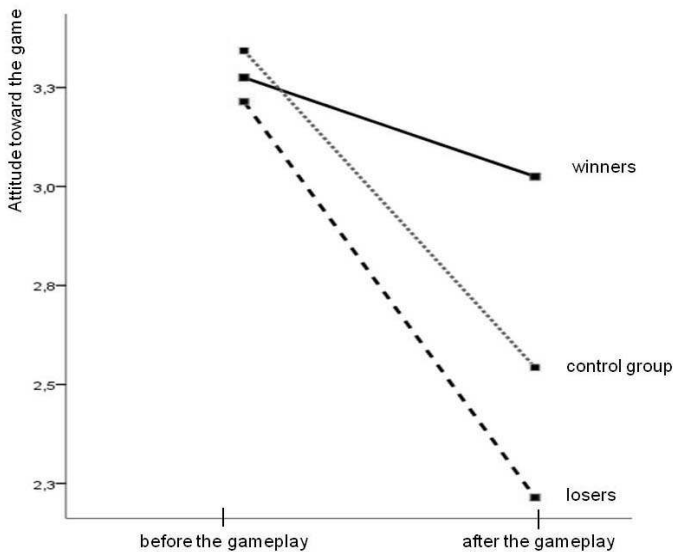


Figure 3: Changes in the attitude toward the game in the three conditions of the game outcome

5 Discussion and implications

The results of this study illustrate that the outcome of the game can have a significant impact on the players' mood, and their attitude toward the advertised brand and the game itself.

Players with a negative game outcome are not only in a worse mood afterwards and rate the game as worse; they also rate the advertised brand more negatively than before the game. The winners display the opposite effects: They are in a better mood, rate the game as better and assess the advertised brands more positively than before the game. The fact that the effect of the game outcome on the appreciation of the brands is not merely an unspecific influence of the more negative mood on brand appreciation is clear from the result that only the advertised brands are actually rated as worse but not a brand that is not advertised (in this case, Volvic). The large effect strengths of these effects, which yielded statistically significant results despite the small number of samples, are especially striking.

Companies that advertise their brands in computer games often hope for an image transfer between the game setting and the brand. The results of this study support this assumption in that they illustrate that players really transfer their positive and negative experiences during and after the game to the advertised brand.

However, it would be too easy to conclude from this that it is only worth advertising in games that are so easy that every player can win them. The results of the flow theory, according to which the enjoyment of the game is greatest when the demands of the game and the players' ability are equal (Csikszentmihalyi and Rathunde 1993), suggest rather that games that adjust their playing ability to suit the ability of the players are more interesting for brand advertising (Zentes and Schramm-Klein 2004).

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Entertainment in Advergames and its Influence on Brand-Related Outcomes for Children

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1 Abstract

Advergaming is seen as a valuable communication strategy which specifically targets children. Producers of advergames emphasize that the positive gaming experience transfers positive emotions to the brand. However, recent studies indicate that children, even at a young age, recognize the fact that advergames are “camouflaged” brand messages. This paper addresses the role of entertainment in the gaming experience and its impact both on reusing and recommending the advergame as well as on children’s attitudes towards the brand and on their behavioral intentions. Thus in this paper we deal with children’s perception of the gaming experience and its influence on brand attitude and behavior. Children aged 9 to 12 are the subject of this study as this age group is the main target group for many advergames.

2 Introduction

In our age of information overload and advertising clutter, advertisers are always developing new forms of media and advertising. Hence, new forms of below-the-line communication are becoming more common. In particular, new convergent forms of communication which combine the brand message with entertainment are nowadays very popular with businesses and advertisers (Hudson & Hudson, 2006). The underlying rationale is based on media richness theory (Daft & Lengel, 1984), according to which media enriched with entertainment is more effective and delivers additional value to the user. Advergames are a major new form of this “branded entertainment” (Kretchmer, 2004).

Advergames can be defined as “*an immersive mix of advertising and entertainment that takes the form of video games*” (Obringer, 2007). The advertising

industry promises many advantages from advergames such as higher traffic on the website (Obringer, 2007), better recall of the brand, and better word-of-mouth promotion as such games can even achieve cult status (Stuke, 2001), all of which tends to result in a positive transfer of the gaming experience to the advertised brand (Chen & Ringel, 2001; Kretchmer, 2004). Most advergames target children as kids are familiar with new media, actively seek entertainment, and spend a lot of time in multimedia environments (Moore & Rideout, 2007). However, the effects of advergames on children and on their attitude and behavior towards the advertised brand are still largely neglected though important research issues. Most of the studies of advertising in computer games concentrate on one or other of the following questions: brand recall as the result of product placement in popular computer and video games (Moonhee, Roskos-Ewoldsen, Dinu, & Arpan, 2006; Nelson, 2002); the role of the placement of the brand in the game (Lee & Lee, 2007; Schneider & Cornwell, 2005); attitudes towards the game and the brand respectively (Mallinckrodt & Mizerski, 2007; Mau, Silberer, & Constien, 2008; Nelson, Keum, & Yaros, 2004; Sharma, Mizerski, & Lee, 2007); the behaviors initiated by playing advergames (Guru, 2008; Hang & Auty, 2008); the role of enjoyment of the game in attitudes towards the promoted brand (Bambauer-Sachse, 2007; Wise, Bolls, Kim, Venkataraman, & Meyer, 2008); the content and the delivered messages within brands; and the impact on children's health issues (Moore, 2007; Moore & Rideout, 2007).

However, a number of questions still remain unanswered. In particular, practitioners argue that advergames are perceived positively by children and that the positive entertainment value is transferred to the brand, but there is no empirical evidence for these claims. In addition, we have only very limited knowledge about how recognizing the promotional character of the advergame affects the gaming experience and subsequently the brand attitude and future behavior towards the game and towards the brand. Thus in this paper we have chosen to deal with children's perception of the gaming experience and its outcome on brand attitude and behavior. Children aged 9 to 12 are the subjects of this study as this age group is the target group for many advergames.

3 Advergaming: a new form of advertising?

The terms advergame and advergaming are frequently used in in academic and practitioner publications. Nevertheless there is no consensus on what exactly these terms mean (Svahn, 2005). Some – the earliest - authors used the term “advergame” in a broad sense for all forms of advertising or product and brand placement in video and computer games and even in virtual worlds such as

Second Life etc. (e.g. Barnes & Mattsson, 2008; Bruckner, Fang, & Qiao, 2001; Chen & Ringel, 2001; Nelson, et al., 2004; Winkler & Buckner, 2006). However, recent studies show that it is important to differentiate between various forms of advertising and product placement in computer games (Svahn, 2005). In this paper, we distinguish between advergaming and in-game advertising.

In-game advertising is the inclusion of a product or brand within a computer or video game. The main aim of such games is to deliver entertainment or fun. Video and computer games currently available on the market - especially sports games - sell slots to advertisers in the same way that product placement is handled in movies. In addition to the advantages of such product placement in general, such as lower reactance against the message, the close connection between storyline and brand, and the endorsement of the brand image through association with a celebrity (Brennan & Babin, 2004; d'Astous & Chartier, 2000; Gupta & Balasubramanian, 2000), in-game advertising is considered more effective than traditional product placement in movies or TV series due to higher interactivity with the brand, the extremely large number of users, the identification with positive figures like sports stars while playing the game, and the increased sense of realism in the game through the advertisements which have been placed in the game (Moonhee, et al., 2006). However, such games also work well without brands or using fictitious brands.

Advergaming also combine two key elements: the brand and entertainment. However, the main aims of advergaming are to deliver a powerful message for the advertised brand and also to achieve a higher traffic on brand websites. A second major difference to in-game advertising is that individual advergaming are usually sponsored by only one brand or company (Grossman, 2005). Thirdly, advergaming are usually free of charge and downloadable from the company's website (Bruckner, et al., 2001; Moore, 2006). Fourthly, advergaming are commonly designated to be "casual games". Kuittinen et al. (2007, p. 106) characterize a "casual game" as "*... easy to learn, simple to play and offers quick rewards with forgiving gameplay, which all turns into a fun experience.*" Hence, we understand advergaming as branded casual games which can be downloaded for free from a company's website or via a high traffic website. Advergaming are more closely related to advertising than to product placement and many of the advergaming target children. For this reason, it is necessary to know how children perceive advergaming and which reactions are evoked by such games.

4 The nature of advergames and their impact on entertainment

Current studies (Mallinckrodt & Mizerski, 2007) indicate that children evaluate the brand more negatively if they know that an advergame is some form of advertisement. To understand how this unfavorable attitude transfer works, it is necessary to understand the relationship between the gaming experience and the recognition of the promotional character of the advergame. Many studies, especially in the area of television advertising, focus on the ability of children to recognize the commercial and persuasive character of advertisements. One general finding of these studies is that the ability to recognize the promotional nature of advertising is closely related to children's age. The older children become, the more they are likely to discriminate between commercial and non-commercial content (Kunkel, 2001; Robertson & Rossiter, 1974). With increasing age school kids become better educated and more critical. Thus, the ability to recognize the commercial character of an advergame varies with the child's age and educational level. In order to explore these relationships, we have developed the following hypotheses:

H1: The ability to identify the promotional character of an advergame is positively related to the educational level of the children.

Attitude towards advertising in general is a widely researched topic. Many studies have found a positive relationship between attitudes towards advertising and product placement and the evaluation of advertising (e.g. Gaski & Etzel, 1986; Gould, Gupta, & Grabner-Kraeuter, 2000; Gupta & Balasubramanian, 2000; Gupta & Gould, 1997). In the context of product placement in computer games, Nelson et al. (2004) found that a negative attitude towards product placement in general also leads to a negative attitude towards product placement in computer games.

In addition, the identification of the commercial character of the advergame could also harm the gaming experience. According to media experience or media entertainment theories, entertainment can be characterized as a pleasant experiential state, which includes affective and cognitive as well as behavioral components. When people play advergames, it can be expected that they are primarily seeking entertainment. If they are explicitly aware of the promotional character of the game, they may feel less entertained by the game. The rationale is that they expect entertainment and fun while playing the game and not brand advertising. (Nabi & Krömer, 2004; Vorderer, Klimmt, & Ritterfeld, 2004). In the case of gaming, the affective component of enjoyment is often explained using flow theory (Csikszentmihalyi, 1988). On the one hand, gamers feel fun and excite-

ment when there is an optimal balance between difficulty and skill. On the other hand, they might be bored if there is not enough challenge. Naturally, the balance between skill and difficulty level is not the only reason why people feel that gaming is fun. The gaming experience is also conditioned by an individual's expectations and previous experience or knowledge (Grodal, 2000; Klimmt, 2006a, 2006b; Sherry, 2004; Vorderer, et al., 2004), hence players also evaluate games cognitively. In general, the identification of commercial content leads to a more skeptical and cynical evaluation of a communication tool (Kunkel, 2001). Although advergames aim to combine the positive effect of the gaming experience with delivering the brand message, children who recognize that they are playing an advergame with a commercial character are more likely to evaluate the game critically and are more likely to feel a less pleasant experience. The appraisal of the advergame is also determined by the identification of the commercial content and the persuasive character of an advergame. Especially if children know about the intent to persuade them they cope this situation by an increase of skepticism towards the communication tool (Friestad & Wright, 1994). Though games including commercial content are evaluated more negatively (Mallinckrodt & Mizerski, 2007).

H2: The identification of the game being played as an advergame is negatively related to the game's entertainment value. Thus children who recognize the promotional character of an advergame will be less entertained.

Entertainment media lead to re-use by the individual as well as recommendation behavior and intentions (Nabi & Kremer, 2004; Vorderer, et al., 2004). This by the producers of advergames intended "viral-marketing"-effect (Ferguson, 2008; Thomas & Stammermann, 2007) is strongly driven by the Entertainment Level. Hence, it can be expected that the less entertained children are by an advergame, the less likely they will be to recommend the game to their friends and the less likely it is that they will intend to revisit the website to play the game again.

H3: A low entertaining advergame is negatively related to the attractiveness of the game. Thus children who are less entertained by the advergame

- a. will show a lower intention to recommend the advergame to others.
- b. will show a lower intention to play the advergame again.

The key promised advantage of branded entertainment is the transfer of the entertainment value to the promoted brand (Hudson & Hudson, 2006; Kretchmer, 2004; Obringer, 2007). Recent studies indeed indicate that this transfer can be

observed in the field of in-game advertising (Bambauer-Sachse, 2007; Nelson, Yaros, & Keum, 2006). Therefore, it can be expected that a lower level of entertainment from an advergame will also lead to a less positive brand attitude. One of the main effects of a positive attitude towards a brand is the subsequent pestering behavior, especially in the case of convenience products (Battle Horgen, Choate, & Brownell, 2001; Strasburger & Wilson, 2002). Therefore, we expect that lower entertainment value also leads to lower pestering intention.

- H4*: A low entertaining advergame leads to
- a. less positive attitude towards the brand,
 - b. to lower pestering intention and
 - c. to a lower buying intention.

5 Study

An experiment was carried out to test the hypotheses proposed above. The advergame of the Pombaer brand was chosen for use in the experiment. Pombaer is a very popular brand in German-speaking countries (www.pombaer.de) and specifically targets children. Pombaer snacks are manufactured by Intersnack, which fields a whole stable of popular brands like Funny Frisch, Chio, Wolf-Bergstrasse and Goldfischli. The Pombaer products are teddybear-shaped potato-and-peanut snacks. The Pombaer featured on the packaging is a teddy bear wearing a crown. In addition to Pombaer, the website also features Criss-Cross (a crocodile-shaped snack food made from peanuts) as well as Lilly the Fox (potato chips). The Pombaer homepage explicitly addresses children. It is designed in a comic-strip style and uses comic-like testimonials. The website offers a wide variety of downloadable comics, audio-books, newsletters and wallpapers, etc. and also a variety of games of different genres (Figure 1).



Figure 1: Pombaer homepage (www.pombaer.de)

Most of the games offered on the Pombaer site are action/reflex games such as driving a school bus, sports games, adventure games such as treasure hunts and also simulations such as growing potatoes and flowers. In addition, puzzle games (e.g. tetris-style games) as well as community-related games such as shooting soccer goals and competitions with other children are also on offer. Overall, the website attracts a broad range of school-age kids thanks to the different genres of games available which appeal to both girls and boys. For our experiment “Ketch-It-Up”, a classic and easy-to-play “shooter” game was chosen (for game genres see e.g. Wolf, 2001) in which players have to shoot snack packs with a canon loaded with tomato ketchup (similar to the popular grouse-hunt game). In the advergame, children are supposed to shoot and hit the green packages and balloons only, not the yellowish or blue ones. In addition, they must shoot at tomatoes to fill up the ammunition depot (Figure 2).

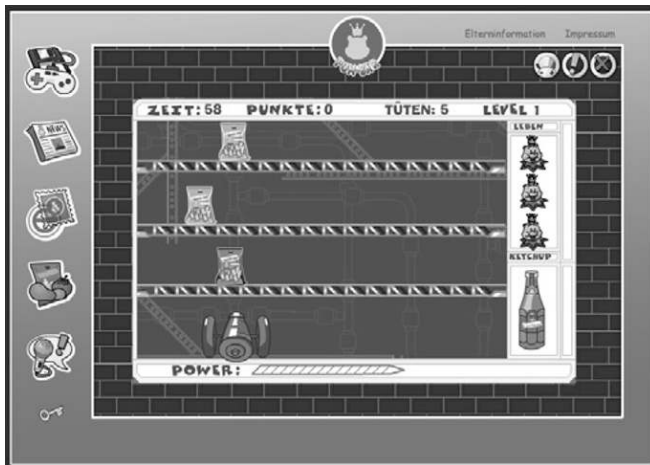


Figure 2: Advergame Ketch-It-Up

5.1 Sample, methodology and measures

The experiment was conducted in June 2008 in two Austrian schools, an elementary school and a junior high school. 97 children between nine and twelve years of age took part in the experiment. Table 1 reports on the characteristics of the sample as well as the internet-access and the online behavior of the children. As the data indicates, the children mainly use computers for leisure activities and nearly 90 % of the kids have access to the internet. From a manufacturer's point of view, advergaming can therefore be considered a valuable advertising instrument, especially if the games can be accessed via the internet. In general, the sample of children is typical of the wider population of school kids in Austrian schools, with a slight numerical preponderance of female school students.

Table 1: Characteristics of sample

Sex	male	46	47.4 %
	female	51	52.6 %
Age	9 years	13	13.4 %
	10 years	17	17.5 %
	11 years	20	20.6 %
	12 years	47	48.5 %
Access to a computer for personal use	Yes	94	96.9 %
	No	3	3.1 %
Access to internet on personal-use computer	Yes	87	89.7 %
	No	10	10.3 %
Computer and online behavior (multiple answers)	e-mail	31	32.0%
	chat	40	41.2 %
	games	77	79.4 %
	educational games	19	19.6 %
	doing homework	42	43.3 %
	searching for information	37	38.1 %

The quasi-experiment was conducted as classical one-shot test (EA-Experiment) (e.g. Zikmund & Babin, 2007). Children were asked to play the advergame for at least 15 minutes. Afterwards the children were questioned by trained interviewers using a standardized interview guideline. In addition to being requested to supply personal data, children were asked how well they had been entertained by the game (cognitive evaluation of the game using the items “fun” and “liking the game”) and also how they had felt while playing the game, using the emotions “joy” and “excitement” from the NUKI emotion-kit for children (Vanhamme & Chung-Kit, 2008). Next, the children had to indicate how they rated Pombaer (measuring how much they liked the product) and whether they showed pestering and rebuying intentions. In addition, the children were asked if they intended to play the game again and if they would recommend the game to friends. To avoid overtaxing the children, all measures were conducted with single items and measured on a 5-point Likert scale by means of a non-verbal scale featuring smiley icons.

5.2 Results and discussion

30 of the subjects attended elementary school, 67 were enrolled at junior high. Whereas 9 (30%) – almost one third - of the elementary school students were not

able to identify the promotional character of the game they had been playing, only 4 (5.9%) of the junior high group were unable to do so. Hence H1 is supported.

Figure 3 shows the differences in the perception of entertainment value in relation to whether or not the children recognized that they had been playing an adverage. The entertainment level was calculated as a latent variable by dimensional reduction of the items “enjoyment”, “fun”, “excitement” and “liking the game” through a factor analysis (variance extracted 63 %, $\alpha=.74$). Using the factor loadings for weighting, a weighted entertainment index was calculated. As Figure 3 indicates, children who did not recognize the promotional nature of the game experienced a higher entertainment value ($M=4.55$) than the children who had recognized that the game was a form of advertising ($M=3.99$). A t-test was run and showed that the difference is significant to the level of $p=.002$. Hence H2 could be supported by our data.

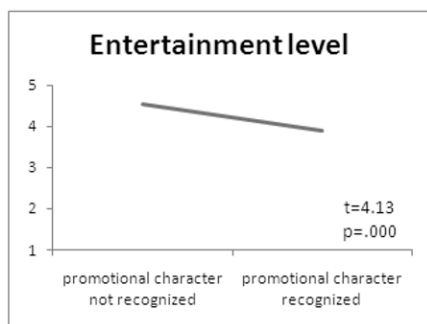


Figure 3: Perceived entertainment level moderated by the recognized promotional character of the adverage

To test the impact of perceived entertainment level on the players’ propensity to recommend the game to others and to reuse the game themselves, the latent measure of entertainment was stored as a mean-centered factor score and used to divide the sample into two groups, i.e. those who experienced a relatively low entertainment value ($n=41$) and those who felt highly entertained ($n=56$). Both the intention of replaying the game ($M=4.79$ in the highly entertained group vs. $M=3.51$ in the less entertained group) and the willingness to promote the game by word-of-mouth to others (high entertainment: $M=4.43$, low entertainment: $M=2.90$) are positively influenced by the perceived degree of entertainment. T-

values indicate that the differences in means are significant at $p=.000$ level (figure 4). Thus H3 is supported.

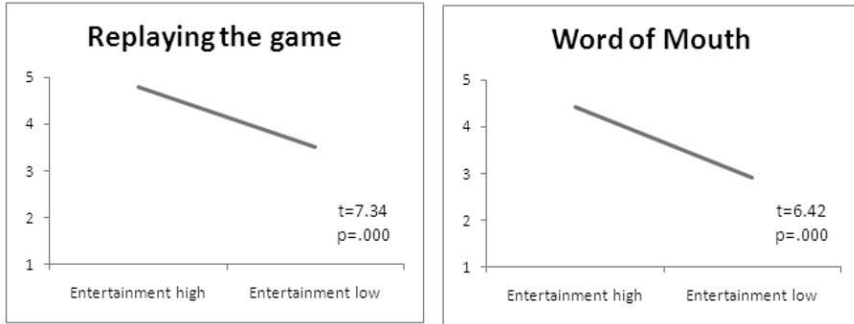


Figure 4: Influence of the entertainment level on replay and recommendation intentions

Figure 5 reports the mean values for liking the Pombaer brand (high entertainment: $M=3.68$; low entertainment: $M=2.78$) and for the intention to pester for it (high entertainment: $M=2.60$; low entertainment: $M=1.58$) and for future buying intention (high entertainment: $M=3.62$; low entertainment: $M=2.76$) plotted against the level of entertainment experienced. A calculation of t-values likewise indicates that all three brand-related items show higher values in the high level of entertainment group than in the low degree of entertainment group on a high significance level of $p<.01$. Hence H4 could be supported.

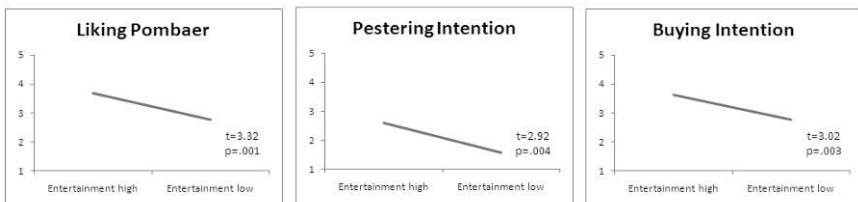


Figure 5: Influence of entertainment on brand-related intentions

To research the postulated relationships additionally a correlation-analyses was conducted. Table 2 reports the correlations of the measured variables. Thereby

the Entertainment Level as well as liking Pombaer is significantly related to all behavioral intentions variables. The strongest correlations could be observed between the Entertainment, recommendation and replay-intention. And between Entertainment, Brand Liking and the intentions to pester and buy the product. Thus, also correlation analysis supports the postulated hypothesis 2-4.

Table 2: Correlation matrix

	<i>Entertainment Level</i>	<i>Liking the Produk</i>	<i>Buying Intention</i>	<i>Pestering Intention</i>	<i>Replay Intention</i>
<i>Entertainment Level</i>					
<i>Liking the Produk</i>	,301**				
<i>Buying Intention</i>	,332**	,676**			
<i>Pestering Intention</i>	,196*	,426**	,347**		
<i>Replay Intention</i>	,757**	,300**	,325**	,162	
<i>Word of Mouth Intention</i>	,495**	,216*	,182	,218*	,461**

Notes: * ... $p < .10$, ** ... $p < .05$

6 Implications and limitations

This study indicates that the quality of the gaming entertainment experience is indeed important for the effectiveness of advergaming. Highly entertained kids are significantly more inclined to reuse and recommend the game. In addition, attitudes towards the brand and pestering behavior propensity (the latter being especially important for convenience items manufacturers) are higher when children experience the game as more enjoyable. Nevertheless, the role of the player's attitude towards advertising practices also plays a critical role in the field of advergaming. The results indicate that those school kids who identified the advergaming's promotional character are less entertained by the game and also rate the game more negatively. The ability to identify the commercial character of the advergaming increases with age and educational level. Especially the transition from elementary school to junior high (at age 10 in Austria, after fourth grade) profoundly changes the way that children learn about and comment on their environment.

This finding has two major implications. From a communication point of view, advergaming need to be targeted more precisely to be effective. Advertisers must be aware that with increasing age, children's ability to identify the promotional character of advergaming increases, leading to reduced gaming experience

and subsequently to a less positive attitude towards the brand and also to lowered behavioral intentions – the intention to play again; the intention to recommend the game to others; the intention to pester parents to buy the brand. To avoid such negative transfer to the brand, companies should modify the advergaming to respond to changes in children's awareness levels, by changing the placement of the brand within the game and by offering different skill levels. Advergaming for older children should not overemphasize the visibility of the brand as the study shows that this harms the evaluation of the game and the branded product.

From an ethical point of view, the results of this study are also important. Though most of the children, especially the older ones, identified the advergaming as a form of advertising, there remains a small group of younger children who were not able to identify the commercial character of the advergaming. As Pombaer is an unhealthy product (high fat, high carbohydrates), the question must be raised as to how important it is to prevent the use of concealed advertising in advergaming to children who are not yet able to identify the promotional character of such games. If the children are not aware that the game is a type of advertising, the result is a higher entertainment experience, subsequently leading to a higher evaluation of the brand and to higher behavioral intentions.

A limitation of the study is that the advergaming analyzed in this study did not carry any information about the product itself in the way that some other advergaming do. In addition, the design as a one-shot study should only be seen as a first step in this research. Moreover, the sample was small. Additional tests with older and younger children should be carried out as well as tests with adults who may also play casual games such as the Pombaer advergaming. Hence, the results should not be generalized. Nevertheless the findings provide some useful empirical evidence for a number of key assumptions regarding advergaming.

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Play Our Game and Tell Your Friends: Pringle's Brand Campaign on a Mobile Social Networking Site

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1 Introduction

In recent years, a steady number of empirical studies on advergaming have been reported (Mallinckrodt and Mizerski, 2007; Mau and Silbrer, 2008; Waiguny et al., 2009). Narrowly defined, advergaming is “the use of interactive gaming technology to deliver embedded advertising messages to consumers” (Chen and Ringel, 2001). This unique form of branded entertainment ranges from simply featuring a brand in the gaming environment to creating more elaborate virtual experiences with the brand (Wallace and Robbins, 2006).

The logic behind advergaming is that games are often regarded as content that attracts and retains consumers, and thus the positive associations and feelings gained from game play should transfer to the sponsor's brand. Games are less obtrusive than other Web forms, because consumers try games for fun, social escapism, social interaction and relaxation (Nelson, 2005). As a result, academics are increasingly interested in the content of advergaming, and its effects on children (Mallinckrodt and Mizerski, 2007; Moore, 2006), the social policy ramifications (Villafranco and Zeltzer, 2006), the effect of persuasive messages in games (Mallinckrodt and Mizerski, 2007) and the impact of brand prominence (Caugher, 2008), amongst others.

Academics as well as practitioners are increasingly interested in linking this concept to the important business metric of brand value, because it is regarded as an effective tool in online branding. This chapter attempts to increase our understanding of advergaming from a new perspective. More specifically, this study examines a multiplayer advergame that was sponsored by Procter & Gamble (P&G). This game was created as a part of cross-media campaign for Pringles, and it features a unique brand character. After the completion of the campaign, we asked about the game players' perceptions of both the attitudinal and the behavioural variables.

One interesting aspect of this advergame is that it is embedded in a social networking site (SNS). SNS is quickly becoming a new form of collective communication, in which users can expand their contacts in an exponential manner. Our primary interest lies in the interrelationship among the SNS, the advergame and the sponsor brand. Specifically, this study seeks to address the following two questions. First, would electronic word-of-mouth (eWOM) occur among SNS users regarding advergaming campaign information? Second, does this eWOM ultimately increase the value of the sponsor brand?

The rest of this chapter is structured as follows. First, we provide a background for the study in terms of games in mobile devices and SNS. Next, on the basis of a series of published studies, we try to establish our theoretical framework, and to formulate hypotheses. We then explain the methodology in detail, and provide a description of the results. In closing, we draw important conclusions and recognise some limitations.

2 Significance of the study

The study makes an important contribution to the literature, for several reasons. First, SNS is a typical form of consumer-generated content, and it has been identified as one of the emerging topics in marketing communications that have received explicitly expressed research needs (Marketing Science Institute, 2008). However, research on SNS remains sketchy, thus leaving important questions unanswered. Specifically, prior research hardly addresses the question as to how and why SNS is effective in increasing brand awareness. Second, advergaming, which is a combination of advertising and gaming, represents an attractive form of branded content, and it has received increasing attention from both academics and practitioners. For example, global brands, such as *Cola-Cola*, *Nike* and *BMW*, have successfully employed advergaming as a branding tool, and one that seems to generate many followers. To date, however, advergaming has been studied in terms of type and level of brand/product exposure, but has received only scant attention in the context of viral campaigns. Third, although advergaming often appears in SNS, the two issues have seldom been examined jointly. Thus, one of our study motivations is to juxtapose both contents in a causal model, in order to explain the mechanism by which SNS users use their advergaming experience as a “reason to talk”. We believe that this study finds a missing link between networking, eWOM and branding.

3 Background

3.1 Games and mobile device

By blending the virtual world and their increased ubiquity, mobile games have rapidly become an attractive alternative to PC-based games, because they do not require advanced computing skills. The mobile device is not subject to any constraints in time and space: consumers can play games whenever and wherever they wish. This enables games to be played by a much broader socio-demographical segment than PC users. Sharp colour screens and enhanced sound features appeal especially to the youth segment, and a significant percentage of teenagers spend much time in the small mobile “living” space.

According to Nokia (2006), in 2005 the mobile gaming market exceeded \$2.43 billion in worldwide revenues. Industry analysts projected that this figure would reach nearly \$4.02 billion by 2006, and \$10.17 billion by 2010, with downloadable mobile gaming accounting for more than 30% of the total (M2 Presswire, 2006). Recent industry surveys, from China, Germany, India, Spain, Thailand and the U.S.A., have found that (1) mobile game players frequently play mobile games for an average of 28 minutes at a time; (2) users in the U.S.A. and Thailand indicated that they play for slightly longer periods; and (3) 80% of those surveyed indicated that they play mobile games at least once a week, and 34% play each day (Dobson, 2006).

Recent innovations in mobile games include single-player, multi-player and 3D graphics. Multi-player games, in particular, are quickly finding an audience, as developers take advantage of the ability to play against other people. In particular, in countries with a high mobile Internet penetration, such as Japan and Korea, multi-player social games are becoming more and more popular. These games are usually offered free on SNS, and thus attract many registered users as a pastime.

3.2 Social networking sites

SNS is the most popular form of consumer-generated content. It can be defined as Web-based services that allow individuals to (1) construct a public or semi-public profile within a bounded system, (2) articulate a list of other users with whom they share a connection and (3) view and traverse their list of connections and those made by others within the system. According to eMarketer’s survey, more than 55% of teens online use social networks, and 48% of them visit SNS daily or more often (Lenhart and Madden, 2007). In the most recent survey,

Lenhart (2009) reports that as much as 75% and 57% of online adults aged 18-24 and 25-34, respectively, have a profile on a social network site. This drastic increase has impacted business in terms of both advertising and branding. eMarketer (2008) forecast that ad spending on MySpace would reach \$520 million in 2009, with \$495 million coming from the US and \$25 million from other markets. Non-US spending on Facebook is expected to reach \$70 million, for a total of \$300 million in 2009 (Williamson 2009).

When users join an SNS, they are given a page on which to create a profile. They are urged to enter personal information, such as home town, work history, hobbies, favourite movies, interests, etc. Profile pages serve as launching pads from which users explore these sites. They can search for other individuals, or find people with common interests. Users who identify others whom they wish to be part of their networks invite one another to be “friends”. Such networks are also displayed for others to see and browse.

The growth and success of SNS can in part be attributed to what is called the “network effect”. The network effect in relation to social networking websites means that the more people use a website, by adding profiles and content, the more valuable it becomes to each of its users. These users will be more likely to find content that interests them and connects them with people they know. Thus, more new people want to join, because they know that they can sure of finding friends and interesting content (Prescott, 2006).

An increasing number of firms sponsor SNS by offering free online games, because games are regarded as the content that attracts and retains consumers. In this method, brands may or may not be a part of the game itself, but the game increases the Web sites’ entertainment value, and thus also increases the stickiness factor. In addition, it seems that the increased eWOM occurs on the sites. For example, an industry report estimated that about 50% of user time on game sites is spent chatting with others (Nelson, 2005). Thus, games offer an additional and important benefit as a viral marketing tool. For this reason, an increasing number of firms employ advergaming as a viral marketing tool. In the context of SNS, advergaming can be converted into a “reason to talk”, thus encouraging active eWOM through a diverse range of networking tools, such as electronic bulletin boards and chat.

4 Theoretical framework and hypotheses

Theoretically, the network effect can be explained by social influence theory. According to this theory, the transmission of interpersonal information exchange via eWOM is primarily motivated by social interactions. Bagozzi and Dholakia

(2002) examined how virtual community participation works in terms of compliance, internalisation and identification. Their framework uses the social psychological model of goal-directed behaviour and social identity theory (Tajfel, 1978) as underlying frameworks, and it conceptualises participation in virtual chat rooms as “intentional social action” involving the group. Dholakia et al. (2004) extended Bagozzi and Dholakia’s (2002) study, and developed a social influence model, by examining a network-based versus small-group-based virtual community.

In this regard, Algesheimer, Dholakia and Herrmann (2005) extended social influence theory in the context of brand community. They posit that the strength of the consumer’s relationship with the brand community can be measured by so-called “brand community identification” (p. 20), whereby the person identifies his or her belonging to the community. Consistent with Bagozzi and Dholakia (2002), this is a shared or collective identity that leads to community engagement. This engagement in turn affects community recommendation intentions, and then behaviour.

In this study, we argue that this community engagement-recommendation link is a key to understanding the relationship between users’ SNS participation and eWOM within the site. Our interpretation is that when SNS users feel motivated to participate in the network, they are more likely to engage in exchanging information with other users. Specifically, they are likely to recommend enjoyable or beneficial experiences, such as games or sweepstakes, to others, because they want to share common goals.

Based on the preceding discussion, this section formulates our research hypotheses. Figure 1 shows our research model. First, SNS participation is mainly motivated by the gratifications offered by networking practice, and by users’ willingness to provide the necessary information. Thus

H1: SNS gratifications will significantly and positively affect SNS participation.

H2: SNS gratifications will significantly and positively affect willingness to provide the necessary information.

Additionally, there is a positive and direct relationship between willingness to provide the necessary information and SNS participation, because those who are eager to help others’ information search are likely to participate in the creation of an information network through SNS:

H3: Users’ willingness to provide the necessary information will significantly and positively affect SNS participation.

Next, Gangadharbatla (2008) examined Facebook users' psychological motives, and found that Internet self-efficacy, need to belong and collective self-esteem all have positive effects on attitudes toward SNS. These motives are similar to the self-expressing, online interaction and forum participating needs found by Huang et al. (2007). These findings seem to suggest that active users of SNS are likely to be engaged in a viral chain of eWOM, which in turn motivates users to play advergaming:

H4: SNS participation will significantly and positively affect eWOM in an advergaming campaign.

Similarly, those who are willing to provide others with the necessary information are likely to participate in an active exchange of information through WOM:

H5: Willingness to provide the necessary information will significantly and positively affect eWOM on advergaming campaign.

Finally, we argue that eWOM will ultimately improve the perceived brand value, because of the network effects. Algesheimer et al. (2005) found that community engagement significantly strengthens brand loyalty intentions. Although they did not address directly the relationship between community participation and brand value, we posit that active engagement in SNS, and subsequent eWOM behaviour within a network, will greatly enhance the perceived value of the brand embedded in the advergence. More formally,

H6: eWOM on an advergaming campaign will significantly and positively influence the perceived brand value.

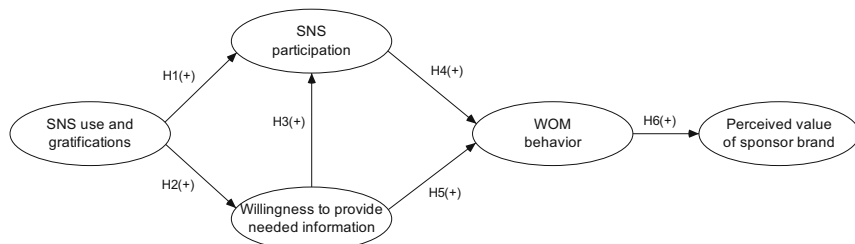


Figure 1: Proposed model

5 Method

In this study, we collaborated with P&G, a well-known food manufacture that produces a popular potato chips brand, Pringles. The company planned and launched a promotional campaign on a mobile SNS whose subscribers exceed 10 million. On this SNS, registered users can exchange information in various ways (mainly bulletin board, diary and chat), while enjoying free online games, on which we uploaded our advergaming. Users could join the game either from the SNS or from the campaign site, and the winners were automatically entered into sweepstakes to win avatars as a prize.

One week after the completion of the campaign, the questionnaire survey was conducted. A survey invitation was sent to the registered SNS users via SMS, and it included a link leading to a survey site. Because we are interested in the consequences of the campaign (actual eWOM behaviour and the subsequent increase in the perceived brand value), we selected only those who actually played the advergame. In total, we obtained 925 usable responses, with an approximate response rate of 20%.

The questionnaire consisted mainly of two parts. The first part contained questions related to basic demographic information (sex, age and occupation). The second part contained items related to the primary constructs. SNS gratifications were measured by a 5-item reflective construct (mobility, simultaneity, timeliness, convenience and usefulness). SNS participation was measured as a formative construct, by asking the frequency of posting and information searching in the three main functions of SNS: bulletin board, blog and chat. These were measured by ordered categorical scales. Willingness to help information search was measured by 2 items. Participation in eWOM was measured by a dichotomous scale (yes=1, no=0). We conceptualised brand favourability as Keller's (1993) consumer-based brand equity, by adapting the existing scales. A second-order formative construct of brand favourability, brand awareness and brand uniqueness was used.

6 Results

Partial least squares (PLS) path modelling was used to test our research hypotheses. We chose this statistical approach because it is robust and insensitive to the distribution assumption, including dichotomous and ordinal variables. Because we measured eWOM participation with a dichotomous scale (yes=1, no=0), this method is more appropriate than covariance-based structural equation modelling. *SmartPLS2.0(M3)* was used for the analysis (Ringle et al., 2005).

Chin (1998) suggests that, in PLS, we should first examine the measurement model in terms of individual item reliability, loadings and weights, along with composite reliability and average variance extracted. All items significantly loaded on to the hypothesised constructs, while all weights were also statistically significant. The other quality indicators were satisfactory.

To test our hypotheses, we examined the significance and sign of the structural paths. H1 and H2 posit that SNS gratifications and willingness to provide the necessary information, respectively, significantly stimulate SNS participation. Our data suggest that both paths are positive and statistically significant ($\beta=.25$ and $.25$, respectively), thus supporting both hypotheses. In H3, we postulate that the willingness to provide the necessary information determines participation in SNS. This path was statistically significant ($\beta=.38$), and thus provides support for H3.

Next, H4 and H5 examine whether both SNS participation and willingness to provide the necessary information improve the possibility of eWOM on advergaming within the network. Our results indicate that both paths were strong and statistically significant: $\beta=.37$ and $.32$, respectively. Thus, H4 and H5 were supported.

Finally, in H6, we posit that eWOM behaviours ultimately and significantly increase the perceived value of the sponsor brand. This path was statistically significant ($\beta=.21$), and thus rings true for H6.

7 Discussion

7.1 Theoretical implications

The present study is one of the pioneering studies that have examined advergaming in a mobile SNS. The sample was chosen from actual advergammers participating in a promotional campaign for a consumer good. Our data support all the hypothesised relationships between SNS gratifications, willingness to provide the necessary information, SNS participation, eWOM and the creation of perceived brand value.

First and foremost, our study makes an important theoretical contribution, by providing evidence regarding the missing link between SNS participation and the creation of perceived brand value. Although prior research on eWOM implies that the viral effects of information exchange may strengthen brand and/or product identification, this issue has not previously been explicitly addressed. Our study confirms that eWOM behaviour indeed increases the strength of perceived brand value, in terms of brand favourability, awareness and uniqueness. In terms

of social influence theory, this may result from the creation of social identity, which Bagozzi and Dholakia (2002) have termed “intentional social action” involving the group.

In this respect, our study also sheds light on the fact that SNS participation was determined not only by SNS gratifications, but also by willingness to provide the necessary information. Furthermore, the mediating role of willingness to provide the necessary information is so strong that only SNS gratifications may not sufficiently motivate SNS participation. This willingness may be an important driver in making a causal link from SNS participation to eWOM, which in turn affects the creation of perceived brand value. That is, unless users seem likely to engage in voluntary information exchange, branding in SNS cannot occur.

7.2 Managerial implications

Managerially, playing games may be one of the most typical pastimes of mobile Internet users. As a result, marketers and advertisers have begun to recognise mobile games as a platform of branded fun for younger consumers. From SNS perspectives, firms will be encouraged to identify opinion leaders in the network, so that information dissemination can be performed in an exponential manner. In a gaming context, the leaders may be winners or high point getters, and are thus relatively easy to identify. Firms can then use them as eWOM seeds that effectively spread the word.

8 Limitations

To ensure the objectivity of our findings, we must recognise several important limitations. First and foremost, this study does not control for the respondents in terms of their advergaming campaign exposure. That is, we do not compare perceived brand value before and after the campaign. Perhaps more importantly, we did not control for prior knowledge and experience with Pringles. In this light, this study is essentially a case study, as it uses only one game and did not test for the effects of variations. Second, this study did not take into account the “no game” condition, as we used only the responses from the game participants. Therefore, the question as to whether the model validation would truly hold without an advergame needs to be addressed in future data collection. These important limitations also demand caution before generalising any of our study results.

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Implicit Measurement Games: Using Casual Games to Measure Psychological Responses to Ads

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1 Introduction

Internet advertising has become big business. Online advertising revenues were estimated at \$23 billion for the U.S. market alone in 2008 (IAB 2009). Whether or not advertisers' money is spent effectively is hard to determine (Dreze and Hussherr 2003). Although click-through or conversion rates may give some indication of an ad's impact on Internet users' behaviour, these measures provide little information with respect to the psychological impact of online marketing, such as changing awareness, attitudes or beliefs with respect to the advertised product or brand (Chatterjee, Hoffman and Novak 2003). To obtain such psychological insights, online consumer-based research is warranted. The conventional methods used for such research, however, have several disadvantages. In this paper we present and test a new method for conducting online consumer research that circumvents these disadvantages: Implicit Measurement Games (IMGs). The implicit nature of the measurement method aims to avoid reactance (i.e. social desirability) and demand artefacts in respondents by tapping into their unconscious cognitions. Moreover, by presenting implicit measurement instruments as games we aim to make them more attractive and thus circumvent the problem of response bias. In a study, we test Implicit Measurement Games as a new way of tapping into consumers psychological states online, and compare it against more conventional methods of online measurement.

Most research testing the psychological effects of online marketing uses online questionnaires. Although online questionnaires have the potential advan-

tage of reaching a large target audience, they have a number of drawbacks. First, website visitors often find Web-based questionnaires obtrusive, tedious, and even downright annoying. Consequently, few visitors make an effort to complete such questionnaires (McDonald and Adam 2003). Second, online questionnaires are sensitive to response bias: Visitors who fill out online questionnaires while surfing the Web may not be characteristic for common users of an evaluated website or the common audience of an online ad (Sax, Gilmartin and Bryant 2003). To overcome these two drawbacks of the deployment of online questionnaires, researchers make many efforts to make participating in online questionnaires more attractive by, e.g., offering participants money or the opportunity to win a prize. Other researchers attempt to make online measurement tools more attractive, by improving their design and ease of use, in hopes that this may overcome some of website visitors' reluctance to participate in online research.

A third, more general, problem in questionnaire-based consumer research is that of demand artefacts (Fazio and Olson 2003). For a variety of reasons research participants often choose not to reveal their most inner and private thoughts to researchers. Social desirability issues may induce participants to adjust their answers toward an appropriate social norm (e.g., Fisher 1993), especially when the subject matter of the research is sensitive, e.g., dealing with sexual preferences, racial stereotypes, or political opinions. Respondents also may adjust their answers to impress or surprise researchers, or to (not) comply with the perceived intended outcome of a study (Sawyer 1975).

Implicit measurement is a commonly used method that circumvents the problems of reactance and demand artefacts (Fazio and Olson 2003). Generally, implicit measures use response latencies (in milliseconds) to target words to assess the accessibility of relevant constructs (Greenwald, McGhee and Schwartz 1998). If, for instance, participants respond faster to sex-related words after seeing a sexually explicit advertisement, this indicates that concepts related to sex are activated in the brain. Because implicit responses take place outside of conscious awareness, implicit measurement is less vulnerable to demand artifacts (Banaji 2001). Hence, respondents are less able to control their responses on implicit measurements, compared with regular, explicit measures.

However, like questionnaires, implicit measurement techniques can be quite demanding and tedious. As an example, taking part in an online IAT-test (e.g., Houben and Wiers 2008) takes about 20 minutes and a lot of effort and concentration. Moreover, implicit measurements techniques are not completely unobtrusive: Participants are aware of the fact that they are being tested and can often guess the purpose of the research.

A possible way to make implicit measurement methods less obtrusive, less effortful, and less tedious is to "dress them up" as online casual games. Casual

games such as *Bejeweled*, *Scrabulous*, or *Bubble Shooter*, are highly popular on the Web (Wallace and Robbins 2006), and thus could lower respondents' resistance toward participating in online studies. The current study examines the usefulness of a so-called Implicit Measurement Game, in this case a simple word game specifically designed to implicitly measure the accessibility of ad-evoked associations. The game (G) part of the IMG prompts participants to look for as many existing words hidden in a word grid, as fast as possible. Participants are thus merely playing a game, which is considered a more pleasant activity than filling out a questionnaire or taking part in an implicit association test. The implicit measurement (IM) part of the IMG is constituted by inserting relevant target words in the word grid, and assessing the ease with which participants locate these target words within a certain time frame. The rationale behind the technique is based on tried and tested implicit measurement techniques: The more accessible a construct is inside the brain, the easier it is for respondents to recognize visual (written) representations of the concept (Neely 1991; Masson 1995; Schacter 1987; Schacter 1992). Likewise, we conjecture that if a concept is made accessible by exposure to an advertisement, this will help respondents in locating concept-related words in an online word-grid game environment.

To test whether the IMG is superior to explicit measures, and generates results similar to regular implicit association tasks, we designed an experiment that used online advertisements to trigger sex-related thoughts. Sexual stimuli are a particularly interesting candidate to assess differences between measurement techniques for two reasons. First, previous research shows that the reporting of sexual arousal, or sexual thoughts, at the explicit level is subject to social desirability factors, which may also explain the sometimes observed difference between males and females in self-reported levels of arousal (Murnen and Stockton 1997). Second, the suppression of sexual thoughts has strong effects on the unconscious level (Wegner, Shortt, Blake and Page 1990), thus suggesting that measurement at the implicit level may produce more reliable results regarding the activation of sexual thoughts.

In the present experiment, the effectiveness of measuring (suppressed) sexual thought following a sexual stimulus was compared for three different measures: an explicit self-report measure, a classical implicit measure, and a newly designed IMG. In order to achieve differences in sexual thoughts, participants were presented with a mild or a more graphical sexual ad. We hypothesized that participants would feel particularly uncomfortable in explicitly reporting sexual thoughts after seeing a graphical sexual picture, more so than in the mildly sexual condition. Therefore, we expected that using an explicit measure, participants would report less sex-related associations after exposure to a more graphical sexual ad than after exposure to a mild sexual ad. In contrast, we expected that

suppressed sexual thought would still ‘show up’ at the unconscious level, especially in male respondents, thus showing a reversed effect on the IMG and implicit measures, with more implicit sex-related associations following the graphical advertisement rather than the mild advertisement.

2 Study

An experimental study was conducted to assess the extent to which three different methods of measurement are able to reveal sex-related ad-associations in men and women after exposure to a mild or a more graphical sexual online ad.

2.1 *Participants and design*

A total of 47 Dutch respondents participated, 19 men and 28 women. Mean age of the respondents was 26.30 ($SD=9.55$). The average education level was college. We used a mixed factorial design with type of ad (mild vs. graphical sexual ad) and gender (male vs. female respondents) as between subjects factors and type of measurement (explicit vs. implicit vs. IMG measurement) as a within subjects factor. The order in which the different measurements were conducted was balanced: Half of the respondents played the Implicit Measurement Game before proceeding to the implicit association task; for the other half of the respondents the order was reversed. The explicit measurement of sex-related associations was always conducted last. Women and men were distributed equally across the two different ads.

2.2 *Procedure*

People from different parts of the Netherlands were recruited by e-mail to participate in an online study. As a cover story, participants were invited to test a new online game that university students had developed, and to answer some questions about it. A link in the e-mail directed them to the online study. They were randomly assigned to the mild or graphical sexual ad condition ($N=22$ for the mild ad, $N=25$ for the graphical ad). In both conditions, participants were shown an ad for Labello lip balm – presented as a sponsor of the game – showing a heterosexual couple fondling. In the mild ad, the couple was fully dressed; in the graphical ad, the couple was undressed (see Figures 1 and 2 for the ads

used). The ads were pre-tested ($N=14$) as, respectively, the most and least sexually explicit out of a set of six.



Figure 1: Mild sexual ad



Figure 2: Graphical sexual ad. The taglines read: “Soft lips, always.”

After participants saw the ad, they proceeded either first to a classical implicit association task and then to the Implicit Measurement Game ($N=25$), or first to the IMG and then to the implicit association task ($N=22$). In implementing the implicit association task, we followed a standard approach to unobtrusively measure the accessibility of primed concepts (cf. Berger and Mitchell 1989). In our particular task, participants were asked to categorize 48 words as fast as possible as “fitting” or “not fitting” the Labello advertisement. Of these 48 words, eight were sex-related; the rest were fillers. The filler items were included to mask the real purpose of the implicit measure. To obtain an association score for each word, a product score was created from rated association compatibility (-1, 1) and response latency in milliseconds, indicating association accessibility. This procedure yields high scores for fast and compatible categorizations and low scores for fast and incompatible categorizations. Slow categorizations in both categories yield intermediate scores. Scores for target words were averaged to obtain a total score. To compare the scores from the implicit association tasks with those of the other measurements, scores were standardized using Z -scores.

The IMG was programmed in JavaScript and ran inside the Internet browser. It consisted of five consecutive word grids. In each of the grids sex-related (around 16%) and non-sex-related words (around 84%) were randomly hidden. Each grid was visible for approximately 30 seconds to ensure that only the words most salient to participants would be recognized. Subsequently the grid closed and a new grid appeared. Participants were asked to swipe words with their mouse as fast as possible in order to obtain the highest possible scores. Figure 3 shows a typical word grid in the IMG game environment. To measure the accessibility of sex-related ad associations, we assessed the order in which the words were found. From this order we computed a score per word grid, such that if sex-related words were found before all other words a maximum score was attributed, and if sex-related words were found last (or not at all) a minimum score was credited. By using the order in which words were found as a measure for concept accessibility instead of the speed at which they were found, we controlled for differences in player ability. Scores per grid were averaged to obtain a total score per participant. Subsequently, total scores were standardized using Z -scores.

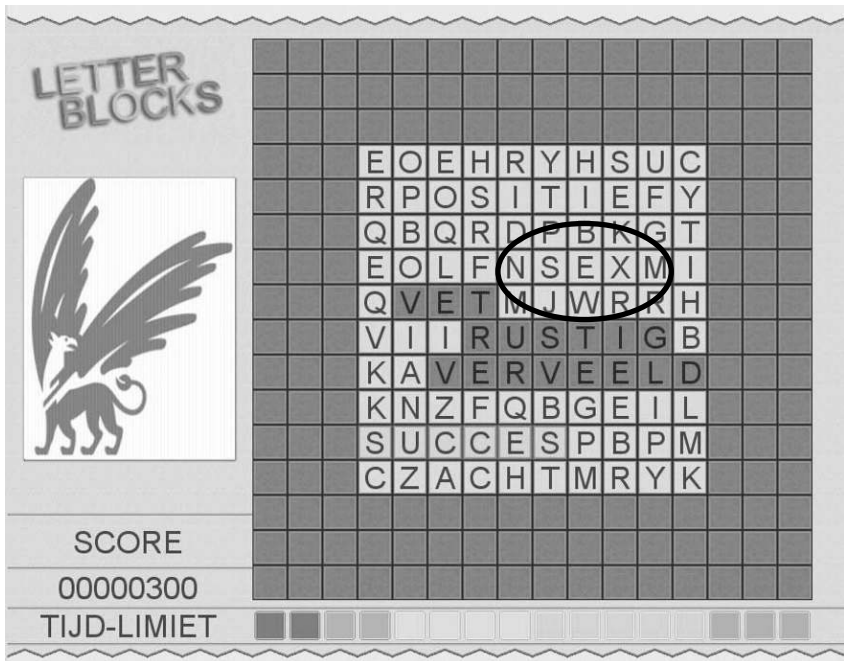


Figure 3: A typical word grid in the IMG game environment (in Dutch)

Next, participants proceeded to the explicit measurement of ad-evoked associations. They were asked to indicate on a 5-point Likert-scale to what extent they perceived a list of 44 words as fitting the Labello advertisement. Again, eight of these words were sex-related. The total score was computed by averaging the scores of the eight sex-related words. Again, participants' scores were standardized using Z-scores.

Finally, respondents reported age, education, and gender. Debriefing consisted of explaining the actual purpose and rationale behind the experiment, and asking – in an open question – whether respondents had guessed the real purpose of the IMG. The participant who found the most words – either sex-related or not – in the IMG received a small price.

3 Results

3.1 Control variables and demographics

Because age, education and gender may be related to the outcome variables in the study, we tested for systematic differences between the experimental groups. A 2 (ad type) x 2 (gender) ANOVA on age and on education showed no significant main or interaction effects (all F 's < 1). A 2 (ad type) x 2 (gender) ANOVA on education level also showed no differences (all F 's < 1). Women and men were distributed approximately equal over the two different ads. Of the men, 9 saw the mildly sexual ad, whereas 10 saw the graphical ad; of the women, 13 saw the mild ad and 15 saw the graphical ad. In the post-experimental briefings none of the respondents guessed the real purpose of the IMG correctly.

3.2 Main analysis

A 2 (ad type: mild vs. graphical) x 2 (gender: male vs. female) ANOVA on the accessibility of sex-related associations with Repeated Measures on measurement method (explicit vs. implicit vs. IMG) revealed an interaction between ad type and measurement method ($F(2, 45)=9.41, p<.001$). On the explicit measure, sex-related associations were lower for the graphical ad ($M=-0.54, SD=1.01$) than for the mild sexual ad ($M=0.59, SD=0.49$). On the response latency measure, sex-related associations for the graphical ad were slightly stronger ($M=0.07, SD=0.92$) than for the mild sexual ad ($M=-0.02, SD=0.99$). Similarly, on the IMG, sex-related associations were also slightly higher ($M=0.09, SD=1.07$) than for the mild sexual ad ($M=-0.02, SD=1.02$). See Figure 4 for a graphical display of the mean scores. No further interaction or main effects were found.

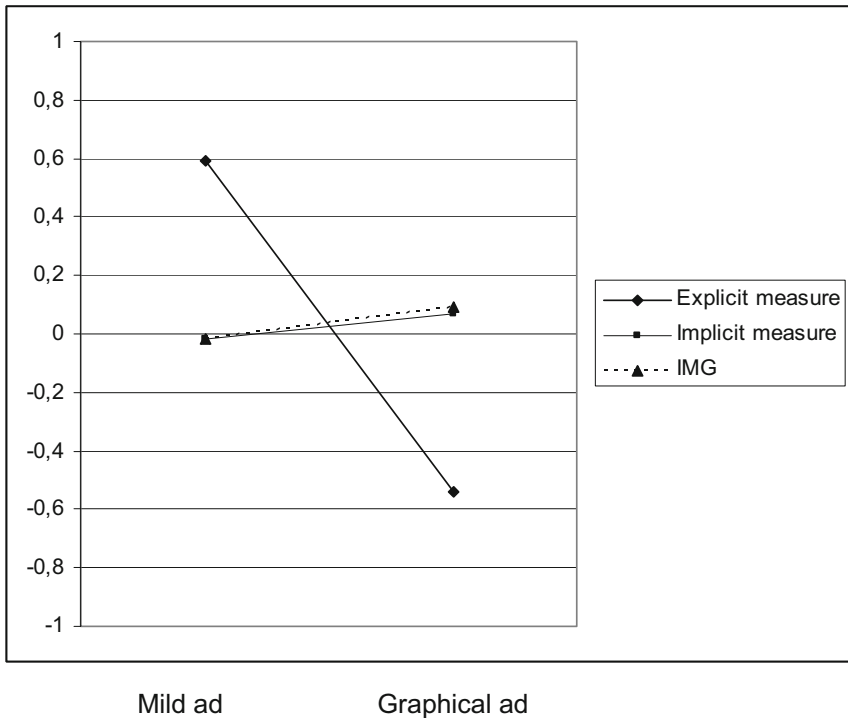


Figure 4: Sex-related associations in participants following exposure to mild and graphical sexual ads, measured by explicit, implicit, and IMG measurement techniques

The results indicate that the scores provided by the explicit measure were influenced by social desirability constraints, whereas results of the two implicit measures were not. Both implicit measures make clear that the mild and the graphical ad evoked sex-related associations to a similar extent. On the explicit self-report measure, however, participants denied having sex-related associations following exposure to the graphical ad, and only acknowledged having sex-related associations following the mild ad.

A 2 (ad type) x 2 (gender) between subjects ANOVA with IMG scores as a single dependent measure revealed a 2-way interaction between ad type and gender ($F(1, 46)=5.93, p<.05$). Whereas women had less sexual associations following the graphical sexual ad ($M=-0.07, SD=0.96$) than following the mild

ad ($M=0.40$, $SD=0.95$), men had more sexual associations following the graphical ad ($M=0.33$, $SD=1.22$) than following the mild ad ($M=-0.64$, $SD=0.82$). See Figure 5 for a graphical display.

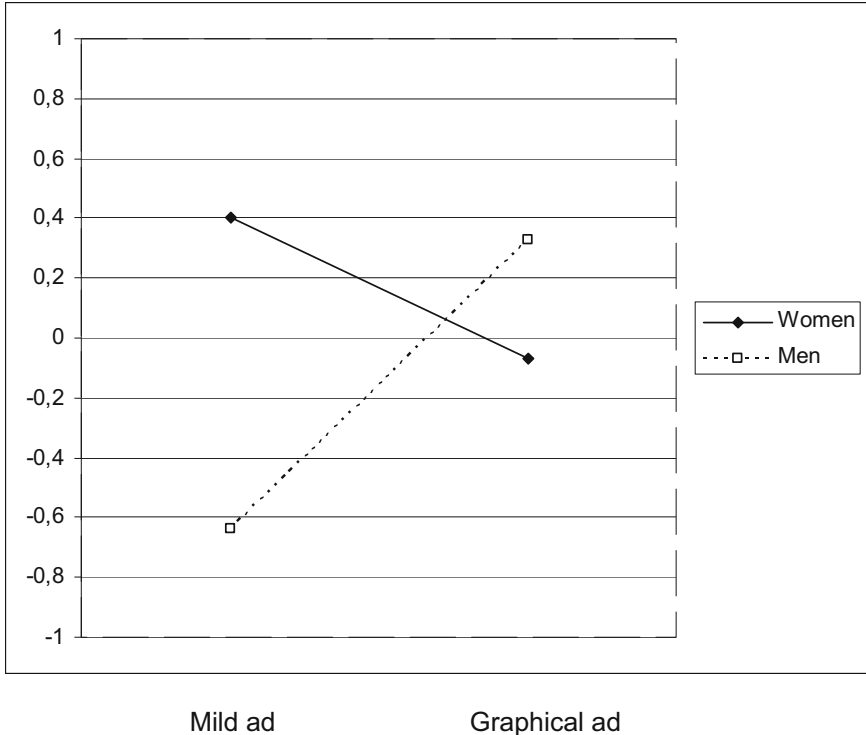


Figure 5: Sex-related associations in women and men following exposure to mild and explicit sexual ads, measured by use of an IMG

This result suggests that men and women’s reactions to sexual cues may differ to the extent that in women, the mild, more “suggestive” ad seemed to increase the accessibility of sex-related thoughts, whereas in men, the graphical, more visually explicit ad increased sexual thought accessibility. In the IMG’s results, this difference was even more pronounced than in the results of the classical implicit association task. Similar ANOVA’s using the scores on the explicit self-report

measure and on the classical implicit association task revealed no significant interactions between gender and ad type.

Finally, a 2 (ad type) x 3 (measurement method) repeated measures ANOVA using only the male subjects revealed a 2-way interaction ($F(2, 45)=6.14, p<.05$). Figure 6 displays the mean scores.

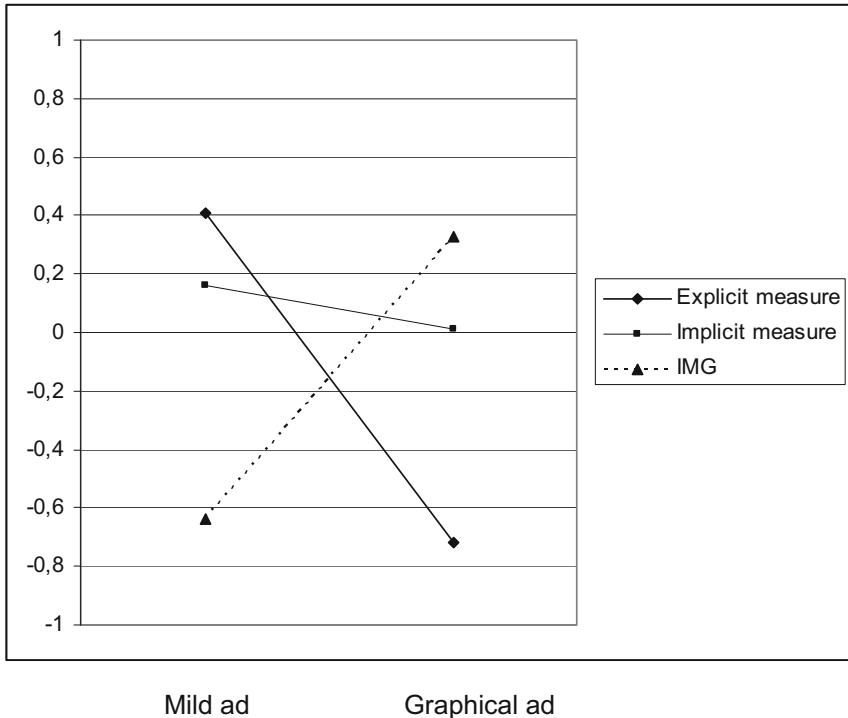


Figure 6: Sex-related associations in men following exposure to mild and explicit sexual ads, measured by explicit, implicit, and IMG measurement techniques

Whereas on the explicit measure men reported significantly less sex-associations for the graphical ad ($M=-0.72, SD=0.87$) than for the mild ad ($M=0.41, SD=0.61; p<.05$), on the classical implicit association task they reported no difference ($M=0.01, SD=1.07$ for the graphical vs. $M=0.16, SD=0.91$ for the mild ad; ns.). As observed in the previous test, the IMG revealed that men had more sex-

related associations following exposure to the graphical ad ($M=0.33$, $SD=1.22$) than following exposure to the mild ad ($M=-0.64$, $SD=0.82$). Simple effects analysis showed that this latter effect was marginally significant ($p<.07$).

These results suggest that men may suppress sex-related associations in an explicit measurement context, and to a lesser extent even in the context of a classical implicit association task. When measurement was conducted through the IMG men did not suppress their sex-related thoughts because their instrumental motivation was to locate as many words as possible.

4 Conclusion and discussion

The present study tested the usefulness of a newly designed implicit measurement game – IMG – to measure the accessibility of sexual thoughts after watching a sexually explicit or less explicit advertisement in an online setting. The IMG was designed to circumvent two key drawbacks of usual online measurement tools: (1) website visitors often find Web-based questionnaires obtrusive, tedious, and even downright annoying, thus yielding low response rates, and (2) online questionnaires are subject to demand artefacts and social desirability issues. In the present research, it was proposed that by dressing up an implicit measurement instrument as a casual game, we can circumvent socially desirable responses frequently observed on explicit self-report measures and make participating in online research more entertaining, thus yielding higher response rates and lower response bias.

Previous research has shown that implicit measures can circumvent socially desirable responses frequently observed on explicit self-report measures. Our results extend these findings by showing that like standardized implicit measures, the IMG is capable of catching participants' 'unconscious' responses. Specifically, whereas on an explicit measure participants reported less sexual thoughts after exposure to a graphic sexual advertisement than after exposure to a mildly sexual advertisement, the reverse effect was observed on both implicit measures, thus attesting to the reliability of the IMG in measuring unconscious thoughts. In addition, and consistent with expectations, IMG results showed that male respondents scored higher on sex-related associations when exposed to an ad containing graphical sexual content than when exposed to a mild sexual ad. For female respondents this effect was reversed. On the explicit measure, male respondents reported less sexual associations when exposed to a graphical ad than when exposed to a mild ad, suggesting a tendency toward providing socially desirable answers, which the IMG was able to neutralize.

These findings are a first demonstration of the usefulness of implicit measurement techniques specifically designed for use outside of the lab, in a regular internet environment where media enjoyment is one of the main goals. Classical implicit measurement techniques have proven extremely effective in assessing respondents' unconscious responses but can hardly be used outside of the lab, because of their serious and sometimes tedious character. Because the IMG is an implicit measurement instrument dressed up as a regular online game, it matches a primary motive of internet users – i.e., to enjoy themselves – and is much more likely to receive positive responses and high compliance rates. Importantly, the scores yielded on the IMG equal the scores yielded by classical implicit measurement techniques, which suggests that the IMG is equally capable of catching 'hidden' responses. The finding that the accessibility of sex-related cognitions for males was most prominent on the IMG suggests that this measure may even be more effective in circumventing social desirability constraints than classical implicit measurement techniques.

This study was a first test of a newly designed online implicit measurement technique. Future studies should focus on extending the current findings in different domains where social desirability constraints may arise – e.g., dealing with sexual preferences, racial stereotypes, or political opinions – using different experimental stimuli as input, and different explicit measures as a comparison. Moreover, future studies should investigate the performance of other, newly developed implicit measurement games, aiming for instance at implicit brand awareness, implicit attitude assessment, or implicit choice in an online marketing context, and relate this performance to classical implicit measurement instruments serving a similar aim (as in, e.g., Vermeulen and Seegers 2009). Finally, future studies should systematically investigate the extent to which the entertainment provided by implicit measurement games actually increases compliance rates in online research, as well as the extent to which their entertainment value might inadvertently colour participants' responses, e.g., by inducing a positive mood. Prior research showed that participants in a positive mood display more positive attitudes (Schwarz and Clore 1983) and categorize more broadly (Beukeboom and Semin 2006; Isen and Daubman 1984) than participants in a negative mood.

Clearly, the proposed IMG has one big advantage over classical explicit or implicit measurement techniques, i.e., that participants are enjoying themselves rather than becoming bored while filling in lengthy questionnaires. Current online measurement suffers from huge response biases, user annoyance with pop-up questionnaires, and low response rates (Wright 2005). The combination of measurement reliability and user enjoyment in the IMG opens the door to better online measurement in the future.

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Part IV

Advertising, Branding and Communication on the Internet

The Perceived Interactivity of Top Global Brand Websites and its Determinants

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1 Introduction

Recent reviews of the online advertising literature revealed that interactivity was one of the key topics in that field (Ha 2008; Kim and McMillan, 2008). Three main streams of research can be distinguished in the website interactivity literature. First, several researchers have written about the definition and conceptualization of interactivity (e.g., Liu and Shrum 2002; McMillan and Hwang 2002; Johnson, Bruner II and Kumar 2006). Second, several researchers have tried to map interactivity on websites by performing content analyses of websites (e.g. Ghose and Dou 1998; Ha and James 1998; Tse and Chan 2004; Cho and Cheon 2005; Okazaki 2005). Third, several researchers have investigated consumers' responses to interactivity. Such studies mainly focused on the influence of interactivity on advertising effect measures like attitude toward the website, attitude toward the brand, and purchase intention (e.g., Bezjian-Avery, Calder and Iacobucci 1998; Coyle and Thorson 2001; Macias 2003; Wu 2005; Liu and Shrum 2009).

Within this latest stream of research, the theoretical approach on interactivity has changed from examining the effects of objectively assessed interactivity to the effects of interactivity perceptions, so called perceived interactivity. While research on perceived interactivity has become widespread, two issues remain underrepresented in the literature to date.

First, to our knowledge, there is no single study that provides insight into the perceived interactivity of websites of the most important consumer brands. Therefore, the first aim of this study is to address this gap in previous literature by giving an overview of the level of perceived interactivity of top global brand websites. The following research question was formulated to fulfill this aim:

RQ1: What is the level of perceived interactivity of top global brand websites?

Second, whereas research on the consequences of perceived interactivity is abundant, research on its determinants is scarce. The research up to now has primarily investigated website characteristics that influence interactivity perceptions. To our knowledge, research focusing on person characteristics, such as demographic variables or experience variables, influencing interactivity perceptions is almost non-existent (Jee and Lee 2002), but vital for the field of interactivity research (Tremayne 2005). Therefore, the second aim of this study is to give insight into the personal determinants of perceived interactivity. The following research question was formulated:

RQ2: Which personal variables determine the perceived interactivity of brand websites?

To fulfill these two aims, our study draws on a survey in which 331 respondents are exposed to a total of 65 brand websites. This design provides us with an opportunity to investigate the level and determinants of perceived website interactivity across a wide variety of websites. In addition the survey represents a more natural situation than earlier studies that employed experiments with only one, or a limited number of websites. Such a large-scale survey was never employed before in interactivity research

In the next sections we will expand on the definition of interactivity and on factors influencing interactivity perceptions, after which we will describe the design of our study. Finally, after reviewing the results, we will draw conclusions on which personal factors influence interactivity perceptions.

2 Theoretical background

2.1 Definition of interactivity

In the advertising literature, there is still a considerable amount of discussion on defining interactivity (Liu and Shrum 2002; McMillan and Hwang 2002; Johnson, Bruner II and Kumar 2006; Song and Zinkhan 2008). Following Liu and Shrum (2002: 54), we define interactivity as: “The degree to which two or more communicating parties can act on each other, on the communication medium, and on the messages and the degree to which such influences are synchronized”. Liu and Shrum (2002) acknowledged the multidimensional nature of the interactivity construct and specified three dimensions: two-way communication (“the

ability for reciprocal communication between companies and users, and users and users”, Liu & Shrum 2002: 55), synchronicity (“the degree to which users’ input into a communication and the response they receive from the communication are simultaneous” or without delay, Liu & Shrum 2002: 55), and active control (“voluntary and instrumental action that directly influences the controller’s experience”, Liu & Shrum 2002: 54). Accordingly, the interactivity construct in our research includes these three dimensions.

2.2 Determinants of perceived interactivity

Although there is a rich body of literature on the definition of interactivity and the influence of interactivity on advertising effectiveness, only a handful of studies have tested determinants of perceived interactivity. The largest part of these studies have focused on the relationship between interactive website functions, so called actual interactivity, and interactivity perceptions. Early interactivity researchers thought that these two forms of interactivity were identical and thought the relationship between actual and perceived interactivity was straightforward. They suggest that increasing the quantity of interactive features results in stronger interactivity perceptions (Coyle and Thorson 2001; Sicilia, Ruiz and Munuera 2005). However, more recently, some researchers indicated that the relationship between the two construct was not as simple as a linear relationship (Voorveld, Neijens and Smit 2009a). Earlier studies showed, for example, that website with many interactive features were not perceived as interactive (McMillan 2002), or that websites that contained the same number of interactive features were not perceived as equally interactive (Lee, Lee, Kim and Stout 2004). Thus, there is more and more evidence that other factors than website characteristics influence interactivity perceptions.

However, research on personal determinants of perceived interactivity is very scarce. In our study, we will investigate four types of personal determinants. Earlier knowledge on these determinants will be described below.

2.2.1 Demographic variables influencing interactivity perceptions

To our knowledge, there is no research that has investigated the influence of demographic variables on interactivity perceptions of brand websites. However, a study of Sohn and Lee (2005) might give us some insight. Sohn and Lee (2005) measured the perceptions of interactivity of the World Wide Web in general and related this to participants’ age. Results showed that age had no influence of the

perceived interactivity dimensions. In our study we will investigate the influence of the demographic variables age, sex, and whether or not the participants were students.

2.2.2 Experience variables influencing interactivity perceptions

The influence of experience variables is somewhat more explored in the interactivity literature. Jee and Lee (2002) tested the influence of internet skills and challenges, and online shopping experience, but the results of their preliminary study, employing only three websites, did not show any significant correlations. Also Liu (2003) and Chung and Zhao (2004) were not able to show a correlation between the level of internet experience of the participants and interactivity perceptions. Finally, Sohn and Lee (2005) related participants' time spent in using the internet to their interactivity perceptions of the internet and showed a significant correlation on only one dimension of their perceived interactivity scale: the participants' perceptions of the efficacy of the internet for communicating with others. Because Song and Zinkhan (2008) stated that internet experience would influence perceived interactivity, we test the influence of experience variables once again.

2.2.3 Familiarity variables influencing interactivity perceptions

To our knowledge, the influence of familiarity variables like usage of the brand displayed on the website or the frequency of earlier website visits on interactivity perceptions was never tested. From related research in the advertising field we know however, that such variables influence consumers' responses to advertising stimuli (Campbell and Keller 2003). In our study, we will therefore investigate the influence of such variables.

2.2.4 Evaluation variables influencing interactivity perceptions

In the interactivity literature it is generally assumed that perceived interactivity has an effect on evaluation measures like attitude toward the website and the brand. Although this line of reasoning represents the dominant approach in the literature on interactivity effects (e.g., Jee and Lee 2002; Liu and Shrum 2002; McMillan and Hwang 2002; McMillan, Hwang, and Lee 2003), it could also be that website and brand evaluations are determinants of perceived interactivity

instead of consequences. So, probably interactivity perceptions are influenced by the evaluation of the brand and the website. Our study we will be a preliminary effort to test this assumption.

To summarize, earlier studies have not thoroughly focused on personal factors influencing interactivity perceptions. We will investigate the influence of four types of person characteristics on the three dimensions of perceived interactivity; two-way communication; synchronicity, and active control.

3 Method

3.1 Stimulus material

Because we want to investigate the level of perceived interactivity of top global brand website, a list of the top 100 global brands (Business Week, 2007) was used to select the websites in our study. As the study was conducted in the Netherlands, only brands that had an operating Dutch-language website were selected. In addition, search engine websites, online auction sites (e.g. Ebay) and websites of brands that only exist on the internet (e.g. Amazon) were removed from the sample, because these websites do not fit our definition of brand websites which are defined as business to consumer websites that have persuasion as the most important goal (Voorveld, Neijens and Smit 2009b). This selection resulted in 65 websites. Table 1 lists the brand websites that were analysed in this survey.

3.2 Participants and procedure

The 65 brand websites were used as stimulus material in the survey. 331 respondents (72.2% women) participated in the survey. Participants were asked to browse a website for about five minutes as if they would like to know more about the brand and its products. After browsing a website, participants filled in the questionnaire. Participants browsed between one and three websites. Websites were randomly selected from the list of 65 websites. In total, 715 evaluations were completed, which resulted in about 11 evaluations per website.

3.3 Measures

The dependent variables of our study were the three dimensions of perceived interactivity; two-way communication, synchronicity, and active control. The

independent variables were the demographic, experience, familiarity and evaluation variables.

3.3.1 Perceived interactivity

Eleven items of the scale of Liu (2003), and Song and Zinkhan (2008) were used to measure the three dimensions of perceived interactivity. To verify the underlying structure of these items, an hierarchical factor analysis was performed. The results of this analysis will be described in the results section.

3.3.2 Two-way communication dimension of perceived interactivity

Two way communication was assessed with four items of Liu (2003) and Song and Zinkhan (2008). Items included: “The website enables conversation”, “The website facilitates two-way communications between the visitors and the site”, “It is not difficult to offer feedback to the site”, and “The website makes me feel it wants to listen to its visitors”. Response categories ranged from 1 (*strongly disagree*) to 7 (*strongly agree*).

3.3.3 Synchronicity dimension of perceived interactivity

Synchronicity was measured with three items of Liu (2003) and Song and Zinkhan (2008). Items included: “The website processes my input very quickly”, “I was able to obtain the information I want without any delay”, and “The website was very fast in responding to my feedback”. Response categories ranged from 1 (*strongly disagree*) to 7 (*strongly agree*).

3.3.4 Active control dimension of perceived interactivity

Active control was measured with four items of Liu (2003) and Song and Zinkhan (2008). Items included: “While I was on the site, I could choose freely what I wanted to see”, “While I was on the site, I was always aware where I was”, “While I was on the site, I always knew where I was going”, and “I feel that I have a great deal of control over my visiting experience at this site”. Response categories ranged from 1 (*strongly disagree*) to 7 (*strongly agree*).

3.3.5 Intuitive interactivity perception

Participants' intuitive interactivity perception was measured with one item from Johnson, Bruner II and Kumar (2006). "The website was interactive" ($M = 4.09$, $SD = 1.53$).

3.3.6 Demographic variables

Participants' age and sex were measured. In addition, we asked whether the participant was a student or not.

3.3.7 Experience with the internet

Participants' internet experience, online shopping experience, and whether participants are often looking for information about brands on the internet were measured to assess their influence on interactivity perceptions.

3.3.8 Familiarity with the website and the brand

The following variables were measured to assess their influence on the perceived interactivity scales: time spent on the website, frequency of earlier visits, and usage of the brand.

3.3.9 Evaluation of the website and the brand

Participants were asked to evaluate the website and the brand by giving an overall judgment, on a scale from 1 (very negative) to 10 (= very positive), which is a common evaluation measure in the Netherlands.

4 Results

4.1 *The underlying structure of the perceived interactivity construct*

To detect the underlying structure of the perceived interactivity items and dimensions, hierarchical factor analysis was conducted. "Hierarchical factor analysis

seeks to differentiate higher-order factors from a set of correlated lower-order factors” (Garson 1998). Hierarchical factor analysis is a two step process. In the first step, an oblique factor analysis, that allows correlation between the factors, is conducted on the items. In this step, the three dimensions that were distinguished in the literature were empirically verified in an exploratory factor analysis with promax rotation that explained 74.58% of the variance. The three first-order factors were: two-way communication ($EV = 4.01$; $R^2 = .48$; Cronbach’s alpha = .89), synchronicity ($EV = 3.90$; $R^2 = .16$; Cronbach’s alpha = .84), and active control ($EV = 3.67$; $R^2 = .11$; Cronbach’s alpha = .86). One score for each dimension was obtained by calculating the mean of the items representing the dimension (Two-way communication: $M = 3.68$, $SD = 1.26$; Synchronicity: $M = 4.76$, $SD = 1.27$; Active control: $M = 4.88$, $SD = 1.29$). Because the first step of the hierarchical factor analysis showed that the three interactivity dimensions were correlated, we need to extract higher order factors (Thompson 2004; Gorsuch 1983). To obtain higher-order factors from the correlated set of lower-order factors, the factor scores of the first step were used as input in a second orthogonal factor analysis (Garson 1998). This analysis showed that all first-order factors loaded on one higher-order factor ($EV = 1.90$; $R^2 = .63$). In this way perceived interactivity is modelled as a second-order latent construct. Our results resemble the structure of the 15-item instrument for measuring interactivity by Liu (2003). One score for overall perceived interactivity was obtained by calculating the mean of the scores on the three dimensions ($M = 4.41$, $SD = 1.02$).

4.2 Correlation between theoretically based and intuitive based perceived interactivity scores

In the literature two main traditions of measuring perceived interactivity exist. Some researchers simply asked consumers how interactive a website is in their opinion (Johnson, Bruner II, and Kumar, 2006). Other researchers used a multi-item scale representing the multidimensional nature of the interactivity construct (e.g., Liu 2003; Song and Zinkhan 2008; McMillan and Hwang 2002). To see whether the simple question to what extent a website is interactive predicted the score on the perceived interactivity scale, we tested the correlation between the theoretically based interactivity score and the intuitive interactivity perception. The analysis revealed that there was a significant correlation between the two perceived interactivity scores ($r = .49$, $p < .001$).

To see how the intuitive perceived interactivity score is predicted by the three theoretical dimensions, we regressed the scores for the three dimensions on the intuitive perceived interactivity score. The analysis showed that scores for

the two-way communication and the synchronicity dimension significantly predicted the scores on the intuitive perceived interactivity measure (respectively $\beta = .45$, $p < .001$ and $\beta = .10$, $p < .01$). However, the active control dimension only marginally predicted the intuitive perceived interactivity measure ($\beta = .07$, $p = .08$). Thus, the active control dimension is underrepresented in the intuitive perceived interactivity measure. To guarantee the theoretical contribution of our study we will use the theoretically based perceived interactivity scores in the subsequent analyses.

4.3 Level of perceived interactivity

To gain some more insight into the perceived interactivity levels of the brand websites investigated in this study, perceived interactivity scores were calculated for every website. We then calculated a rank score for every website (see Table 1). For example, the website of IKEA was perceived as most interactive, and thus received a rank score of 1. The websites of Nintendo, Nivea, Canon, and UPS were also perceived as very interactive. These websites were perceived as interactive on all three dimensions of interactivity, but especially concerning the synchronicity and the active control dimension. On the other hand, the websites of Disney, JP Morgan, Kodak, Allianz, and ING were perceived as the least interactive. These websites were rated very low on the two-way communication and the synchronicity dimension, and scored around the midpoint of the scale on the control dimension

Table 1: Brand websites in this study with their interactivity ranking

IKEA (1)	Siemens (18)	Toyota (35)	BP (52)
Nintendo (2)	IBM (19)	Kleenex (36)	General Electric (53)
Nivea (3)	American Express (20)	L'Oréal (37)	McDonalds (54)
Canon (4)	Honda (21)	Philips (38)	Kraft (55)
UPS (5)	Nescafe (22)	Colgate (39)	KFC (56)
LG (6)	SAP (23)	Johnson & Johnson (40)	Nissan (57)

Volkswagen (7)	Coca Cola (24)	Harley-Davidson (41)	Ralph Lauren (58)
Duracell (8)	Apple (25)	Porsche (42)	Hertz (59)
Mercedes Benz (9)	Sony (26)	Accenture (43)	Xerox (60)
Panasonic (10)	Kellogg's (27)	Pizzahut (44)	Disney (61)
Audi (11)	Smirnoff (28)	HP (45)	JP Morgan (62)
Dell (12)	Nestle (29)	Hermès (46)	Kodak (63)
Wrigley (13)	Microsoft (30)	Pepsi (47)	Allianz (64)
Nokia (14)	MTV (31)	Cisco (48)	ING (65)
Shell (15)	Hyundai (32)	Samsung (49)	
BMW (16)	Danone (33)	Ford (50)	
Caterpillar (17)	Motorola (34)	Lexus (51)	

Note. The number between brackets is the ranking based on the overall perceived interactivity score.

4.4 *Personal determinants of perceived interactivity*

To see whether we could detect some personal variables that influence interactivity perceptions, we calculated correlations between such variables and the three interactivity dimensions, two-way communication, synchronicity, and active control, and an overall perceived interactivity score. The correlations can be found in Table 2.

4.4.1 Demographic variables influencing interactivity perceptions

First, we tested whether the demographic variables sex, age and whether the participant was a student or not affected interactivity perceptions (see Table 2). No differences were found between males and females and between students and non-students. However, we found a negative correlation between participants'

age and their interactivity perceptions. This significant correlation was found for all three interactivity dimensions, active control, synchronicity and two-way communication, and obviously also for the overall perceived interactivity score. The study showed that older participants perceived lower levels of interactivity than younger ones. Although this result is probably a little counterintuitive, a plausible explanation is existent. According to Liu and Shrum (2002) interactive features on a website are only able to influence consumers' interactivity perceptions when consumers are actually using the interactive website features. It could be that the older participants have used only a small part of the interactive possibilities on a website, for example only the interactive features displayed on the homepage, and therefore did not perceive a high level of interactivity. Future research should investigate the validity of this explanation.

Table 2: Demographic factors influencing interactivity perceptions

<i>Dependent variables/ Independent variables</i>	<i>Active control</i>	<i>Synchronity</i>	<i>Two-way communication</i>	<i>Overall perceived interactivity</i>
	<i>r</i>	<i>r</i>	<i>r</i>	<i>r</i>
Sex (Dummy coded)	.03	.02	.06	.04
Age	-.09*	-.11**	-.08*	-.12**
Student (Dummy coded)	.01	-.07	.01	-.02

* = $p < .05$, ** = $p < .01$, *** = $p < .001$, all two-tailed.

4.4.2 Experience variables influencing interactivity perceptions

Second, we investigated whether participants' experience with the internet affected interactivity perceptions. No significant correlations were found between participants' internet experience, their online shopping experience or whether participants often browsed the internet for searching information about brands and the perceived interactivity scores. These results were found for all three interactivity dimensions and the overall perceived interactivity score (see Table 3). So these variables could not have influenced interactivity perceptions.

Table 3: Experience variables influencing interactivity perceptions

<i>Dependent variable/ Independent variables</i>	<i>Active control</i>	<i>Synchrony</i>	<i>Two-way communication</i>	<i>Overall perceived interactivity</i>
	<i>r</i>	<i>r</i>	<i>r</i>	<i>r</i>
Internet experience	.03	.02	-.01	.02
Online shopping experience	.06	.04	.05	.06
Online brand information experience	.06	.05	-.01	.04

* = $p < .05$, ** = $p < .01$, *** = $p < .001$, all two-tailed.

4.4.3 Familiarity variables influencing interactivity perceptions

Third, we examined whether background variables related to the website visit influenced interactivity perceptions (see Table 4). Again, no significant correlations were found between the time participants spent on the website or their frequency of earlier visits to the website and the perceived interactivity scores. However, usage of the brand was positively related to interactivity perceptions. When participants used the brand, they perceived the website as more interactive.

Table 4: Familiarity variables influencing interactivity perceptions

<i>Dependent variables/ Independent variables</i>	<i>Active control</i>	<i>Synchrony</i>	<i>Two-way communication</i>	<i>Overall perceived interactivity</i>
	<i>r</i>	<i>r</i>	<i>r</i>	<i>r</i>
Time on website	.01	.00	-.04	-.01
Frequency of earlier visits	.05	.02	.07	.06
Usage of the brand	.08*	.08*	.12**	.12**

* = $p < .05$, ** = $p < .01$, *** = $p < .001$, all two-tailed.

4.4.4 Evaluation variables influencing interactivity perceptions

Finally, we tested whether participants' evaluation of the website and the brand were correlated with the perceived interactivity scores. Now, a significant correlation was found between the evaluation of the websites and the perceived interactivity scores (see Table 5), as well as between evaluation of the brands and perceived interactivity. Thus, participants who were positive about the website and the brand also perceived high levels of interactivity.

Unfortunately, from these results we can not draw conclusions about the direction of these relationships. Two explanations for the significant correlations can be found. First, it could be that a positive evaluation of the website or the brand has affected interactivity perceptions. Second, it could also be that interactivity perceptions have affected the evaluation of the brand and the website.

Even though a final answer has to come from future research, there is an indication that the evaluation of the website and the brand affected interactivity perceptions. Earlier we showed that whether participants use the brands in question was correlated to interactivity perceptions, in a way that users of the brand perceived more interactivity than non-users. Therefore, we tested the correlation between the evaluations and perceived interactivity while controlling for brand usage. The correlation remained significant after controlling for brand usage (attitude toward the website: $r = .59, p < .001$; attitude toward the brand: $r = .40, p < .001$), which strengthens our explanation that evaluations are a determinant of perceived interactivity, instead of a consequence.

Table 5: Evaluation variables influencing interactivity perceptions

<i>Dependent variables/ Independent variables</i>	<i>Active control</i>	<i>Synchrony</i>	<i>Two-way communication</i>	<i>Overall perceived interactivity</i>
	<i>r</i>	<i>r</i>	<i>r</i>	<i>r</i>
Attitude toward the website	.60 ***	.47***	.37***	.60***
Attitude toward the brand	.39***	.32***	.29***	.41***

* = $p < .05$, ** = $p < .01$, *** = $p < .001$, all two-tailed.

5 Conclusion and discussion

The first aim of this study was to give an overview of the level of perceived interactivity of top global brand websites. Using a large scale survey in which the perceived interactivity of 65 top global brand websites was investigated, our study showed that the websites of IKEA, Nintendo, and Nivea were perceived as most interactive, while the websites of Kodak, Allianz, and ING were perceived as the least interactive.

The second aim of our study was to give insight in the personal determinants of perceived interactivity. Results showed that four factors influenced interactivity perceptions consistently over all interactivity dimensions: age, usage of the brand, attitude toward the website, and attitude toward the brand.

The study was the first that reported a large-scale survey in which numerous websites were shown to a large amount of participants who reported their interactivity perceptions. By doing so, the study successfully extends our theoretical knowledge on interactivity. One important theoretical implication is the absence of a relationship between consumers experience with the internet, online shopping, and online brand information. Whereas several researchers (Song and Zinkhan 2008; Chung and Zhao 2004) expected that experience was related to interactivity perceptions, our study confirms the fact that experience is not influencing interactivity perceptions, which is in agreement with the findings of Jee and Lee (2002) and Liu (2003). We should however note that in general our participants had high levels of experience with the internet and online shopping. A second theoretical implication is that usage of the brand was clearly related to perceived interactivity, which emphasizes the importance of measuring this variable in future research, for example for inclusion as a control variable.

Future research should focus on the direction of the relationship between website or brand evaluations and interactivity perceptions. The dominant approach in interactivity research to date is that positive website and brand evaluations are a consequence of perceived interactivity, and not a cause. However, the current study gave a first indication that this relationship could probably be reciprocal. Experiments or longitudinal research could give a definite answer to this issue.

Given the limited number of factors affecting interactivity perceptions of the top global websites, in the future it would be interesting to investigate the influence of brand image on interactivity perceptions. It could be that all brands have somewhat superior brand images, because only top global brands were used in our study. These superior brand images could have influenced interactivity perceptions and thereby could have caused the low number of significant interactivity predictors. As our study already gave some indications that brand evalua-

tions are able to affect interactivity perceptions, future research could replicate this study using a random sample of brands.

It would also be interesting to combine a survey in which the perceived interactivity of websites is measured with a content analysis in which the objectively assessed interactivity of the websites is measured or the interactive behaviour of the participants is registered. By doing so, we can further explore the relation between actual and perceived interactivity, and verify the expectations of Song and Zinkhan (2008: 109) that "simply adding [interactive] features does not guarantee a high level of [perceived] interactivity".

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Developing a Classification of Motivations for Consumers' Online Brand-Related Activities¹

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1 Introduction

With the advance of new and highly interactive media technologies, internet users have become active seekers and producers of content (Livingstone, 2004). Social media provide internet users with unparalleled opportunities and completely different ways to interact. Myriad so-called social media platforms, popular examples of which are YouTube, Facebook and Epinions, facilitate a multitude of online activities based on communicating, interacting, expressing, sharing, creating, and publishing user-generated content about anything, including brands (Hawkes and Gibbon 2008). For instance, people watch videos on Absolut Wodka's YouTube channel, talk about IKEA on Twitter, or upload pictures of their new Converse sneakers to Facebook.

COBRAs have dramatically altered consumer behavior (e.g., Mangold and Faulds 2009). Li and Bernoff (2008: 9) describe this development as "a social trend in which people use technologies to get the things they need from each other, rather than from traditional institutions like corporations." Consumers' Online Brand-Related Activities (here coined and further referred to as "COBRAs") have important consequences for present-day marketing, and may play a fundamental role in future marketing. For brand managers to tap into these consequences, it is therefore imperative that they have a superior understanding of why people engage in COBRAs (Stewart and Pavlou 2002). This study therefore focuses on motivations. Being the key antecedents of behavior (Assael 1998; Joinson 2003), motivations are the internal and external incentives that drive people's selection, use, and interpretation of media and media content (Rubin

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2002). However, little research has to date investigated the motivational sources of COBRAs (cf. Arnhold and Burmann 2009; Hoppe and Terluttler 2009). This study therefore aims to gain a holistic understanding of peoples' motivations to engage in such social media based brand-related behaviors.

2 Social media and uses & gratifications

As a framework for investigating people's motivations for engaging in COBRAs, this study adopts a Uses and Gratifications (U&G) approach. U&G asserts that people use media for many different purposes and that their inner desires, needs or wants are linked to their media choices. It assumes that people are autonomous and goal-directed in their behaviors, and actively seek and use media to fulfill certain perceived cognitive and affective gratifications (Katz et al. 1974; McQuail 2005). The emergence of the internet has seen a revival of interest in U&G (e.g., Morris and Ogan 1996; Newhagen and Rafaeli 1996; Ruggiero 2000). Social media applications allow people to become fully in charge of their online behaviors and experiences (c.f. Livingstone 2004; Daugherty et al. 2008). This active, autonomous, goal-orientated use of social media fits well with the assumptions of U&G. Moreover, because U&G covers a wide range of motivational dimensions that can explain the satisfactions related to the use of countless media types, it typically is a model of consumer choice of new media innovations (Lin 2002; Ruggiero 2000; Stafford et al. 2004). Consequently, it is also well-suited to explore the motivations for the innovative, brand-related social media-based behaviors at issue. Furthermore, the social media trend is really not about technology. Social media are about the "the fundamental change in behavior now happening online" (Li and Bernoff 2008: 9) that is facilitated by new media technologies. This approach fits well with U&G, which focuses on an individual using a medium, rather than on an individual adopting the underlying – often transitory – technology (Katz et al. 1974; Ruggiero 2000; Stafford et al. 2004).

2.1 Social media motivation types

In order to generate an overview of all known social media use motivations, we first conducted an extended literature review of a decade of regular and brand-related social media motivations literature². As the identified motivations gener-

2 The extended literature review of a decade (1999-2009) of both regular and brand-related social media motivations studies is available at request.

ally display many different names and operational definitions, we used McQuail's (1987: 73) much-cited typology of common motivations for using media as a template for categorizing them. McQuail discerns the motivation types *information*, *personal identity*, *integration and social interaction*, and *entertainment*. Because there is "a fairly stable and consistent structure of demand" (McQuail 2005: 410) with regard to using media, including the internet (Flanagin and Metzger 2001), we assume this typology to be well applicable to the categorizing of (brand-related) social media use motivations. Based on our literature review we add two more social media motivation types: *remuneration* and *empowerment*. The eventual six social media motivation types usually cover several second-order motivations - here referred to as sub-motivations. All (sub)motivation types are briefly discussed below.

Information: Based on McQuail's (1987) description, the information motivation type generally covers three sub-motivations: finding out about what is happening in someone's direct daily environment (*surveillance*), seeking advice and opinions and satisfying curiosity and interest (*knowledge*), and risk reduction through gaining pre-purchase information (*pre-purchase information*).

Personal identity: In this study, the personal identity motivation type involves three sub-motivations: expressing one's self (*self-expression*), presenting one's self (*self-presentation*), and gaining recognition and self-assurance (*self-assurance*).

Integration and social interaction: McQuail's (1987) divides his integration and social interaction motivation type into four sub-motivations: conversation and social interaction (*social interaction*), seeking and providing support and advice (*helping*), identification with others and belonging to a group (what McQuail refers to as integration; here dubbed *social identity*), and engaging in social media use because others do it (*social pressure*).

Entertainment: In line with McQuail's (1987) typology, the entertainment motivation can be divided into four sub-motivations: engaging in an activity because it is pleasurable (*enjoyment*), because it brings relaxation (*relaxation*), because it facilitates escaping reality (*escapism*), and because it facilitates passing time and escaping from boredom (*pastime*).

Remuneration: In social media motivations research, remuneration as a motivation type usually involves people consuming, contributing to, or creating brand-related content because they expect to gain any kind of future rewards - be it economic incentives (e.g., money or a present), job-related benefits (e.g., career prospects) or personal wants (e.g., specific software).

Empowerment: As a motivation type, empowerment involves people using social media to exert their influence or power on other people or companies, for

instance through writing online consumer reviews or “enforcing service excellence” (Wang and Fesenmaier 2003: 37).

3 A COBRA typology

COBRAs cover a wide range of online behaviors centered around brand-related content that vary between and within individuals. To facilitate the exploration of COBRA motivations, we organized brand-related behaviors into a typology. Drawing on Li and Bernoff’s (2008) typology of social media users and Shao’s (2009) typology of social media usage, we propose a typology of three COBRA types based on gradually increasing activity: consuming, contributing and creating (see Figure 1). In the following section we provide a detailed description of each COBRA type.

Level of brand-related activeness	Consuming	<ul style="list-style-type: none"> • Viewing brand-related video • Listening to brand-related audio • Watching brand-related pictures • Following threads on online brand community forums • Reading comments on brand profiles on social network sites • Reading product reviews • Playing branded online videogames • Downloading branded widgets • Sending branded virtual gifts/cards
	Contributing	<ul style="list-style-type: none"> • Rating products and/or brands • Joining a brand profile on a social network site • Engaging in branded conversations, e.g. on online brand community forums or social network sites • Commenting on brand-related weblogs, video, audio, pictures, etc.
	Creating	<ul style="list-style-type: none"> • Publishing a brand-related weblog • Uploading brand-related video, audio, pictures or images • Writing brand-related articles • Writing product reviews

Figure 1: COBRA typology as a continuum of three usage types: consuming, contributing, and creating

3.1 Consuming

Consuming is a contraction of Li and Bernoff's (2008) spectators group and Shao's (2009) consuming usage type. It represents a minimum level of online brand activity and denotes participating without actively contributing or creating content. Consumers view the brand videos others create, study the product ratings and reviews that others post, and read the dialogues between participants of online brand community forums. Studies on the motivations for consuming brand-related content have primarily focused on motivations for reading consumer reviews (Goldsmith and Horowitz 2006; Hennig-Thurau and Walsh 2003; Schindler and Bickart 2005).

3.2 Contributing

Contributing is a contraction of Li and Bernoff's (2008) user groups joiners and collectors, and Shao's (2009) participating usage type. It denotes both user-to-content and user-to-user interactions. People who contribute to brand-related content discuss with others on a brand's profile on a social network site, make contributions to brand forums, comment on blogs and any other brand-related content others have created. In addition, they download branded widgets, play branded games, and send branded virtual gifts. The few studies on motivations for contributing to brand-related content solely focus on the motivations to contribute to online brand communities (Jeppesen and Frederiksen 2006; Hsu and Liao 2007; Popp et al. 2008).

3.3 Creating

Creating represents the ultimate level of online brand activity. It denotes actively producing and publishing the 'branded' content others read, use, play or comment on: writing a brand blog, posting product reviews, creating and/or uploading branded videos, music and pictures, or writing articles on brands.

Three studies investigated the motivations for creating brand-related content. Hennig-Thurau et al. (2004) and Bronner and De Hoog (in press) explored consumers' motivations for writing product reviews, and Berthon et al. (2008) investigated motivations to create user-generated advertisements.

4 Method

4.1 Interviewing via Instant Messaging (IM)

As this study is a first effort to thoroughly explore COBRAs' motivational sources, we use online interviews to uncover the motivations driving COBRAs; these allow us to reveal "the reasons behind the reasons" (Gengler *et al.* 1999: 75) of brand-related social media use, and gain in-depth, holistic and possibly new insights into the motivations for consuming, contributing to, and creating brand-related content.

IM is a text-based chat that enables the synchronous exchange of messages and is easy to use. It is convenient through the automatic transcription of the interviews, and interviewees do not have to leave their homes or offices. Moreover, the physical distance between the interviewer and the interviewee prevents social desirability biases. It also encourages people to reveal more personal information and express themselves uninhibitedly, where they often freeze up in face-to-face contexts (O'Connor and Madge 2003; Gruber *et al.* 2008).

We conducted a pilot study ($N = 5$) to test our IM application and develop an effective interview protocol. The interviewees (three females, two males, $M_{\text{age}} = 31$, $SD = 8.12$) had little trouble verbalizing their motivations. When asked in a face-to-face setting following the pilot interviews, they indicated that the IM module was easy to operate and encouraged them to answer comfortably, elaborately, and without any reserve. In addition, all positively valued both the interviewing method and the way the interviews were set up and carried out.

4.2 Data collection

Participants were recruited in The Netherlands, which has one of the highest internet penetration rates in the world (82.9%³) and hosts many regularly used social media venues. We recruited interviewees from a wide variety of social media venues, representing different age and gender categories, and engaged with a wide variety of brands. To avoid the necessity of parental consent we set the minimum age limit at 16. We posted invitations and actively approached participants on several brand-related Dutch social media venues, offering the prospect of winning a € 25 incentive. To ensure that we dealt with the latest COBRAs possible, we only selected venues with the most recent activity being shown no later than fourteen days prior to the start of the data collection. Ulti-

33 World internet usage and population statistics, available at: <http://www.internetworldstats.com/stats.htm> (accessed 13 January, 2009).

mately, we interviewed people engaged with social media sites such as brand profiles on social network sites, online brand communities, customer review sites, and brand-related weblogs.

When people agreed to take part in our research project we made appointments to meet each other online. At the arranged date and time participants went to the website that housed the IM module, where they first saw a picture of the interviewer alongside a brief exposé of the research. In order to avoid possible bias, we did not mention the exact purpose of the interview. After filling in their names, they entered the virtual interview room and the interview began. All interviewees engaged in more than one COBRA. For instance, people primarily consuming brand-related content occasionally create brand-related content too, and vice versa. Consequently, a single interview always yields statements on more than one COBRA type. The results of each COBRA type are therefore based on data generated from all interviews. We interviewed just as many people as were necessary for no more new motivations to come up. We then decided that no additional interviews were needed (cf. Gruber et al. 2008). The interviews that provided the final data were conducted between April 1 and June 11 2009. We interviewed twenty people aged between 16 and 47 (45% female, 55% male, $M_{\text{age}} = 28.10$, $SD = 9.09$). The interviews ranged in length between 45 and 90 minutes.

4.3 Coding procedure

Two coders individually tracked all original interview transcripts on motivational statements. Motivational statements can be found in a single word, a (fragment of) a sentence, or an entire paragraph. As one coder was unfamiliar with the motivations literature and the research's framework a priori, the coding procedure was objective and data-driven. Statements were coded following Miles and Huberman's (1994) approach. As a template to code the motivations derived from the interviews, we used descriptions of McQuail's (1987) earlier mentioned typology of common motivations for using media, complemented with the two motivation types obtained through our extensive literature review. When statements contained motivations that did not fit with any of the motivations derived from literature, these were coded as new. Statements that displayed more than one motivation were coded twice – and sometimes thrice. After having coded all the interviews, the coders discussed the motivations. Coding disagreements were jointly resolved, and coders eventually reached full agreement on all coding decisions.

5 Results and conclusion

Consumers' online brand-related activities (COBRAs) are of ever growing importance to firms, brands and modern-day marketing efforts. It is therefore imperative to grasp the motivational drivers of these new forms of online, social media-based consumer behavior. However, a holistic understanding of people's motivations to engage in COBRAs to date remained absent. Using IM-based interviews, we therefore explored the motivational sources of a continuum of three COBRA types: consuming, contributing to, and creating. Because we aimed to connect specific, brand-related, social media uses to specific gratifications, we adopted a Uses & Gratifications perspective. We thereby partly drew upon McQuail's (1987) typology of common motivations for media use. Our most significant and unique contribution is the holistic, in-depth empirical understanding of brand-related social media use. The next sections display our most important findings.

5.1 Consuming brand-related content

We find that the COBRA type with the lowest level of brand activeness, consuming, is predominantly driven by information-related motivations. Online, people search for the technical specifications of a Volkswagen car, scrutinize Adidas' latest shoe collection, read Zwitsal usage experiences or check which events and parties Bacardi is organizing. Information covers four significant sub-motivations: *surveillance*, *knowledge*, *pre-purchase information*, and *inspiration*. Surveillance is the largest sub-motivation. By consuming brand-related content, people thus observe their brand-related (social) environment: what's new, what's going on, what's "hip and happening" and what do others do with, or think of a certain brand? Remuneration is present within this COBRA type, but appears to play a minor role. The personal identity, integration and social interaction, and empowerment motivations are completely absent.

5.2 Contributing to brand-related content

Conversely, information-related and remuneration motivations are equally absent for the COBRA types with a higher level of brand activeness, contributing and creating. Contributing is dominated by the integration and social interaction motivation, which covers three major sub-motivations: *social interaction*, *helping*, and *social identity*. Social interaction is the first and largest within the moti-

vational distribution. People contribute to brand-related social media venues to meet, interact and talk with like-minded others about a particular brand. In fact, interviewed members of virtual brand communities repeatedly mentioned having started off long-lasting friendships with the brand as common denominator. Helping refers to contributing to brand-related content to help, and get help from others. For instance, people ask other “brand fans” all sorts of brand-related questions – where’s that Converse store located, what’s your favorite Ben & Jerry’s flavor, how can I solve this problem with my Volkswagen? Such a common passion for a brand can also make people feel strongly connected towards one another and generates a bond. This social identity makes people “note a critical demarcation between users of their brand and users of other brands” (Muñiz and O’Guinn 2001: 48). As one interviewee (male, 39) aptly expresses, “(...) VW diesel engine-lovers are just a different sort of people.”

5.3 *Creating brand-related content*

Creating is the COBRA type that requires the highest level of brand activeness, and is dominated by personal identity, which encompasses several self- and identity-related motivations. Personal identity covers *self-expression*, *self-assurance*, and *self-presentation*. As an illustration of the self-expression sub-motivation, one interviewee (male, 20) writes reviews to express his own identity as a Nintendo brand lover: “Nintendo is everything to me”. Another interviewee (male, 17) gains self-assurance by uploading the brand-related pictures he crafts: “I always like it when someone sends me a message saying something like: nice pictures you’ve got there!” Yet another interviewee (female, 20) uploaded a picture of a Puma-tattoo she had placed on her belly to show off, impress others, and present herself as the “biggest living Puma-fan.”

5.4 *Entertainment as a driver of consuming, contributing, and creating*

Remarkably, the entertainment motivation is found to be present in the consuming, contributing, and creating COBRA types. Although it is considerably more present within the consuming type compared to both of the other COBRA types, we can safely conclude that all brand-related social media use is to some extent driven by enjoyment, relaxation, or passing time. Moreover, throughout all COBRA types entertainment is interpreted in the exact same manner: it covers consuming, contributing to and creating brand-related content for reasons of *enjoy-*

ment, relaxation, or pastime. Escapism, on the other hand, remains absent throughout all COBRA types.

6 Implications

This study provides an in-depth understanding of the motivational differences between consuming, contributing to, and creating brand-related content, and of the distribution of motivations within each COBRA type. Such holistic understanding enables brand managers to effectively direct brand-related social media use and evoke the desired gratifications and subsequent effects.

Consuming brand-related content is mainly driven by information-related motivations such as surveillance, knowledge and pre-purchase information. In order to direct consuming-related social media behavior such as watching brand-related YouTube videos or reading consumer reviews, marketers should provide consumers with social media content that has a focus on information about their brand-related (social) environment, and practically applicable information on brands, rather than focussing on entertaining content only.

People tend to contribute to brand-related content primarily to engage in conversations with, and advise and assist like-minded others. Marketers and brand-managers aiming to encourage people to contribute to brand-related social media use should therefore primarily facilitate interaction. Although other motivations do also occur within this COBRA, responding to these may not, or to a lesser extent, generate the desired effects.

Creating brand-related social media content is primarily driven by personal identity. People engaged in creating such brand-related social media content as pictures featuring a brand, writing consumer reviews or uploading brand-related videos principally do so to express themselves, influence others and gain self-assurance through other people's recognition and appreciation. Marketers and brand-managers should bear in mind that in order to encourage the creation of brand-related content, they should primarily enable people to express themselves, rather than to facilitate social interaction.

7 Limitations and future research directions

Since it is hard to keep track of exposure patterns through observation, U&G research usually relies heavily on self-reports (Ruggiero 2000). But self-reports are based on the interviewee's personal memory, and people usually do not consciously think of, let alone reflect upon, such innate mechanisms as motivations.

As McQuail (1987: 73) states, motivations “are often recognizable to a media user without being easily expressible”. Interviewees, it is often thought, therefore may experience difficulties articulating their motivations. However, we experienced little evidence of such difficulties with current self-reports. All interviewees generally proved willing and well-able to reflect upon and articulate their motivations. The lack of visual cues, the familiarity of the own home or office and the fact that people engaging in social media use are almost by definition familiar with instant messaging; all encouraged people to speak their minds freely and without the restrictions of face-to-face interviewing.

Interviewing a relatively small sample of people engaging in COBRAs enabled us to methodically and thoroughly explore their motivations to do so. As a result, we gained in-depth, valuable insights into, and a comprehensive overview of the motivational sources driving brand-related social media use. Future research requires quantifying these motivations, and several additional research questions following directly from the current study. For instance, we remain unaware as to what characterizes those people engaging in COBRAs. Are they predominantly male or female? Do higher educated people contribute more to brand-related content than people with a lower education? And are younger people more inclined to create brand-related content, whereas older people tend to consume more? Secondly, our study does not make distinctions according to (types of) brands. As far as we can make out, all brands account for the same motivations and COBRAs, and benefit equally from their consumers' brand-related social media use. However, it is unclear whether this is actually the case. FMCG brands may or may not incite the same COBRAs as service brands, and on an individual brand level there may be differences through brand values and brand personalities. Future research requires quantitative investigation of such differences between brands accounting for differences between motivations, COBRAs, and effects.

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Making Money on eBay by Relieving Risk

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1 Introduction

More and more consumers buy their products online. Consumers do not only conduct their online purchases on typical business-to-consumer websites, online auction websites are becoming a successful phenomenon as well. One of the largest auction sites is eBay, where sellers register their products for sale, and consumers bid on them. There are many incentives for consumers to switch from the traditional bricks-and-mortar store to the Internet for their purchases, such as time convenience and competitive prices. However, online consumers also face some hurdles. A great body of literature demonstrates that online consumers experience various risk concerns regarding the online purchase. These concerns are the main impediment for the growth of electronic commerce. Online marketers seem to acknowledge consumers' risk perceptions and offer several cues on their websites that address specific risk concerns, so-called risk-relieving cues, with the goal to lower the consumers' risk perceptions and finally to increase sales. Not only business-to-consumer websites are catered to consumers risk perceptions, but also online auction websites offer sellers diverse possibilities to address risk concerns of potential buyers. Empirical research on the persuasiveness of risk-relievers is scarce, and mainly focused on the typical online business-to-consumer retail context. However, this research did indicate that in the domain of business-to-consumer websites consumers adopt the strategy to rely on risk-relieving cues (e.g., Jiang, Jones, & Javie, 2008), and that these cues indeed can be effective in reducing risk perceptions and inducing favorable attitudes (e.g., van Noort, Kerkhof, & Fennis, 2008). As online shopping is still perceived as risky it is important to extend our knowledge on risk-relieving cues. There are several lacunae in the body of literature on risk relievers that will be addressed in the current study.

First, in studying the effects of online risk-relieving cues on consumer responses, research is rather limited to experimental designs, in which responses are measured with self-report scales and intentions are used as an indicator for consumer behavior. Of course, these attitudes, risk perceptions, and trust are impor-

tant determinants of behavioral intentions, and intentions are good predictors of actual behavior. However, it is a common observation that individuals do not always act in accordance with their intentions and attitudes. There is sufficient empirical evidence for an attitude-intention gap on the one hand (e.g., Vermeir & Verbeke, 2006) and an intention-behavior gap on the other hand (for an overview of attitude behavior relationships see Glasman and Albarracín, 2006). Therefore, despite recent findings that demonstrated the significant predictive power of attitudes for online consumer behavior (Yang, Lester, & James, 2007), an extension of the findings of the persuasiveness of online risk-relieving cues is desirable, with more explicit dependent variables such as real online purchases or click-through behavior.

Second, prior experimental research was either scenario-based (i.e., using fictitious web sites or fictitious shopping situations) or was using fictitious web sites, which does not allow for examining actual consumer behavior in real-world settings. Therefore, the second aim of this study is to externally validate the persuasiveness of online risk-relieving cues, by using a real-life online purchase setting and by measuring actual buying behavior as a dependent variable.

Third, even though online auctions sites are very popular for both consumers and sellers, research on risk-relieving cues did hardly focus on the online auction market. Ample studies examined factors that affect prices on eBay (e.g., Lucking-Reiley, Bryan, Prasad, & Reeves, 2007). However, despite much interest in auction theory and the great body of empirical studies on online auctions, up to date closing price on eBay is hardly examined from the perspective that features in the online auction relieve consumers' risk concerns and thereby increase prices (Flanagin, 2007). Based on prior findings on risk-relieving cues in the context of business-to-consumer websites, this study argues that the presence of various *types* of risk-relieving cues that are offered on eBay increase actual buying behavior, that is online consumer spending.

Fourth, existing studies on risk-relieving cues generally neglected to study the joint effects of cues. Rather, the effectiveness of single cues was examined. Based on prior effect studies on risk-relieving cues, on the basis of uncertainty reduction theory (Berger, 1979), and multiple source research (e.g., Harkins & Petty, 1981), this study argues that online spending increases with *the amount* of risk-relieving cues presented to the consumer. This study empirically verifies these assumptions, by examining the separate and joint effects of multiple risk-relieving cues, used in an online auction context, on the price paid for an auctioned product.

The structure of the remainder of this paper is as follows. The literature review section first explores the literature on the Internet as an upcoming purchase medium, the advantages for consumers to shop online, and then discusses the

most important disadvantage of online shopping: risk concerns. Then the literature review delves into risk-relieving strategies, and identifies the reliance on risk-relieving cues as a main strategy. Next, research that studies the effects of risk-relieving cues is outlined and hypotheses are formulated on the basis of theory and prior research. The method section describes how this study examines the effects of risk-relieving cues in auctions held at eBay. The results section provides evidence for the notion that displaying multiple risk-relieving cues is more effective. The final sections offer a conclusion in light of both methodological limitations, as well as theoretical and practical implications.

2 Literature review

2.1 Internet looms as a shopping medium

Internet is one of the biggest changes to society during the past decades. The World Wide Web that started as an academic system for sharing information unquestionably evolved into a system that is fully integrated in our day-to-day life. Since its introduction, the popularity of the Internet has been growing at a very rapid pace. Not only has the population of Internet users grown incredibly, the diversity of Internet usage has also increased. Gaming, music sharing, participation in online communities, gambling, it all happens online. Applications for the Internet as a communication tool are most popular, followed by its usage for product-information search and gaming, and for downloading music, images and games (e.g., CBS, 2006). Also, electronic banking is a booming Internet application.

Thus, consumers adopted the Internet for a rich variety of purposes, most notably pre-purchase information search and online shopping. With only a few clicks we can search for information and shop for services and products twenty-four hours a day, seven days a week. The top ten of online purchases did not really change over the years and is approximately as follows: 1) holidays, 2) tickets for events such as concerts, 3) literature (e.g., books and magazines), 4) clothing and sports clothing, 5) movies and music, 6) electronic goods, 7) software, 8) household products such as furniture, washing machines and toys, 9) financial products such as insurances, 10) hardware (e.g., CBS, 2009).

For their online purchases, consumers can go to he typical web shops such as H&M's online store, but more and more consumers buy products on the online marketplace, that is on online auction websites. With 84.5 million active users world wide, eBay (www.eBay.com) is without any doubt the leading on-

line auction site. In 2008, the total worth of goods sold on eBay was \$60 billion (eBay, 2008).

2.2 Incentives to shop online

With the adoption of the Internet as a shopping medium, research on online consumer behavior emerged in diverse fields, such as information systems, psychology and marketing communications. The main objective in early studies was to discover incentives for consumers to switch to the Internet for purchases. These studies showed that compared to traditional bricks-and-mortar shopping advantages of internet shopping are that it saves time and that it makes it easier to seek for and compare information on products, services and prices (e.g., Burke, 1998; Savolainen, 2000). Other important reasons to conduct purchases online are that the Internet provides the possibility to purchase goods that are not available in the region one lives in, but also its competitive pricing (CBS, 2006).

Research on the consumers' incentives to shop online, generally adopted the perspective that advantages of the Internet over the traditional shopping medium are clear-cut to the consumer (Bhatnagar & Ghose, 2004). That consumers indeed acknowledge the advantages of shopping online is reflected in many research reports. These reports indicate that online retail continues to be a nascent market, growing at impressive rates. In 15 European countries, sales through the Internet as a percentage of the total turnover quadrupled from 2002 to 2006 (Eurostat, 2006). Research reports show various estimates of the growth in electronic commerce, but they all show that in the next years online revenues will continue to expand (Forrester, 2006). This is not surprising, since the number of global Internet users is still increasing tremendously not only in Western-Europe and the USA, but also worldwide (see Internet World Stats, 2008). Extensive research on online shopping intentions and the adoption of the Internet as a shopping medium has shown that there are many benefits for consumers to buy online. However, research has also shown that online consumers face a lot of hurdles. This might explain why the number of online buyers does not reach the number of active Internet users, at all (e.g., Blauw Research, 2008).

2.3 Risk perceptions regarding online shopping

The reluctance to purchase products of the Internet is a consequence of the safety and security concerns. Online consumers experience these concerns regarding both online shopping and the online retailer (e.g., BBB, 2001; Blauw Research,

2008). Initially, researchers argued that security consideration would be resolved over time as the Internet becomes safer (Van den Poel & Leunis, 1999), or as consumers become more experienced online shoppers and gain positive online experiences (Miyazaki & Fernandez, 2001). However, in academic research it is demonstrated that these safety and security concerns remain the main obstacle for the growth of electronic commerce (e.g., Hoffman, Novak, & Chatterjee, 1995; Pavlou, 2003; Ranganathan & Ganapathy, 2002). Consumers experience risks regarding the product (will the product meet my expectations upon delivery), the seller (is the online retailer trustworthy), and the payment (is the online payment secure). This study takes on the perspective that online consumers are apprehensive about online shopping, and try to adopt strategies to lower their risk perceptions regarding purchasing online.

2.4 Risk-relieving strategies

In response to the perceived risks that consumers experience when they go about their online shopping, consumers adopt risk-relieving strategies. Risk relievers are defined by Derbaix (1983) as ‘devices or actions used to ally perceived risk’ (p.20). Amongst these strategies are brand loyalty, and product comparison (Derbaix, 1983), but also the reliance on online product reviews. Up to date research on risk-relievers was mainly focused on in-store shopping contexts and for example showed that risk relievers are effective in reducing consumers’ risk perceptions in bricks-and-mortar shopping (e.g., Shimp & Bearden, 1982). As online shopping is perceived as more risky than offline shopping (e.g., Van Noort, Kerkhof, & Fennis, 2007), it is important to understand the persuasiveness of risk relievers in online shopping contexts. Besides, as purchases on online auction sites are increasing it is important to study effects of risk-relieving cues in the context of the online auction market.

To minimize the feelings of risk, many online retailers are experimenting with various risk relievers for consumers. In business-to-consumer websites a prominent tactic is displaying risk-relieving cues on the web sites. For example, online retailers try to show the consumer that a purchase with the online store is safe, by displaying logos as VeriSign, Truste, BBB, and PayPal. These logos are designed to inform the consumer and to promote the retailer. Representations and the underlying content of these logos differs in terms of scope and focus. In general, privacy (i.e., compliance with privacy policies), process (i.e., compliance with standards for internal business standards), and technology (i.e., employment of reliable technologies for order and payment) assurances can be distinguished (Kimery & McCord, 2002).

Not only business-to-consumer websites are catered to the consumers' risk concerns by displaying risk relievers, in online auction websites the consumers' need to relieve risk is also recognized, as argued by several authors (e.g., Brinkmann & Siegert, 2001; Flanagin, 2007). On online auction sites, such as eBay, it is made possible for sellers to address risk concerns of potential buyers in several ways. First of all, eBay features a reputation system that enables users to leave feedback about interactions with each other at completion of the auction. The seller and the buyer can rate each other's performance either positively, negatively or neutrally and leave comments. For potential buyers the reputation scores and these comments give some insight in the performance of the seller, as this information is available prior to the bidding. For them, the reputation system addresses risk concerns regarding the reliability of the seller. Most researchers find that high reputation scores have a positive impact on the price paid, but others cannot find significant effects (see Wood, 2004 for an overview). Other cues that address this type of risk are information on the type of seller, that is whether the seller operates commercially or private, and information on the duration of the seller's membership with the online auction website as longer membership decrease the risk of dealing with an inexperienced seller. Second, sellers are enabled to present the product in a very detailed way, including a product picture. For a potential buyer the presence of a picture, or multiple pictures, of the offered product, reduces product risks. Without product pictures consumers run the risk of buying a product that does not meet one's expectations upon delivery of the product. Furthermore, the seller can address perceived financial risks, by mentioning the shipping costs, which decreases the risk of unexpectedly paying too much, but also by offering a payment system like PayPal, which can reduce the risk of unsecured payments (e.g., Flanagin, 2007).

2.5 Effects of risk-relieving cues

With the emergence of the tactic of displaying risk-relieving cues in both online business-to-consumer web shops and online auction markets, the question rises whether these risk-relieving cues are persuasive. Are these cues indeed able to convince the consumer that an online purchase is safe, are risk perceptions reduced, and is trust enhanced? Empirical research that addresses the effectiveness of online risk-relieving cues on these and other affective and behavioral responses is still scarce, but it shows some evidence for the persuasiveness of these cues. A recent survey conducted by Jiang, Jones, and Javie (2008) indicates that risk-relieving logos, such as BBB, VeriSign, and TRUSTe might transfer trust. This notion is supported by Tan (1999) and by recent findings of Van Noort,

Kerkhof, and Fennis (2008). In the latter study it was demonstrated that the presence versus absence of online risk-relieving cues favorably influences consumer responses as risk perceptions, attitudes toward the site and the retailer and behavioral intentions.

Further support for the effectiveness of risk-relieving cues is found in the research by Aiken and Boush (2006). They showed evidence that risk-relieving cues affect consumer's beliefs about security and privacy, beliefs about firm trustworthiness, and the consumer's willingness to share personal information. Moreover, Yang, Hung, Kai, and Farn (2006) demonstrated that, especially for low involved consumers, online risk-relieving cues predict the consumers' perception of the reliability of the assurances given by the online retailer, and thereby the consumers' trust toward an online retailer. These studies together indicate that online risk-relieving cues do positively affect several pivotal online consumer responses.

Within the context of online auction markets ample research tried to predict closing price on the basis of auction features, but fluctuations in closing prices are hardly studied from a risk-relieving perspective. However, Boyd (2002) argued that eBay is in fact a community and that the construction of a community gives users reasons to trust a buyer and to be trustworthy to (potential) buyer. More focused on risk relievers as cues, Flanagin (2007) did study the effect of the presence of some auction features on closing price from the perspective of uncertainty reduction. His study demonstrated some support for the idea that auction features increase final bidding prices by reducing risk concerns, as his results demonstrated that the amount of product information (counted in words of the product description and the amount of pictures available) increased closing price, but that higher seller reputation scores actually *lowered* the final bid price. The current study builds forth on these findings. Consistent with prior research on risk-relieving cues in offline shopping contexts and in typical business-to-consumer web shops, this study argues that each offered cue in an online auction, such as a product picture, will increase the final bidding price.

H1: Risk-relieving cues in online auctions contribute to a higher closing price.

2.6 Effects of multiple risk-relieving cues

So far the limited amount of literature gave us some understanding of the effectiveness of online risk-relieving cues. In these studies, experimental designs are employed and it is typically tested whether no versus a risk-relieving cue is more effective or which specific cue is most effective. However, risk-relieving cues

represent various types of assurances (e.g., privacy, payment security). So far, it has not been tested whether displaying multiple risk-relieving cues is more effective.

Departing from uncertainty reduction theory (Berger, 1979) one might assume that displaying more risk-relieving cues, would reduce more uncertainties as each risk-relieving cue informs about a different set of securities. Reducing more uncertainties, could lead to more favorable consumer responses. The effectiveness of multiple risk-relieving cues could also be explained by the effects of source magnification as explained in multiple source research (e.g., Harkins & Petty, 1981). From that perspective, the presence of more risk-relieving cues does not only enhance persuasion because each specific cue inform about different securities, but also because the presence of more cues (of multiple sources) increases attention to the cues. Enhanced attention for the risk-relieving cues could then persuade the consumer that the online purchase is safe.

So far, only Aiken and Boush (2006) raise the question whether there are an optimal number of risk-relieving cues, but did not find an effect of the amount of risk-relieving cues. Whereas prior research focused on the persuasiveness of various specific risk-relieving cues, this study aims to examine whether displaying multiple risk-relieving cues will lead to more positive consumer responses. In this study it is therefore argued that the more risk-relieving cues an online auction offers, the higher the final price for the auctioned product will be. Hence, based on prior effect studies on risk-relieving cues and based on uncertainty reduction theory and multiple source theory, the second hypothesis states:

H2: Online auctions that offer multiple risk-relieving cues have a higher closing price.

In online auctions both new and second-hand products are sold. Of course, buying second-hand products increases product risk concerns as compared to buying a new product. As argued by for example Gabbott (1991), second-hand products cannot be considered similar (to new products) with any degree of certainty. Therefore, this study argues that risk-relieving cues have a more profound effect on the closing price for second-hand than for new products.

H3_{a-b}: The isolated (a) and joint (b) effects of risk-relieving cues on closing price is stronger for second-hand than for new products.

2.7 *In conclusion*

In sum, this study extends the current knowledge on online consumers' risk-reduction strategies in several important ways. First, this study examines the effect of risk-relieving cues on *actual* online consumer behavior. It aims at validating prior empirical findings on the persuasiveness of risk-relieving cues, using a real-life shopping context and the key behavioral response in electronic commerce as dependent measure, actual online spending. Second, whereas prior research mainly tested the persuasiveness of a specific type of risk-relieving cue, this study examines both the separate and joint effects of multiple online risk-relieving cues. Third, as online auction markets are growing at phenomenal rates and the effectiveness of risk-relieving cues is mainly studied with the focus on typical business-to-consumer web shops, this study chooses an online auction context for examining the effects of risk-relieving cues.

To investigate whether there is a positive effect of the number of online risk-relieving cues on actual online consumer behavior, collected data from eBay sales will be analyzed. The data includes various types of risk-relieving cues, addressing different types of risk, considering both the eBay seller (e.g., membership duration), and the product (e.g., availability of a picture of the product).

3 **Method**

3.1 *Data collection procedure*

As opposed to typical business-to-consumer sites, such as Expedia, Ebookers, or Bol.com, on online auction sites information on the seller (e.g., reputation score), and the purchase (e.g., products description and price) is available. This makes it possible to examine the relationship between risk-relieving features and actual purchase behavior, that is the price paid for an auctioned product. Although, there are more online auction sites in each country, for this study eBay was chosen, since it has been used in the majority of previous online-auction studies, and in addition to its original web site in the US it has localized web sites in nearly 40 countries throughout the world. Besides, between countries the site's features are similar and therefore comparable.

The eBay auctions examined in this study are for a mp3 player, as this products is in the top 10 of commonly purchased products (CBS, 2009). For this study only mp3 players of a specific and well-known brand were used. The chosen brand was the most popular for years. Although the choice for an mp3 player might seem somewhat arbitrary, an mp3 player was chosen as an example of a

homogeneous product. That was important, because with a very a homogeneous product one can study the isolated effects of risk-relieving cues, as there is no variation in product features (e.g., capacity in GB) these cannot explain variance in the dependent variable closing price. Furthermore, prices for this product are high enough (approximately € 130) to assume that the seller is inclined to reduce risks; for lower prices, there is less financial risk, subsequently the influence of risk-relieving cues might be small.

The online auction site eBay maintains a record for completed auction for a certain period after the auction ends. The site also provides an auction title search utility for complete auctions that allows a user to enter keywords and view auctions for which the title included the desired keywords. The collection procedure used the following steps:

1. search for offered specified mp3 players (both new and second-hand)
2. examining presence/absence of a risk-relieving cue
3. coding the risk-relieving cues
4. collecting closing price for completed auctions with the search utility

3.2 Collected information

As the separate and joint effects of risk-relieving cues were to be tested for both new and second-hand products (H3), first information was collected on the status of the product. Next, information collected for each completed auction, included four risk-relieving cues that can reduce risk in online auctions. First, type of membership of the seller was collected, being either private (coded 0) or commercial (coded 1). Second, the availability of a product picture was coded, auctions with a picture available were coded 1 (i.e., reducing product risk because you see what you buy), whereas auctions without a picture were coded 0. Third, shipping costs were collected and a dummy variable was created on the basis of a median split. Auctions with shipping costs below the median were coded 1 (i.e., reducing the risk of paying too much), above the median auctions were coded 0 (i.e., indicating the risk of paying too much). Fourth, duration of the seller's membership was collected and a dummy variable was created on the basis of a median split procedure. Membership duration above the median was coded 1 (i.e., reducing the risk of buying with an inexperienced seller), whereas membership duration below the median was coded 0 (i.e., indicating less experienced sellers and increasing the risk of buying with an inexperienced seller).

4 Results

4.1 Effects of separate risk-relieving cues

Two multiple regression analyses were conducted to test the first hypothesis regarding the predictors of closing price both for new and second-hand products (H1 and H3_a). In both regression analyses the following variables were entered as separate blocks: (1) type of seller (*private* = 0, *commercial* = 1), (2) availability of a product picture (*no* = 0, *yes* = 1), (3) shipping costs (*high* = 0, *low* = 1), (4) duration of the seller's membership (*short* = 0, *long* = 1).

For new products, the analysis revealed that each cue individually contributed to a higher closing price, and that the final model including all predictor variables was significant and accounted for 14.1% of the variance in closing price explained. Type of seller ($\beta = .126, p < .05$), picture availability ($\beta = .172, p < .001$), and shipping costs ($\beta = .115, p < .05$), duration of the membership ($\beta = .098, p < .05$), all significantly predicted closing price. Furthermore, picture availability ($\Delta R^2 = .006, p < .05$), shipping costs ($\Delta R^2 = .006, p < .05$), and membership duration ($\Delta R^2 = .061, p < .05$), all accounted for explained variance in closing price in the expected direction.

For second-hand products, the results demonstrated a different pattern. The final model including all predictor variables accounted for only 0.7% of the variance in closing price explained and was non-significant. None of the risk-relieving cues significantly predicted closing price (all β 's = *ns*) or contributed to a significant change in closing prices (all $\Delta R^2 = ns$). Hence, H1 is supported, but only for new offered products on eBay. Thus, there was no support for H3_a.

4.2 Effect of multiple risk-relieving cues

The second hypothesis assumes that closing price increases with the number of risk-relieving cues offered in the auction, and the third hypothesis states that this effects is stronger for second-hand versus new products. To test the effect of multiple risk-relieving cues on closing price, a new variable was computed for risk-relieving cue quantity by adding up the dummy variables for type of seller, picture availability, shipping costs, and membership duration. Thereby, each auction varied from 0 to 4 for the amount of risk-relieving cues. Next, two analyses of variance were conducted for new and second-hand mp3 players. In these analyses, closing price was the dependent variable and the computed variable for amount of risk-relieving cues served as independent variable.

For new mp3 players the analysis revealed an effect of the amount of risk-relieving cues on closing price in the expected direction ($F = 25.18, p < .001, \eta^2 = .14$). The more risk-relieving cues present in the auction, the higher the closing price. However, for second-hand mp3 players this effect was non-significant ($F < 1, ns$). Therefore, H2 is supported, but again only for new, not for second-hand, mp3 players. Hence, there was no support for H3_b.

5 Conclusion

The aim of the present research was to extend the knowledge on the persuasiveness of risk-relieving cues and investigated the effectiveness of multiple risk-relieving cues on actual consumer behavior, using real-world data. This study examined the separate and joint effects of multiple risk-relieving cues on online spending in an online auction context. The empirical verification of the persuasiveness of risk-relieving cues showed for four risk-relieving cues, commonly used on the online auction site eBay, that closing prices for mp3 players increased in the presence of these cues. More importantly, the results effectively demonstrated that displaying multiple cues enhances online closing prices for auctioned mp3 players. However, the effectiveness of the risk-relieving cues could only be confirmed for new, not for second-hand, mp3 players. Nonetheless, the results demonstrated that actual online consumer behavior, that is online spending, is influenced by risk-relieving cues. Online spending increases with the amount of risk-relieving cues presented in online auctions.

6 Discussion

6.1 Theoretical implications

The demonstrated increase in online spending in the presence of multiple risk-relieving cues can be explained from several theoretical perspectives. First, conform uncertainty reduction theory, more risk-relieving cues reduce more uncertainties and thereby initiate more favorable consumer responses. Second, departing from the findings of multiple source research, displaying more risk-relieving cues does not only provide the consumer with more information on security, but also enhances attention to the cues, which subsequently results in more favorable responses. As multiple theories address the underlying mechanism of the effectiveness of risk-relieving cues, future studies should investigate how the effectiveness of multiple risk-relieving cues can be explained. Furthermore, as in the

current study only four risk-relieving cues were tested, future studies should look at the possibility that adding more risk-relieving cues undermines the effectiveness of each individual cue. One might assume that there is a ceiling effect of the number of cues, but also that the relationship between amount of cues and consumer responses has an inverted u-shape (conform Aiken & Boush, 2006).

This study hypothesized that the persuasiveness of risk-relieving cues is dependent on the status of the product. It was argued that purchasing second-hand products is relatively more risky, and subsequently that the separate and joint effects of risk-relieving cues are stronger for second-hand products, than for new products. The results did not confirm this hypothesis. The single and joint effects of risk-relieving cues were only demonstrated for new products. As second-hand products are less homogeneous than new products, other features of the online auction might explain the variance in closing price better than risk-relieving cues. Future research could address the question, whether consumers rely on risk-relieving cues for the purchase of second-hand products, or whether information needs differ between new and second-hand products.

6.2 *Limitations*

The method used in this study has some limitations. First of all, because this study analyzed real-world data on completed auctions, it was not possible to collect buyers' background variables, such as whether buyers were female or male, risk averse, experienced online shoppers, heavy or not-heavy Internet users, familiar with eBay, and so on. Prior research has shown that these background variables may influence online consumer behavior (e.g., Chiang & Dhoklakia, 2003), therefore it is important to be able to control for these variables. A research design, in which real-world data is combined with information on the (potential) buyers, would make it possible to control for these variables or consider these variables as moderators.

Second, the persuasiveness of risk-relieving cues was tested within the context of eBay. Across the world market shares for eBay are very high. As a result, online auction website users might perceive eBay as the most popular online auction website. Users of this website might have already relatively high levels of trust, and relatively lower levels of risk perception regarding a purchase with this site. As background variables and personal differences in buyers (respondents) could not be collected, the results are not controlled for familiarity with eBay. As one can assume that eBay is a relatively reputable shopping context, the results imply that risk-relieving cues have an important impact on online consumer behavior in a reputable context. Therefore, the current findings should

only be generalized to online retailers with a good reputation. The effects of multiple cues might not occur in non-reputable shopping contexts. In these contexts consumers might pay more attention to content such as the information that is represented by a cue, and cues itself probably do not serve as risk-relieving indicators.

Third, the persuasiveness of displaying multiple online risk-relieving cues is tested within an online auction environment, which contains a different dynamic than an online business-to-consumer shopping environment. In online auctions several dynamics (such as bidding fever) might play a role that is not accounted for in this study. This study examined effects on consumer behavior by examining effects on closing prices of auctions. Although this outcome variable fits the goal of this study, the study ignores the dynamics that occur during an auction, e.g., spacing of bids, changing dynamic of price and bidding throughout the auction are not considered (see Wang, Jank, & Shmuel, 2008). Nevertheless, the current study effectively demonstrated the persuasiveness of risk-relieving cues. Real-world data was used to measure actual consumer behavior in response to online risk-relieving cues and it was shown that multiple online risk-relieving cues have a positive influence on consumer spending.

6.3 Practical implications

This study clearly demonstrated that consumers in online auction contexts try to lower their risk perceptions by searching for relevant risk-relieving information. A practical implication of the current findings is that users of online auction sites should offer risk-relieving information on their bidding page in order to make money. The more risk-relieving cues will be presented, the higher the closing price, the more money will be earned. However, this only counts for new offered products, for second-hand products potential buyers might have different information needs. Extending these findings to business-to-consumer websites, web site designers should excel in providing risk-relieving information. Clearly, the current findings imply that it is important to address multiple uncertainties that consumers might experience considering their online purchase. In the literature several managerial implications are discussed to enhance the effectiveness of these risk-relieving cues, such as not placing the cue near to distracting features of the website and standardization of presentation (LaRose & Riffon, 2006).

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Assessing the Probability of Internet Banking Adoption

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1 Differences in internet banking adoption rates

In recent years, developments in information technology and the subsequent evolution of Internet banking have fundamentally changed the ways in which banks implement their business and consumers conduct their everyday banking activities (Al-Somali et al., 2009; Eriksson et al., 2008; Sayar and Wolfe, 2007). Internet banking allows customers to conduct a wide range of banking transactions electronically via the bank's website - anytime and anywhere, faster, and with lower fees compared to using traditional, real-world bank branches. However, despite the continuing increase in the number of Internet users and despite all the apparent advantages of Internet banking for customers, in many countries the growth rate of Internet users who adopt Internet banking has not risen as strongly as expected (White and Nteli, 2004). For example, in Norway and Finland 70-80% of Internet users adopt online banking, in Austria and Germany about 40%, whereas in Greece and Romania less than 10% of the Internet users make use of online banking or brokerage (Meyer, 2006). On the other hand, in Brazil the Internet banking growth rate over the past years has exceeded that of the Internet itself (Hernandez and Mazzon 2007).

In Austria (and in many other countries) potential users object to conduct their financial transactions online, yet in spite of the huge amount of money banks have spent on building user-friendly Internet banking systems. Obviously, the benefits of Internet banking do not, in and of themselves, explain why some consumers accept the new technology and others do not (Lassar et al., 2005). This points out the need to further investigate the factors that ultimately determine consumers' acceptance of Internet banking. For banks it is important to understand relevant user characteristics and to be able to assess who specifically is adopting and utilizing online banking technologies and why. At first sight, it seems that the literature on the acceptance of Internet banking is already mature

and makes up a consistent theoretical body (Hernandez and Mazzon, 2007). Using numerous different theoretical approaches and models several researchers have investigated the factors that impact the decisions of consumers to adopt Internet banking (for recent reviews see e.g. (Hernandez and Mazzon, 2007; Sayar and Wolfe, 2007). Especially in the information systems literature questions related to user technology acceptance have received wide and intense interest. However, models such as the technology acceptance model (TAM) proposed by (Davis, 1989) and extensions and modifications of the TAM that have been suggested by many researchers (for an overview see Chau and Lai 2003) might not adequately consider the potential influence of psychological and situational factors (Dabholkar and Bagozzi, 2002). The same is true for models built on innovation diffusion theory (IDT) frameworks that posit the impact of certain innovation characteristics on the process of innovation adoption. The use of different theoretical models and different methods of analysis make it difficult and ineffective to summarize and compare the results of empirical studies with the aim of deriving recommendations for bank managers to enhance their customers' willingness to adopt online banking. Hence in line with (Hernandez and Mazzon, 2007) it can be concluded that "..., despite the vast number of existing studies, very little is known about the variables that truly determine the adoption of internet banking" (p. 77). Aside from that, banks clearly need distinct guiding principles for formulating their marketing strategies to increase Internet banking adoption.

Based on relevant, extant research we propose an integrated theoretical model that includes selected variables from both TAM and IDT frameworks. To improve the model's predictive power we consider additional individual difference variables such as technology readiness and need for personal contact. We also incorporate different types of trust in our research model, because recent literature on online banking shows that the lacking of trust is considered to be one of the main reasons why consumers are still reluctant to conduct their financial transactions online (Flavian et al., 2006; Grabner-Kräuter and Faullant, 2008; Luarn and Lin, 2005; Mukherjee and Nath, 2003; Rotchanakitumnuai and Speece, 2003). Going beyond the emphasis on attitudes and behavioural intentions in most of the existing online banking studies our study focuses on actual Internet banking adoption. In order to investigate the influence of selected variables on actual adoption, we collected data from both adopters and non-adopters of Internet banking.

2 Determinants of internet banking adoption

The analysis of factors that impact the decisions of costumers to adopt innovative retail services such as Internet banking has extensively focused on the issue of user technology acceptance (Hernandez and Mazzon, 2007; Lai and Li, 2005; Wang et al., 2003). Several theoretical approaches have been used and many competing models have been developed to investigate the determinants of acceptance and adoption of new information technology. Most research on the adoption of Internet banking either builds on TAM models (e.g. Al-Somali et al., 2009; Chau and Lai, 2003; Lassar et al., 2005; Pikkarinen et al., 2004; Sukkar and Hasan, 2005; Wang et al., 2003) or on IDT frameworks (Eriksson et al., 2008; Gerrard and Cunningham, 2003; Ndubisi and Sinti, 2006). Lassar et al., 2005 integrate TAM and the adoption of innovation framework to predict online banking acceptance. In this paper, we propose a conceptual model that integrates perceptions of innovation characteristics and individual differences and includes selected constructs from TAM and IDT frameworks (see also Meuter et al., 2005, who have developed a model to explain customer trial of self-service technologies). The focal dependent variable is actual adoption of online banking.

2.1 Individual differences

The individual differences that we include in our research model are preference for personal contact, technology readiness, self-efficacy, trust, and socio-demographic characteristics.

Preference for personal contact. Previous research on technology-enabled services has shown that some people prefer service encounters that provide an opportunity for social interaction (e.g. Dabholkar and Bagozzi, 2002; Meuter et al., 2005; Walker and Johnson, 2006). If consumers have a high need for interpersonal contact they may be averse or reluctant to adopt and use technologically facilitated means of service provisions. Hence, we propose that a high preference for personal contact will decrease the willingness to adopt Internet banking (H1).

Technology Readiness. (Parasuraman, 2000) has developed the construct of technology readiness of people, a generalized individual difference construct that refers to an individual's propensity to accept and use new technologies for accomplishing different personal goals. It can be viewed as an overall state of mind, resulting from "mental enablers and inhibitors that collectively determine a person's predisposition to use new technologies" (Parasuraman, 2000, p.308). So far, there is very little academic research on the impact of TR on consumer behaviour (Liljander et al., 2006; Lin and Hsieh, 2007). (Lin and Hsieh, 2007)

found a positive influence of TR on behavioural intentions toward self-service technologies. Drawing on these findings we suggest that a consumer's technology readiness is positively associated with online banking adoption (H2).

Self-efficacy. As a dimension of perceived behavioural control self-efficacy can be defined as individual judgements of a person's capabilities to perform a behaviour (Pavlou and Fygenson, 2006). Self-efficacy is associated with beliefs and behaviour and has been shown to have a critical influence on decisions involving computer usage and adoption (Igbaria and Iivari, 1995). Management information systems research suggests that individuals who have high computer self-efficacy are more likely to use information technology (Igbaria and Iivari, 1995; Thatcher et al., 2007). Applied to Internet banking, self-efficacy reflects the belief that consumers have about their ability to use the computer and the Internet effectively to conduct their banking activities (Torkzadeh et al., 2006). We propose that self-efficacy is positively related with Internet banking adoption (H3).

Bank trust and Internet trust. Consumer trust is especially important in online transactions (Grabner-Kräuter and Kaluscha, 2003). Online trust is most often defined as a belief or expectation about the website, the web vendor and/or (less frequently) the Internet as the trusted party or object of trust or as a behavioural intention or willingness to depend or rely on the trusted party. The prevailing view of consumer trust in the e-commerce literature contends that trust has a direct positive effect on attitudes and behaviour (Jarvenpaa et al., 2004; Pavlou, 2002; Suh and Han, 2003; Teo and Liu, 2007). In the case of Internet banking, the bank is the web vendor. We propose that higher trust in the bank is positively related to online banking adoption (H4). The analysis of online trust in the context of Internet banking should not focus exclusively on interpersonal relationships but has to consider impersonal forms of trust as well. Trust in technical systems mainly is based on the perceived functionality (e.g. reliability, capability, correctness and availability) of a system (Lee and Turban, 2001; Thatcher et al., 2007). Internet trust enables favourable expectations that the Internet is reliable and predictable and that no harmful consequences will occur if the online consumer uses the Internet as a transaction medium for his/her financial transactions. (Pavlou and Fygenson, 2006). Therefore, we propose that Internet trust is positively related to online banking adoption (H5).

Socio-demographic characteristics have often been used to define the online banking customer profile (for an overview see e.g. (Flavian et al., 2006). Variables such as gender, age, educational level, or income level, if significant, would offer easy and efficient ways for banks to segment the market and develop adequate online banking strategies. In line with previous studies (Al-Somali et al., 2009; Flavian et al., 2006; Lai and Li, 2005; Lassar et al., 2005; Sathye,

1999), we assume that age, gender, and education influence the likelihood of adopting online banking and expect that younger consumers (H6), highly-educated people (H7) and males (H8) are more likely to adopt online banking.

2.2 Perceptions of innovation characteristics

The innovation characteristics that we assume to be most relevant in the online adoption process are relative advantage, complexity, and perceived risk.

Relative advantage is the degree to which consumers believe or perceive a new product or service as different from and better than comparable goods (Kolodinsky et al., 2004; Meuter et al., 2005; Moore and Benbasat, 1991; Rogers, 1995). In the case of online banking, relative advantages relate to savings of time and money and convenience. If online banking is perceived as better than alternative banking channels, it is more likely to be adopted. Therefore, we propose that perceived relative advantage will positively impact consumer's adoption of online banking (H9).

Complexity is the extent to which consumers believe or perceive an innovative product or service as easy or difficult to use (Kolodinsky et al., 2004; Meuter et al., 2005; Moore and Benbasat, 1991; Rogers, 1995). In line with previous diffusion and adoption research, we propose that consumers who perceive Internet banking as more complicated or confusing will less likely adopt this service (H10).

Perceived risk of Internet banking. Previous research suggests to include perceived risk as an important factor influencing online consumer behaviour (Cunningham et al., 2005; Pavlou, 2003; Salam et al., 2003; Schlosser et al., 2006). In several studies a significant negative impact of risk perception on the attitude towards online shopping or likelihood to purchase online was found (Jarvenpaa et al., 2000; Kuhlmeier and Gary, 2005; Laforet and Li, 2005; Teo and Liu, 2007). One of the most important categories of perceived risk associated with Internet banking is security risk related to the potential loss because of deficiencies in the operating system (Awamleh and Fernandes, 2006; Littler and Melanathiou, 2006; Rotchanakitumnuai and Speece, 2003). Drawing on these findings we posit that higher perceived security risk will negatively influence the adoption of online banking (H11).

3 Methodology and data

To test our hypotheses data of consumers from different Austrian banks were randomly collected in August 2007. The subjects for the study have been approached in different places (airports, parks, shopping streets, etc.) in bigger and smaller cities more or less all over Austria. All interviewed consumers had to have a bank account and had to be internet users. 381 consumers filled out the standardized, self-administered, questionnaire and 372 could be used for this analysis. The sample consists of 41.1% non-adopters and 58.9% adopters of internet banking. The sample split into 49.5% men and 50.5% women. The age of respondents is ranging from less than 20 years to more than 70 years. The majority of the respondents are between 40 to 49 years (23.4%) and 20 to 29 years (23.1%) old, followed by the group of 30 to 39 year old consumers (20.4%). The educational levels of the surveyed consumers ranging from compulsory school to university degree. The largest group are respondents with high-school graduation (37.6%) followed by persons with university degree (27.2%). We can report a significant relationship between gender and the adoption of internet banking (Fisher's Exact Test, p -value= 0.046). Internet banking users are more male than female. There are also significant differences between adopters and non-adopters of internet banking concerning age and education. On average internet banking users are younger and have a higher educational level (Mann-Whitney Test, p -value < 0.001 and p -value = 0.016). Table 1 summarizes the sample characteristics.

Table 1: Sample characteristics

<i>Variables</i>		<i>Non-Adopters</i>		<i>Adopters</i>		<i>Total</i>	
		<i>N</i>	<i>%</i>	<i>N</i>	<i>%</i>	<i>N</i>	<i>%</i>
Age	< 20	17	11.1	20	9.1	37	9.9
	20-29	24	15.7	62	28.3	86	23.1
	30-39	25	16.3	51	23.3	76	20.4
	40-49	33	21.6	54	24.7	87	23.4
	50-59	28	18.3	24	11.0	52	14.0
	60-69	13	8.5	8	3.7	21	5.6
	≥ 70	13	8.5			13	3.5
Education	Compulsory education	11	7.2	7	3.2	18	4.8
	Apprenticeship	16	10.5	16	7.3	32	8.6
	Vocational school	37	24.2	44	20.1	81	21.8
	High-school	54	35.3	86	39.3	140	37.6
	University degree	35	22.9	66	30.1	101	27.2
Gender	Male	66	43.1	118	53.9	184	49.5
	Female	87	56.9	101	46.1	188	50.5
		153	41.1	219	58.9	372	100.0

A standardized questionnaire with closed-response questions using 7-point-rating scales was developed. All measurement items were drawn from the literature, and they were adapted using standard psychometric scale development procedures. Internet trust was measured with five items, two items measuring the perceived reliability and predictability of the Internet, and three items measuring the willingness to depend on the Internet. The items were adapted from (McKnight et al. 2002; McKnight and Chervany 2002) and the brand trust scale developed by (Chaudhuri and Holbrook 2001). Bank trust was based on scales developed by (Bhattacharjee 2002; McKnight et al 2002; Schlosser et al. 2006). Of the three available versions of the Technology Readiness Index (TRI) we used the 10 item scale which is appropriate “for studies where TR is one of the variables for the analysis, but not the main focus of the research” (Parasuraman 2000). Preference for personal contact was based on the scale developed by (Walker and Johnson 2006). Self-efficacy was adapted from (Lassar et al. 2005). Perceived security risk of Internet banking was adapted from (Awamleh and Fernandes 2006) and (Meuter et al. 2005). The measures for perceived relative advantage and perceived complexity were adapted from (Hernandez and Mazzon 2007; Lee et al. 2005). We calculated item mean scores to represent the construct values. The

reliability of constructs was measured by the value of Cronbach's Alpha, which is for all constructs above the appropriate threshold of 0.7. Thus, satisfactory internal consistency reliability is given.

4 Empirical analysis

We tested all applied constructs for differences in mean values between non-adopters and adopters of internet banking via T-test. For all constructs with the exception of bank trust we found highly significant differences between these two groups of consumers. Compared to non-adopters, adopters of internet banking have a lower preference for personal contact and a lower perceived meaning about the complexity and security risk of internet banking. Adopters have a higher self efficacy, higher trust into the internet, are more technology orientated perceive a higher relative advantage of internet banking than non-adopters do (see Table 2).

Table 2: T-test results for mean differences between non-adopters and adopters

	<i>Non-Adopters</i>	<i>Adopters</i>	<i>Differences</i>	<i>p-value</i>
Preference for personal contact	5,819	4,206	1,613 ***	< 0.001
Technology Readiness Index	3,614	4,558	-0,944 ***	< 0.001
Self efficacy	3,244	3,996	-0,752 ***	< 0.001
Bank trust	5,701	5,746	-0,045	0.689
Internet trust	3,464	5,185	-1,721 ***	< 0.001
Relative Advantage	4,858	6,188	-1,330 ***	< 0.001
Complexity of IB	3,521	2,003	1,518 ***	< 0.001
Perceived security risk of IB	4,740	3,438	1,303 ***	< 0.001

We applied a binary logistic regression analysis to test our hypotheses. A logistic regression model was chosen due to the dichotomy character of the dependent variable adoption of internet banking (0= non-adopter, 1= adopter). The logistic regression models the probability belonging to the class of internet banking users. We included a dummy variable for gender in our regression model. The dummy variable is 1 if the person is a man and 0 if the person is a woman.

Therefore the baseline in the model is a female person with average values for all numeric variables.

The Cox and Snell, and Nagelkerke R-squared values are about 0.429 and 0.579, respectively. The R-squared measures indicate that there is an adequate fit of the model. The estimated model classifies 82% of the overall sample correctly, using a cut-off value for the predicted probability of 0.5. Further, 86.3% of the adopters and 75.8% of the non-adopters are classified correctly by the model. The receiver operating characteristic (ROC) curve can be used to summarize the predictive power of the logistic regression model. The concordance index which is equivalently the area under the ROC curve shows a value of 0.901, which states an excellent performance of the estimated logistic regression model (Agresti, 2002).

The significance of individual variables was tested by the Wald statistic. The results of the logistic regression analysis indicate that the coefficients of preference for personal contact, the perceived security risk and the perceived complexity of internet banking are significant negative. A person who has a higher preference for personal contact in service encounters or a person who perceive a higher security risk in the usage of internet banking will have a lower probability to become an internet banking user. Internet trust and relative advantage have a positive significant coefficient (significance level of 5% and 0.1%). The findings indicate that persons, who have higher trust in internet or see a higher relative advantage of internet banking, have a higher probability to adopt internet banking. Thus, hypotheses H1, H5, H9, H10 and H11 are supported. The coefficients for the technology readiness index (H2), for self efficacy (H3) as well as for bank trust (H4) show no significant relationship in the logistic regression model. Thus, these hypotheses have to be rejected. From the personal characteristics only the coefficient of one variable is significant at the level of 10%. The dummy variable for male consumers is significantly positive, indicating that the probability of getting an internet banking user is higher for men than for women. Thus, hypothesis H8 can be supported. Although there were significant differences in age and education concerning the adoption of internet banking in the bivariate tests, the parameters of the variables age and education are not significant in our regression model. Hypotheses H6 and H7 have to be rejected. Table 3 summarizes the results of the regression analysis.

Table 3: Results of the logistic regression analysis

<i>Variables</i>	<i>B</i>	<i>S.E.</i>	<i>Wald</i>	<i>Sig.</i>	<i>Exp(B)</i>
Preference for personal contact	-0.304 **	0.102	8.839	0.003	0.738
Technology Readiness Index	0.213	0.225	0.897	0.344	1.237
Self efficacy	0.016	0.205	0.006	0.937	1.016
Bank trust	-0.094	0.143	0.433	0.511	0.910
Internet trust	0.328 *	0.150	4.783	0.029	1.389
Age	-0.087	0.113	0.587	0.443	0.917
Education	0.058	0.141	0.170	0.680	1.060
Gender (man)	0.555 #	0.313	3.152	0.076	1.742
Relative Advantage	0.827 ***	0.163	25.886	0.000	2.287
Complexity of IB	-0.197 #	0.114	2.968	0.085	0.821
Perceived security risk of IB	-0.302 *	0.148	4.181	0.041	0.739
Constant	-2.956	1.962	2.271	0.132	0.052
Number of observations	372				
-2 Log likelihood	295.198				
Cox & Snell R Square	0.429				
Nagelkerke R Square	0.579				
Correct cases classified:	Adopters	Non-Adopters	Overall sample		
cut-value: 0.5	86.3 %	75,8%	82,0%		
Binary logistic regression: Dependent Variable: Internet banking adoption: 0 = "Non-Adopters"; 1 = "Adopters"					
Level of significance: # p < 0.1; * p < 0.05; ** p < 0.01; *** p < 0.001					

The changes in the probability of online banking adoption (or non-adoption) also provide an indication of the importance of the predicting variables. Table 4 summarizes the changes in the probability of adoption (non-adoption) compared to the reference model with mean values for all variables, if the value of the respective variable is changed to the minimum value (= 1) or maximum value (= 7). In the reference model gender is female. For instance, if preference for personal contact is very low (the value is changed to 1, all other variables remain unchanged), the probability to adopt online banking changes from 58% in the reference model to 81,7%, and the probability of non-adoption changes from 42% to 18,3%. The probability changes for perceived relative advantage are even more impressive. If the value of perceived relative advantage is changed to the minimum value of 1, the probability of online banking adoption changes to less

than 3%, and the probability of non-adoption is higher than 97%. On the other hand, the changes in online banking adoption are very low if the values for self efficacy or bank trust are changed to their minima and maxima, respectively.

Table 4: Changes in the probability to adopt (non-adopt) online banking

	Adopters	Non-Adopters
<i>Reference model</i>	58.0%	42.0%
Preference for personal contact =1	81.7%	18.3%
Preference for personal contact =7	41.9%	58.1%
Technology Readiness Index =1	41.3%	58.7%
Technology Readiness Index =7	71.6%	28.4%
Self efficacy =1	56.9%	43.1%
Self efficacy =7	59.3%	40.7%
Bank trust =1	68.3%	31.7%
Bank trust =7	55.0%	45.0%
Internet trust =1	30.6%	69.4%
Internet trust =7	75.9%	24.1%
Age (under 20)=1	62.9%	37.1%
Age (70 +) =7	50.2%	49.8%
Education =1	54.1%	45.9%
Education =5	59.8%	40.2%
Gender (man)	70.6%	29.4%
Relative Advantage =1	2.9%	97.1%
Relative Advantage =7	80.9%	19.1%
Complexity of IB =1	65.5%	34.5%
Complexity of IB =7	36.8%	63.2%
Perceived security risk of IB =1	77.2%	22.8%
Perceived security risk of IB =7	35.6%	64.4%

5 Discussion and conclusion

The research model and results contribute to a better understanding of the factors that influence online banking adoption. First, our results confirm the importance of perceived innovation characteristics in the online banking adoption process. Beyond that, our findings suggest that Internet trust and preference for personal

contact are individual difference variables that determine consumers' online banking adoption. Thus, the importance of perceived innovation characteristics *and* individual differences in online banking adoption process was confirmed. We found preference for personal contact, Internet trust, perceived relative advantage, and perceived security risk of Internet banking to be the most important predictors of online banking adoption.

Another contribution of this study is that trust toward the bank (or the Internet vendor in a broader sense) and trust toward the Internet must not be confounded or treated as different dimensions of the same construct "online trust", but have to be regarded as two distinct constructs that influence online consumer behaviour in different ways. While Internet trust has a significant positive impact on online banking adoption, bank trust is not related to Internet banking adoption.

Recommendations in the literature on Internet banking concerning the design of user-friendly and trust-inducing websites might not be sufficient to overcome consumers' reluctance to conduct their financial and other economic transactions on the Internet. Consumers might refrain from visiting websites designed for e-commerce or Internet banking because they either do not consider the Internet infrastructure as reliable and secure or they have a greater desire for personal contact and interaction. To attract more Internet banking customers and increase the acceptance of online banking services in Austria, it is definitely not enough to make the Internet banking system convenient and easy to interact with. Rather it is of paramount importance, to address the issue of security in order to improve the rate of Internet banking adoption (see also Laforet and Li, 2005; Mukherjee and Nath, 2003). To ensure the security of their online banking systems banks use security features such as firewalls, filtering routers, callback modems, encryption biometrics, smart cards, and digital certification and authentication (Mukherjee and Nath, 2003). However, for the majority of consumers it is beyond the scope of their technological understanding to fully comprehend the meaning and functionality of these security features. Therefore the attention of bank managers might be fruitfully focused on training and promotion approaches with the aim to influence their customers' perception of online security and to improve their customers' knowledge about privacy and security mechanisms and concepts such as encryption methods.

In their campaigning to persuade non-adopters, banks should re-emphasize and further accentuate the advantages of online banking and provide detailed information about its convenience, simplicity, flexibility, economic benefits and controllability. Banks also should present comprehensive information about the use of security features already in the instruction phase and provide regular information up-dates for customers about security improvements. Beyond that,

banks could organize high-publicity events such as public lectures or research grants to communicate continuing efforts to improve online banking security.

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Part V

Gender and Advertising, Branding and Communication

Gender Stereotyping in Advertising on Public and Private TV Channels in Germany

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1 Abstract

The study investigates gender stereotyping in TV advertising on private and public TV channels in Germany. The results show that gender stereotyping in advertising still prevails despite the change in women's role in many cultures over the years. Contrary to their public mission, public TV channels do not exhibit less stereotypical gender roles in advertisements compared to private TV channels, although there are differences in how both channels stereotype gender. The results raise the question for more control over the current advertising practice, as recently put forward by a new EU resolution.

2 Introduction

The social role of women has changed remarkably in many Western societies over the past years. At the same time, advertisers are still depicting women and men in tradition-bound roles to promote their products. The pervasive use of television and its potential to influence audience's attitudes and perceptions has led to growing criticism of marketers lacking sensitivity to reflect gender role change in advertising. Researchers from various disciplines have shown substantial interest in this topic and contributed to a remarkable body of research on gender role portrayals in advertising over the last four decades. They have performed several content analyses in order to investigate whether gender stereotyping in television advertising exists and how gender roles are depicted. Some authors consider that advertising is moving toward a slightly less stereotypical stance (Wolin 2003) particularly in Western societies (Furnham & Mak 1999), while other authors stress that women are still being portrayed in a stereotypical

way, and stereotyping is becoming even stronger (e.g., Ganahl *et al.* 2003; Milner & Higgs 2004).

The present study adds to the stock of previous research by investigating TV advertising in Germany. Advertising on German Television is a particular interesting candidate for another content analysis on gender roles for two reasons. First, advertisements from Germany have not yet been compared with other gender roles studies. However, Germany is an appealing country for advertisers due to the market's size and the size of the advertising industry: with advertising spending of 24 billion US dollars in 2007, Germany ranks second in Europe (following UK with 29 billion US dollars) and sixth worldwide (WARC 2007). Furthermore, with 36.98 million households and a penetration rate of 93.1 %, Germany has the largest television market in Europe (European Audiovisual Observatory 2007). Most channels are aired in all German speaking countries (Germany, Austria, and some parts of Switzerland), which implies that advertising on German TV channels influences a relatively large number of consumers.

Second, several German television programs are broadcasted not only by private channels, but also by public channels. Previous research on gender roles in advertising has only investigated private channels, neglecting public channels. Comparing gender roles between public and private channels is of particular relevance to European countries where public television is quite popular. All EU countries broadcast at least one public program and this number has increased from an average of two channels per country in 1980 to four channels in 2000 (Eurostat 2002). Public channels hold a higher market share (i.e., share of viewers) than private channels in some countries (e.g., in Denmark 65%, in Belarus 57%, in Croatia 51% in 2007 (IP&RTL Group 2008)). Public television plays a major role in the German broadcasting market as well: Germany is the EU country with the highest number of public TV channels (Eurostat 2002) which hold a market share of 43.3% on the German TV market (AGF 2008).

Comparing gender roles on public and private TV stations provides some substantial knowledge on gender stereotyping in advertising. At the same time, these insights may be useful for public policy. Public television differs from private television in several ways, amongst them the legitimate demand for avoiding stereotypes. Basically, public channels have the mission to inform, educate, and entertain the society (see, for instance, ARD (2008) for Germany, Department of Culture, Media and Sport (2006) for Great Britain, or RTVG (2006) for Switzerland). In order to avoid influence by interest groups (particularly companies), advertising on public TV channels is more strongly regulated by law than on private channels, sometimes even completely forbidden (e.g., on the French-German channel "ARTE"). To serve the best of public interest, public TV channels are expected to provide information in a neutral and unbiased man-

ner (Council of Europe 2009) which includes the avoidance of stereotypical depictions of women and men (e.g., European Broadcasting Union 2004). One would therefore expect public TV channels to take extra control measures beyond those taken by private channels in order to avoid advertising that communicates gender stereotypes and fosters depictions that support gender equality.

The German context seems to provide an appropriate context to conduct a gender role study that is somewhat representative for other countries, as gender-related norms and values are at an average as indicated by gender-related country indices. Although Hofstede's index provides a value that indicates a slight tendency towards traditional gender norms (with a value of 66 out of a range from 5 to 95 over 50 countries) (Hofstede 2001), the more recent GLOBE-index shows that Germany is moving towards the middle of the scale. The previous differences between East and West Germany regarding gender values are almost negligible (East Germany: 4.77, West Germany: 4.90 out of a range from 3.18 to 5.17 over 61 countries, median 4.60) (House *et al.* 2004).

3 Stereotyping of gender roles in advertising

Stereotypes are a set of concepts pertaining to a social category (Vinacke 1957). Gender stereotypes are beliefs that certain attributes differentiate women and men (Ashmore & Del Boca 1981). Research suggests that they have four different and independent components: trait descriptors (e.g., self-assertion, concern for others), physical characteristics (e.g., hair length, body height), role behaviors (e.g., leader, taking care of children), and occupational status (e.g., truck driver, elementary school teacher, housewife) (Deaux & Lewis 1984). Each component has a masculine and a feminine version with masculine and feminine components significantly more strongly associated with males and females, respectively. Many content analyses have provided a catalogue of variables related to gender roles. Most of the variables can be grouped along these components. For instance, age of central figures in advertising relates to physical characteristics, profession of central figures to occupational status, and a central figure's expertise as expressed in the ad to role behaviors. Variables that refer to the first component are usually not applied as gender role variables in content analyses, since trait descriptors are not directly observable and need to be inferred from indicators, which leads to problems of validity and reliability in a content analysis.

Each of the gender stereotyping components can lead to negative consequences that restrict life opportunities, particularly for women. Stereotyping of physical characteristics (e.g., beauty ideals for women) can lead to reduced self-

dignity, stereotyping of role behaviors (e.g., women taking care of children) may lead to restricted opportunities of self-development, and stereotyping of occupational roles may lead to disadvantages in women's careers. Avoiding such stereotypes and achieving equal life opportunities for both genders in different spheres of life (e.g., income, career) is a central concern of gender policy and has become a social objective in many societies (e.g., European Parliament 2008). Equal representation in different spheres of life is a main concern in gender policy that can be used as a basis of comparison for gender stereotyping.

The ideal of gender equality primarily serves as a basis for comparison when it comes to occupational status and role behavior as these factors are influenced by the social environment. As for physical characteristics, gender related differences are biological, so an equality goal is less meaningful. Rather the actual occurrence of certain physical characteristics provides a comparison baseline for an unbiased representation that can avoid stereotyping. In the following content analysis, age of central figures in advertising is the only variable that refers to physical characteristics. An unbiased depiction of the age of women and men in advertising would need to represent all age groups according to the age distribution in society. Since the average age of figures in advertising are generally younger than the national average, there is already a biased depiction of both genders, which may simply be explained by the fact that more advertisements are directed towards a younger than an older audience. In order to find out whether the depiction of women is more or less biased than that of men, age equality of central figures can be assumed as a standard of comparison and the deviation from equality provides a relative, not an absolute measure of stereotyping, showing "how much more" stereotyping occurs for each gender.

4 Method

4.1 *Sample of advertisements and central figures*

The most popular public and private TV channels in Germany are ARD (public) with a market share of 13.4% and RTL (private) with a market share of 11.7% (AGF 2008). Both were selected for the content analysis. During a period of four weeks in June 2008, several non-consecutive days were chosen randomly. All advertisements aired between 5 p.m and 8 p.m. on these days were recorded. This was done for the purpose of comparison, because public TV channels in Germany are not allowed to broadcast advertisements before 5 p.m. and after 8 p.m. Repeated TV advertisements were discarded, and any advertisements with unidentifiable central figures or the central figures being children and cartoon

characters were also excluded from the analysis. Eventually, 183 advertisements were retained for detailed analysis providing 231 central figures. 113 advertisements with 137 central figures were broadcasted on RTL and 70 advertisements with 94 central figures were broadcasted on ARD. Up to two adults portrayed in the advertisement that had the most distinguishable role and appeared for at least three seconds were coded as central figures per advertisement, following the procedure that has been applied in previous studies.

4.2 Coding procedure and measures

One of the first academic studies on gender roles in television commercials is the study by McArthur and Resko (1975). Many other content analysis studies have followed the coding categories used by these authors. The fact that studies conducted and published after their study contain very few changes and only slight scheme adaptations suggest that the original categories are quite comprehensive and appropriate to use in different years and for different cultures; the data allow a simple comparison of gender stereotyping over time.

The coding procedure therefore closely follows a procedure applied by Furnham, Babitzkow, and Ugucioni (2000a), which was originally modeled on the coding procedure of McArthur and Resko (1975).

Before proceeding with the analysis, several categories were combined (following the procedure in previous studies) in order to have cell sizes that meet the requirements of chi-square tests (i.e., max. 20% of the cells can have counts below 5). The following attributes were coded as follows:

Credibility describes the basis of the central figure's credibility and is coded as follows: 1 = product user when the central figure was depicted primarily as a user of the advertised product, 2 = authority/other when the central figure was a source of information regarding the product or neither a user or an authority of the product. Stereotyping indicates that men are more often authorities than women and vice versa.

Age: The variable describes the central figure's portrayed age as follows: 1 = young (under 35 years), 2 = middle-aged/old (35 years and older). Stereotyping occurs when men are more often depicted as middle-aged/old than women who are more often depicted as young.

Role describes the central figure's role in everyday life and is coded as follows: 1 = dependent/relative to others (incl. parent, spouse, home-maker), 2 = autonomous/independent from others (incl. professional, worker, celebrity, interviewer/narrator), 3 = other. Stereotyping indicates that women are more often depicted in dependent roles or relative to others (e.g., parent, spouse) and men

are more often depicted in autonomous roles or independent from others (e.g., professional, worker, celebrity).

Product type refers to the type of product the central figures were associated with. It is coded as follows: 1 = domestic (body, home, food), 2 = other (auto, sports, leisure, alcohol, entertainment, services, finance, other). Stereotyping occurs when women are depicted more often with domestic products (e.g., body, home, food) and men are more often depicted with other products (e.g., cars, leisure, alcohol).

Location describes the location in which the central characters appear as 1 = home/domestic, 2 = work/occupational, 3 = leisure/outside, 4 = other/several locations. Stereotyping typically occurs when women are more often depicted at home, whereas men are more often shown at work.

Argument refers to the type of argument the central figures give on behalf of a product. It is coded as 1 = factual/scientific, 2 = opinion/non-scientific/no argument. Stereotyping indicates that men give more often factual/scientific arguments, whereas women provide more often an opinion, non-scientific arguments, or no argument at all.

Background describes the background against which the central figure was portrayed as 1 = mostly women, 2 = mostly men, 3 = mixed/mostly children, 4 = none. Stereotyping occurs when women are more often portrayed together with other women and/or children than men.

Voice-over refers to the gender of the voice-over in an advertisements as 1 = male voice-overs, 2 = female voice-overs, 3 = male and female voice-overs/no voice-over. Stereotyping occurs when more men than women provide voice-overs.

To ensure coding reliability, 30% of the advertisements (56 advertisements with 70 central figures) were coded independently by two coders, one female and one male. The percentage agreements for each attribute are as follows: 93% for credibility, 93% for product type, 89% for age, 87% for voice-over, 87% for argument, 84% for location, 81% for role, and 81% for background. After initial coding, the differences were discussed and reconciled.

5 Results

Table 1 presents the results of the content analysis. Thirty-three percent of the central figures on ARD and 54% of the central figures on RTL were women. The gender distribution differs significantly over both channels ($\chi^2 = 9.95$, $df = 1$, $p < .01$).

Table 1: Characteristics of men and women in advertisements as portrayed on public and private TV channels in Germany

Attributes	ARD public TV channel (n = 94)			RTL private TV channel (n = 137)			Comparison ARD - RTL χ^2
	Female % (n = 31)	Male % (n = 63)	χ^2	Female % (n = 74)	Male % (n = 63)	χ^2	
<i>Credibility</i>							
Product user	87.1	58.7	7.69**	94.6	76.2	9.65**	4.89*
Authority/other	12.9	41.3		5.4	23.8		-. ^a
<i>Age</i>							
Young	61.3	27.0	10.35**	86.5	47.6	23.87***	2.64
Middle-aged / old	38.7	73.0		13.5	52.4		.10
<i>Role</i>							
Dependent	54.8	23.8	15.36***	52.7	44.4	5.65	.23
Autonomous/independent	12.9	54.0		20.3	38.1		-. ^a **
Other	32.3	22.2		27.0	17.5		2.85
<i>Product type</i>							
Domestic	61.3	39.7	3.90*	86.5	46.0	25.54***	8.22**
Other	38.7	60.3		13.5	54.0		.02
<i>Location</i>							
Home/domestic	38.7	7.9	16.07**	32.4	20.6	9.61*	.17
Work/occupational	16.1	22.2		2.7	17.5		-. ^a
Leisure/outside	38.7	41.3		41.9	39.7		5.16*
Other/several locations	6.5	28.6		23.0	22.2		-. ^a **
<i>Argument</i>							
Factual/scientific	29.0	3.2	13.44***	29.7	4.8	14.22***	-. ^a
Opinion/non-scientific/no argum.	71.0	96.8		70.3	95.2		8.04**
<i>Background</i>							
Mostly women	12.9	7.9	11.48**	12.2	4.8	19.59***	-. ^a
Mostly men	6.5	38.1		6.8	22.2		-. ^a
Mixed/mostly children	32.3	28.6		35.1	55.6		.38
None	48.4	25.4		45.9	17.5		5.92*
<i>Voice-over</i>							
Male voice-over	45.2	68.2	7.72*	40.5	77.8	19.33***	2.72
Female voice-over	41.9	15.9		51.4	19.0		2.84
Male and female/no voice-over	12.9	15.9		8.1	3.2		-. ^a

Note: ^a Cell sizes do not meet the requirements for calculating a chi-square test. Significance is given based on Fisher's and Yates' exact test (two-sided).

* $p < .05$; ** $p < .01$; *** $p < .001$

Credibility: Women were presented more often as product users, and men were more likely to be portrayed as authorities/other on both ARD and RTL. The comparison of both channels show that the percentage of women being presented as product users on RTL is significantly higher than on ARD, but the gender distribution in the category “authority/other” does not differ over both channels.

Age: Women were more likely to be younger than 35 years, whereas men were more likely to be 35 or older on both channels. The comparison of both channels shows that the uneven odds for males and females being presented as either young or middle-aged/old do not differ over both channels.

Role: Women were more likely to be portrayed in a dependent role than men, whereas men were more likely to be portrayed in independent roles on ARD, but not on RTL. The comparison of both channels shows that the uneven odds for the roles in which females and males are presented differ concerning the category “autonomous/independent”: the percentage of men being presented in independent roles is higher and the percentage of women is lower on ARD compared to RTL.

Product type: Women were more likely to be portrayed with domestic products than men. In addition, men were more likely to be presented with other products on both channels. The comparison between both channels shows that the uneven odds for females and males being portrayed with particular products differ over both channels: the percentage of women being portrayed with domestic products is higher on RTL compared to ARD.

Location: Women were more likely to be portrayed at home than men who were more likely to be portrayed at work on both ARD and RTL. The comparison between both channels shows that the uneven odds for females and males being portrayed at different locations differs for the categories “leisure/outside” and “other”: the percentage of men is higher and the percentage of women is lower on ARD compared to RTL in the categories “leisure outside” and “other/several locations”.

Argument: Women are more likely to give scientific arguments than men on both channels. The comparison between the channels shows that the uneven odds for females and males giving an opinion, a non-scientific argument, or no argument differ: on ARD the percentage of men that give opinions, non-scientific arguments, or no arguments is higher, whereas the percentage of women is lower than on RTL.

Background: Women and men differ in terms of the background with which they were portrayed. Both genders were more likely to be portrayed with people of their own gender; in addition, women were more likely to be portrayed with no other human beings than men. The difference applies to both channels - ARD and RTL. Both channels differ concerning the last category. On RTL, the percen-

tage of women being portrayed with no other human beings is higher and the percentage of men is lower than on ARD.

Voice-over: Women and men differ in terms of being supported by voice-overs. Particularly, men are more likely to be supported by male voice-overs than by female voice-overs. The difference applies to both channels ARD and RTL. Both channels do not differ regarding the individual categories.

6 Discussion

The analysis of advertisements on two German TV channels reveals that female central figures compared to male central figures in advertisements are more likely to be depicted as product users, are younger, are more likely to be depicted with domestic products, are more likely to be portrayed at home and against a background with no other human beings. On the other hand, male central figures are more likely to be depicted as authority, are older, are more likely to be portrayed at other locations rather than at home and are less likely to be depicted with domestic products.

The results are in line with stereotypical patterns found in previous studies. Considering the effect size indicated by the chi-square test, stereotyping is strongest in the categories age and product type (on RTL) as well as role and age (on ARD). Overall, the findings show that gender stereotyping is still prevalent in TV advertisements in 2008. This is somewhat surprising given the change of the role of women over the years in many cultures, particularly in the United States, Western Europe, and Scandinavia, where women have made great strides in politics, in workplace, and in other spheres of life.

Furthermore, the study does not provide unambiguous evidence to whether women depicted in advertisements on public channels are more likely to be portrayed in a less stereotypical way than on private channels or not. On public TV the percentage of female central figures is lower than on private TV. Four results of the content analysis support enhanced stereotyping on public channels. First, on public TV men are significantly more likely to be portrayed in independent roles compared to men on private TV. Second, on public TV men are more likely to be depicted at locations other than at home compared to men on private TV. Third, on public TV men have a higher likelihood of giving an opinion rather than a scientific argument compared to men on private TV. Fourth, on public TV men are more likely to be depicted with no other human beings than men on private TV. Two results support enhanced stereotyping on private TV: on private TV women are more likely to be presented as product users compared to women

on public TV. They are also more likely to be presented with domestic products than on public TV.

Although stereotypical advertisements are found on both public and private TV channels in Germany, the kind of stereotyping differs. While gender stereotyping on private channels is strongly related to the product, that is, only in situations where women are shown with the advertised product, private TV channels foster stereotypical gender roles which go beyond the stereotypes on public channels. It seems that stereotyping is primarily used as a means to sell a product on private channels, whereas on public channels female gender roles also appear in a context that is not necessarily related to the product (e.g., roles in everyday life, locations).

The results have some practical implications for public policy as well. In several countries, gender stereotyping on television is regulated by law (e.g., Finland, Greece, and Portugal), while self-regulatory organizations in many other European countries try to control gender stereotyping in the media. The European Parliament has recently issued a resolution on gender stereotyping in the media and has asked the membership countries to take actions to avoid stereotypical depictions of women and men on TV (European Parliament 2008). The results of this study support the steps taken by these countries and the European Parliament since the findings show that (1) gender stereotyping still prevails in advertisements on TV channels, and that (2) self-regulation or other means to control gender stereotyping that are already current practice for public TV channels has not succeed so far.

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A Cross-Cultural and Gender-Specific Examination of Consumer Skepticism toward Advertising in General vs. Pharmaceutical Advertising – Empirical Evidence from the U.S., Germany and China (Hong Kong)

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1 Abstract

The truthfulness of advertising messages is often doubted by consumers. This investigation analyzes whether there are differences in the skepticism toward advertising in general, and pharmaceutical advertising, in particular. The study is based on an investigation by Diehl, Mueller and Terlutter (2007, 2008), which compared the U.S. and Germany. The current study extends the analysis to China (Hong Kong). For the measurement of skepticism toward pharmaceutical advertising an adapted version of the SKEP scale (Obermiller and Spangenberg 1998) was used. A total of 341 Americans, 450 Chinese (Hong Kong) and 447 Germans took part in the survey. Whereas in Germany and the U.S. - as expected - skepticism toward pharmaceutical advertising was lower than skepticism toward advertising in general, no significant differences were found in Hong Kong. The paper further analyzes gender-specific differences in skepticism toward advertising in general, as well as toward pharmaceutical advertising. Results showed some significant differences. In each of the three countries, men were more skeptical than women, especially with regard to the informational content of the ads. Implications for governmental regulation of pharmaceutical advertising are discussed and recommendations for advertisers of pharmaceuticals are outlined.

2 Statement of purpose and background

Advertisements for non-prescription (non-restricted) drugs in various media are nothing new to consumers in the U.S., China (Hong Kong) and Europe. The picture is quite different regarding the advertising of prescription drugs. In 1992, the American Medical Association, in collaboration with the U.S. Food and Drug Administration, lifted its ban on advertising pharmaceuticals to consumers. Prior to 1992, prescription drug ads in the U.S. were aimed only at physicians and typically appeared in trade journals. In Europe and China (Hong Kong), advertisements for prescription drugs are still prohibited. In Europe, according to current regulations, pharmaceutical companies may publish only unbranded information in their promotional communications with consumers. The European Council Directive 92/28/EEC “prohibits the advertising to the general public of medicinal products which are on medical prescription only.” The regulatory guidelines allow only disease education (Hone and Benson, 2004).

In Hong Kong, whether pharmaceutical firms are allowed to advertise or not depends more on the category of the disease than on the prescription drug. In Hong Kong, pharmaceutical advertisements for specific diseases (such as tumours, venereal diseases, or diseases of the heart or cardiovascular system) aimed directly at the general public via mainstream media are prohibited according to the Undesirable Medical Advertisements Ordinance, Cap. 231 Laws of Hong Kong (<http://www.legislation.gov.hk>). Diseases for which drugs are not permitted to be advertised, are primarily those for which a prescription is needed in Europe and the U.S. Therefore the authors retain the terms prescription and non-prescription pharmaceutical advertising for the U.S. and Germany and employ the terms restricted and non-restricted pharmaceutical advertising for Hong Kong.

In Europe as well as in China (Hong Kong), advertisers are exerting pressure to relax restrictions on the advertising of prescription drugs (Lam and Smith, 2002; Jaderberg 2001). In addition, the Internet plays an important role in this debate. American medical sites, along with websites from other countries with less strict regulations, are accessible by Europeans and Hong Kong Chinese, and many of these websites promote branded prescription drugs. As a European survey shows, people are very interested in accessing health information via the Internet. Health is one of the most researched areas on the Internet, investigated by almost one in four Europeans (*Brand Strategy*, 2004). Health chat rooms, virtual pharmacies, and self-diagnosis guides are abundant and growing. Considering the huge amount of information available on non-prescription and prescription drugs, a ban on pharmaceutical advertising for prescription drugs is

difficult to justify, as well as difficult to maintain. Therefore, direct-to-consumer advertising of pharmaceuticals has become a hot topic (Jaderberg, 2002).

Although direct-to-consumer advertising of pharmaceuticals has become an area of great debate, there is little research on skepticism toward pharmaceutical advertising, and even fewer intercultural investigations. In a previous study, Diehl, Mueller and Terlutter (2007, 2008) found that German and U.S. consumers liked pharmaceutical advertising less than advertising in general, but they believed it more. The current investigation is based on data collected by Diehl, Mueller and Terlutter (2007, 2008) for the U.S. and Germany, and is expanded to include China (Hong Kong) - a culture different in many aspects from the two Western societies (see e.g. House et al. 2004, Hofstede 1980, 2001).

3 Importance of pharmaceutical advertising

Pharmaceutical advertising is one of the most important advertising categories in China (Chan 1995). In 2009, two pharmaceutical companies were among the top 10 advertisers in China (Nielsen, 2009). In Hong Kong alone, pharmaceutical and health care advertising increased from 3.00 million US dollars in 2006, to 6.25 million US dollars in 2009, more than doubling in just three years' time (Ad Spend Report 2006 and 2009, www.admango.com). China is expected to become the fifth largest pharmaceutical market in the world by 2010. Many pharmaceutical enterprises consider China as a vast market and intend to significantly increase their investment in pharmaceutical advertising (Li and Huang 2009).

In Germany as well, pharmaceutical advertising (B2C-advertising) is a very important advertising category, ranking 7th in terms of the most important advertising categories. Pharmaceutical advertising expenditures increased from 617 million Euro in 2006, to 622 million Euro in 2007, and to 676 million Euro in 2008 (Nielsen Media Research, www.gwa.de, www.axelspringer-mediapilot.de).

In the U.S., pharmaceutical manufacturers spent at least \$20.5 billion on promotional activities in 2008. Detailing to physicians, nurse practitioners and physicians' assistants cost \$12 billion, accounting for more than half of that promotional spending. Drug companies spent another \$3.4 billion sponsoring professional meetings and events and about \$0.4 billion placing ads in professional journals. Pharma manufacturers spent the rest of their promotional budgets, \$4.7 billion in 2008 on direct to consumer advertising. The growth of pharma manufacturers overall promotional spending has slowed from double digit annual pace in 2003 and 2004 to a rate that is close to zero. That slowdown is likely related, at least in part, to the decline in the number of new drugs have received FDA approval since 2000. Not only are fewer newer drugs being approved of late, but

more drugs are facing competition from generic versions. These factors may be particularly important in explaining declining ad spend on Direct to Consumer advertising, which peaked at \$5.2 billion in 2006 - because pharma manufacturers tend to use more DTC advertising for drugs that have especially broad potential markets, as well as drugs with no or few substitutes. (Congressional Budget Office Economic & Budget Issue Briefs, www.cbo.gov). In spite of this decrease in the U.S., in terms of overall product category advertising expenditures, pharmaceuticals ranked second - behind only automobile manufacturers, which demonstrate the great importance of pharmaceutical advertising (Nielsen, http://en-us.nielsen.com/main/news/news_releases-/2009/march/u_s_).

Focusing on the U.S., China (Hong Kong) and Germany - three major markets for pharmaceutical advertising, this investigation provides insights regarding consumer perceptions of commercial messages for such products, outlines recommendations for advertisers and addresses implications for governmental regulation.

4 Skepticism toward pharmaceutical advertising

According to Obermiller and Spangenberg (1998), skepticism toward advertising is defined as the tendency to disbelieve advertising claims. Obermiller, Spangenberg and MacLachlan (2005) conceive ad skepticism as an individuals' willingness to believe advertising claims.

After studying a large number of U.S. public opinion polls, Calfee and Ringold (1994) found ample empirical evidence that skepticism toward advertising is widespread among consumers. Two-thirds of American consumers doubt the truthfulness of advertising. Advertising has the reputation of making people buy things they neither need nor want. Boush, Friestad, and Rose (1994) analyzed skepticism toward television advertising in the U.S. and reported relatively high scores of skepticism toward advertising, as well. In Germany the perception of advertising is quite similar. A study conducted by IMAS International (2004) in Germany found that roughly two-thirds of all consumers think that there is too much advertising. An investigation by the *GfK (Gesellschaft für Konsumforschung, 2003)* in 21 European countries, with 21,178 respondents showed that in Germany, about 78 percent of respondents find advertising annoying. On the other hand, a positive aspect of advertising is, that many consumers also believe that advertising provides useful information (Calfee and Ringold 1994; *GfK, 2003*).

Given that pharmaceutical advertising targets an individual's health and well-being, one might expect consumers to be particularly cautious regarding

pharmaceutical advertising and distrustful of claims made on behalf of such products. However, several investigations have indicated that responses to pharmaceutical messages among American consumers are generally not negative. One poll of 1,200 consumers found that 74 percent believe these ads help them to be more involved in their own health care, while 67 percent say the ads teach them about the risks and benefits of drugs (Steyer, 1999). A 2003 Prevention Magazine survey on consumer reactions to such advertising found that 84 percent of respondents noted that drug ads tell people about new treatments, 83 percent said ads encouraged them to find out more about the condition a drug treats and 80 percent said the ads alert people to symptoms of a condition they might have (*Medical Marketing and Media*, 2003). A survey by Chan and Ha (1997) found that consumers in Hong Kong especially appreciated OTC drug advertising's ability to both increasing their knowledge about OTC drugs as well as encourage healthy competition among brands. Nevertheless, a majority of Hong Kong respondents also perceived that OTC drug advertising exaggerates a product's therapeutic function.

Further, recent research by Mueller (2006) has shown, at least in the U.S., that while consumers are significantly less likely to believe advertiser's claims for low involvement products (such as shampoo), they are significantly more likely to believe claims made on behalf of high involvement products, and in particular, claims for health related products. Obermiller, Spangenberg and MacLachlan (2005) found that involvement with a product tends to mitigate against the negative effects of higher skepticism toward advertising.

Consumers may well believe that pharmaceutical advertising faces much stricter regulatory controls than it, in fact, does. Bell, Kravitz, and Wilkes (1999) revealed substantial misconceptions among U.S. consumers regarding governmental regulation of direct-to-consumer advertising. Though no such regulation existed at the time, 50 percent of the subjects surveyed believed that drug companies had to submit copies of all prescription drug ads to the federal government for approval before those ads could be disseminated; 43 percent incorrectly believed that only drugs that have been found to be completely safe are allowed to be advertised in the U.S.; 21 percent erroneously believed that only extremely effective drugs could be advertised; and 22 percent mistakenly believed that the advertising of prescription drugs with serious side effects had already been banned in the U.S. These false beliefs regarding advertising regulation could have lead to the perception that pharmaceutical advertising is more strictly controlled than regular advertising. In Germany, for instance, all pharmaceutical advertisements directed at consumers must include the following statement: "For risks and side effects read the package insert and ask your physician or pharmacist." This may serve to reinforce the misconception that all in-

formational claims in advertisements are scrutinized by governmental bodies (which is not the case). In Germany and the U.S., these misconceptions of regulatory control may increase the believability of, and reduce skepticism toward, pharmaceutical advertising. In Hong Kong, advertisements for medical preparations and treatments in broadcast media are strictly regulated, and must comply with the Undesirable Medical Advertisements Ordinance Act (Cap. 231 Laws of Hong Kong, <http://www.legislation.gov.hk>) as well as additional codes for specific media, e.g. Generic Code of Practice on Television Advertising Standards (http://www.hkba.hk/en/doc/code_tvad_e.pdf). According to this code, specific medical preparations and treatments (such as smoking cessation treatments, clinics treating the scalp and hair, pregnancy testing services, and so on) are not allowed to advertise in broadcast media (see also Wong and Kwok, 2006; <http://www.psdh.gov.hk/eps/webpage.jsp>). Compared with Germany and the U.S., Hong Kong has much stricter controls on pharmaceutical advertising, regarding not only the kind of diseases for which drugs may be advertised, but also regarding the design and content of the pharmaceutical ads themselves. Nevertheless, Hong Kong consumers might still overestimate the degree of oversight of pharmaceutical advertising compared to advertising in general.

Hence, we hypothesize that skepticism toward pharmaceutical advertising is *lower* than skepticism toward advertising in general.

H1: Subjects are less skeptical of advertising for pharmaceutical advertising than of advertising in general.

In contrast to commercial messages for over-the-counter medications, advertising for prescription (restricted) drugs typically addresses health issues that are of a more serious nature and therefore may be perceived as more important and more involving by consumers. Consumers may also expect a higher level of governmental oversight of prescription (restricted) drug advertising than for non-prescription (non-restricted) drug advertising. With regard to the level of skepticism toward advertising for non-prescription (non-restricted) versus prescription (restricted) medications, one might expect consumers to be less skeptical of commercial messages for prescription (restricted) drugs than for non-prescription (non-restricted) drugs. However, Diehl, Mueller and Terlutter (2007, 2008) found no significant differences for the U.S. and Germany. Their results indicate that consumers do not differentiate between prescription and non-prescription drug advertising. One reason might be that consumers do not explicitly think or care about whether the ads they see are for prescription or non-prescription medications. The same is expected for Hong Kong.

Hence, we hypothesize:

H2: Subjects are equally skeptical of advertising for prescription (HK: restricted) and for non-prescription (HK: non-restricted) pharmaceuticals.

The authors tested the hypotheses for the data set as a whole, as well as for each national data set. In order to examine whether there are gender-related differences with regard to skepticism toward advertising in general, and pharmaceutical advertising, in particular, the paper analyzes the skepticism of males and females separately. There is some evidence in the literature that females are easier to persuade, which suggests that they may be less skeptical toward advertising (Obermiller and Spangenberg, 1998). Women are more heavily influenced by brochures (Andereck, 2005) and women consider themselves as being more influenced by advertising than men (Diehl, 2009, see also Paus-Haase et al. 1999). A study by Cole et al. (2008), however, found no gender-related differences with regard to the skepticism toward advertising among college students. In the present study, the sample population consisted of both non-student and student subjects, thus we hypothesize:

H3: Women are less skeptical of advertising in general as well as of advertising for prescription (HK: restricted) and for non-prescription (HK: non-restricted) pharmaceuticals than men.

5 Research design and methodology

In order to test the above stated hypotheses, the following research design was developed.

Subjects: A total of 1,233 respondents in the USA, Hong Kong and Germany took part in the survey (341 Americans, 435 Chinese (Hong Kong) and 447 Germans). Female respondents constituted 58 percent of the sample, 42 percent were male (U.S.: 216 females, 125 males, Germany: 220 females, 227 males, Hong Kong: 286 females, 163 males). The average age of respondents was 28.4 years. Over half (51 percent) were non-students, 49 percent were university students. Respondents either completed the questionnaire independently, or it was administered by a trained interviewer. The survey took approximately 10 minutes to complete.

As the questionnaire addressed health related issues, the health status of subjects was controlled for. First, a single item scale "I am in good physical health" was used. Subjects responded via a five-point scale ranging from 5 =

“strongly agree” to 1 = “strongly disagree”. The majority of respondents indicated good health status. With regard to U.S. and Germany, there were no significant differences with in terms of health status (mean 4.07 resp. 4.09). In Hong Kong the respondents also indicated relatively good health (mean 3.55), but it was significantly lower as compared to U.S. and Germany. Second, subjects were asked to provide their body height and body weight. Subject’s BMI was measured, as it is the most widely used measurement to define those who are overweight or obese. The average BMI of the U.S. subjects was 23.45, the average BMI of the German subjects was 23.47 and the average of the Hong Kong subjects 20.37. This suggests respondents in U.S. and Germany were relatively equal in terms of body weight as well, whereas the subjects from Hong Kong had a significantly lower BMI. However, the average BMI of all three groups of respondents is within the normal weight range (normal range: BMI 18.5 – 24.99, see World Health Organization, <http://www.who.int/bmi>).

Measure of Skepticism toward Pharmaceutical Advertising: Obermiller and Spangenberg (1998) developed and validated a 9-item Likert-type scale to measure the construct of ad skepticism (SKEP), and demonstrated empirical support for this construct. Skepticism is a basic marketplace belief, which varies across individuals and is related to general persuasability. In this investigation the original SKEP scale was employed for the measurement of skepticism toward advertising in general, and adapted for the measurement of skepticism toward pharmaceutical advertising. For instance, subjects were asked to rate the SKEP scale statement “We can depend on getting the truth in most advertising” and the adapted version for the measurement of skepticism toward pharmaceutical advertising, “We can depend on getting the truth from most ads for medications.” Subjects were asked to indicate the extent to which they agreed or disagreed with the statements on a five-point scale.

6 Results

Principal component analysis revealed that the nine items measuring consumer skepticism toward advertising by Obermiller and Spangenberg (1998) loaded on one single factor in each country separately and in the joint dataset of the three countries. Likewise, skepticism toward non-prescription (non-restricted) drug advertising and skepticism towards prescription (restricted) drug advertising also both loaded on a single factor. The measures of skepticism toward advertising in general as well as the measures toward pharmaceutical (non-prescription/non-restricted and prescription/restricted) advertising are shown in *Table 1* and *Table 2*. The values of Cronbach’s α (Cronbach 1951) were 0.916 (SKEP scale), 0.931

(skepticism toward non-prescription/non-restricted pharmaceutical advertising) and 0.940 (skepticism toward prescription/restricted pharmaceutical advertising), demonstrating high internal consistency of the scales. The adapted SKEP scales for non-prescription/non-restrictive and prescription/restrictive pharmaceutical advertising proved again to be well suited for the measurement of skepticism toward pharmaceutical advertising.

Table 1: Measurement of skepticism toward advertising in general (SKEP scale)

	Mean Values							
	whole sample		U.S.		Germany		HK	
	Women	Men	Women	Men	Women	Men	Women	Men
We can depend on getting the truth in most advertising. (0.758)	3.12		2.83		3.27		3.20	
	3.10	3.15	2.78	2.86	3.30	3.25	3.18	3.34
Advertising's aim is to inform the consumer. (0.637)	2.58		2.56		2.50		2.68	
	2.52	2.66	2.46	2.70*	2.46	2.54	2.61	2.79
I believe advertising is informative. (0.736)	2.51		2.14		2.57		2.73	
	2.45	2.58	2.04	2.32**	2.53	2.60	2.71	2.75
Advertising is generally truthful. (0.817)	3.05		2.65		3.13		3.27	
	3.06	3.03	2.66	2.61	3.18	3.09	3.27	3.28
Advertising is a reliable source of information about the quality and performance of products. (0.847)	3.05		2.69		3.13		3.27	
	3.03	3.07	2.63	2.75	3.14	3.09	3.26	3.29
Advertising is truth, well told. (0.768)	3.26		3.07		3.24		3.43	
	3.24	3.28	3.05	3.08	3.18	3.30	3.44	3.42
In general, advertising presents a true picture of the product being advertised. (0.826)	3.04		2.78		3.00		3.29	
	3.03	3.07	2.72	2.84	3.00	3.01	3.28	3.31
I feel I've been accurately informed after viewing most advertisements. (0.830)	3.01		2.65		3.18		3.14	
	2.99	3.04	2.58	2.72	3.23	3.13	3.13	3.17
Most advertising provides consumers with essential information. (0.770)	2.78		2.47		2.83		2.95	
	2.74	2.81	2.43	2.51	2.81	2.85	2.92	3.00
Factor	2.93		2.66		3.00		3.11	
	2.91	2.97	2.60	2.71	2.99	3.00	3.09	3.14

NOTE: Mean ratings are based on a five-point-scale (5 = strongly agree and 1 = strongly disagree), all items reverse coded. Higher values indicate higher skepticism.

Loadings from factor are in parentheses.

*significant differences p < 0. 1

** significant differences p < 0.05

*** significant differences p < 0.01

Table 2: Measurement of skepticism toward pharmaceutical advertising (Non-prescription/Non-restricted and Prescription/Restricted)

	Mean Values																			
	Non-Prescription/Non-Restricted						Prescription/Restricted													
	sample		U.S.		GER		HK		sample		U.S.		GER		HK					
	Women	Men	Women	Men	Women	Men	Women	Men	Women	Men	Women	Men	Women	Men	Women	Men				
We can depend on getting the truth from most ads for medications. (0.788 and 0.798)	2.86	2.50	2.78	3.24	2.82	2.43	2.74	3.29	2.82	2.43	2.74	3.29	2.78	2.87	2.31	2.59**	2.74	2.73	3.17	3.16
The aim of advertising for consumers is to sell more products.	2.52	2.24	2.45	2.81	2.55	2.22	2.45	2.91	2.52	2.24	2.45	2.81	2.55	2.22	2.45	2.91	2.52	2.24	2.45	2.81
I believe advertising for medications is informative. (0.795 and 0.806)	2.56	2.04	2.52	3.00	2.57	2.07	2.54	3.00	2.56	2.04	2.52	3.00	2.57	2.07	2.54	3.00	2.56	2.07	2.54	3.00
Advertising for medications is generally truthful. (0.831 and 0.847)	2.79	2.33	2.71	3.23	2.71	2.28	2.66	3.07	2.79	2.33	2.71	3.23	2.71	2.28	2.66	3.07	2.79	2.33	2.71	3.23
Advertising for medications is a reliable source of information about the quality and performance of the product. (0.849 and 0.871)	2.87	2.47	2.86	3.19	2.84	2.45	2.81	3.00	2.87	2.47	2.86	3.19	2.84	2.45	2.81	3.00	2.87	2.47	2.86	3.19
Any advertising for medications is truth, well told. (0.799 and 0.816)	3.04	2.77	3.00	3.31	2.95	2.68	2.99	3.17	3.04	2.77	3.00	3.31	2.95	2.68	2.99	3.17	3.04	2.77	3.00	3.31
In general, advertising for medications presents a true picture of the product being advertised. (0.845 and 0.872)	2.91	2.52	2.88	3.25	2.86	2.50	2.86	3.19	2.91	2.52	2.88	3.25	2.86	2.50	2.86	3.19	2.91	2.52	2.88	3.25
I feel I've been accurately informed after viewing most ads for medications. (0.830 and 0.854)	2.92	2.45	3.03	3.20	2.92	2.50	3.02	3.18	2.92	2.45	3.03	3.20	2.92	2.50	3.02	3.18	2.92	2.45	3.03	3.20
Most ads for medications provide consumers with essential information. (0.815 and 0.833)	2.72	2.33	2.65	3.09	2.70	2.34	2.67	3.04	2.72	2.33	2.65	3.09	2.70	2.34	2.67	3.04	2.72	2.33	2.65	3.09
Factor	2.80	2.44	2.77	3.15	2.77	2.41	2.76	3.11	2.80	2.44	2.77	3.15	2.77	2.41	2.76	3.11	2.80	2.44	2.77	3.15

NOTE: Mean ratings are based on a five-point-scale (5 = strongly agree and 1 = strongly disagree), all items reverse coded. Higher values indicate higher skepticism. Loadings from factors are in parentheses.

*significant differences p < 0.1
 ** significant differences p < 0.05
 *** significant differences p < 0.01

Hypothesis 1 states that subjects are less skeptical of advertising for pharmaceutical advertising than of advertising in general. Mean comparisons of the different skepticism scales lend support to Hypothesis 1. The mean value of skepticism toward advertising in general in the joint dataset of U.S., Hong Kong and German subjects is 2.93 (*Table 1*), whereas the mean value of skepticism toward advertising for non-prescription (non-restrictive) pharmaceuticals is 2.80 (*Table 2*). The mean difference is significant ($t = 7.249, p < 0.01$). The results of the mean comparison of skepticism toward advertising in general and skepticism toward advertising for prescription (restrictive) pharmaceuticals (mean value of 2.77) shows significant differences as well ($t = 7.724, p < 0.01$). Hence, Hypothesis 1 is supported by the data.

The results are stable in the U.S. and German sub data sets. In the U.S., the mean value of skepticism toward advertising in general is 2.66 compared to 2.44 toward non-prescription and 2.41 toward prescription advertising. Both differences are significant ($t = 6.777, p < 0.01$ and $t = 6.371, p < 0.01$). In the German dataset, the mean value of skepticism toward advertising in general is 3.00, compared to 2.77 toward non-prescription and 2.76 toward prescription advertising. Again, both differences are significant ($t = 7.124, p < 0.01$ and $t = 6.503, p < 0.01$). In the Hong Kong dataset, however, there are no significant differences between the mean value of skepticism toward advertising in general (3.11) and the mean value of skepticism toward non-restricted drug (3.15, $t = -1.442, p > 0.1$) and restricted drug (3.11, $t = -.261, p > 0.1$) advertising. Thus, hypothesis 1 is only supported for the U.S. and Germany.

Hypothesis 2 states that subjects are equally skeptical of advertising for prescription and for non-prescription pharmaceuticals. Indeed, data revealed that none of the differences are significant (neither within the entire data set, nor within the U.S., Hong Kong or German subsets). Thus, Hypothesis 2 is supported by the data. The results of the study by Diehl, Mueller and Terlutter (2007, 2008) indicated that consumers do not differentiate between prescription and non-prescription drug advertising. The current study shows that this is also true for Hong Kong. Apparently, consumers do not explicitly think or care about whether the ads they see are for prescription or non-prescription medications or in the case of Hong Kong for restricted or non-restricted medications.

Hypothesis 3 analyzed whether there are differences in the degree of skepticism among males and females. Hypotheses 3 received only partial support. For the most part, differences between men and women were not significant. For all three countries, there were no significant differences with regard to advertising in general ($F=1.942, p > 0.1$). Regarding skepticism toward advertising for prescription pharmaceuticals ($F=3.559, p < 0.1$), and non-prescription pharmaceuticals ($F=3.147, p < 0.1$), differences were only significant at the 10% level.

In Germany and Hong Kong, skepticism toward advertising in general, and toward advertising for prescription and non-prescription drugs showed no significant differences, but in the U.S., women were less skeptical of non-prescription pharmaceutical advertising ($F = 3.181, p < 0.1$) and significantly less skeptical of prescription pharmaceutical advertising ($F = 6.309, p < 0.05$) than men, findings which support Hypothesis 3. U.S. women and men are equally skeptical of advertising in general. With regard to the single items, there were some significant differences concerning the informational content of advertising in general as well as of pharmaceutical advertising (see *Tables 1* and *2*).

7 Discussion

Results indicate that in Germany and the U.S. skepticism toward pharmaceutical advertising is lower than skepticism toward advertising in general. There are two possible rationales for this finding: First, pharmaceuticals are typically more highly involving products for most consumers as they directly relate to personal health and well being. Pharmaceutical advertising is also an additional source of information and serves consumers' need for health related data. As the study shows, especially women perceived higher levels of informational content in advertising messages. Secondly, consumers expect stronger governmental regulations in the area of pharmaceutical advertising and thus anticipate a higher degree of accuracy in the informational claims made in these advertisements. This misconception regarding the level of governmental oversight likely leads to lower levels of skepticism toward pharmaceutical advertising, compared to advertising in general. However, in Hong Kong there are no significant differences regarding the skepticism toward pharmaceutical advertising and advertising in general. A possible explanation might be that consumers have the opinion that all areas of advertising are more strictly controlled, so they do not differentiate between the different types of advertising. Hence they are equally skeptical toward pharmaceutical advertising and advertising in general.

Gender-specific analyses revealed that women, especially in the U.S., tended to be less skeptical of advertising for pharmaceuticals, particularly prescription pharmaceuticals, than men.

The fact that in American and German consumer's skepticism toward pharmaceutical advertising is lower than their skepticism toward advertising in general, suggests that such advertising has – at least in these countries - some form of built-in “trust factor” – an important finding with regulatory consequences. Lower skepticism toward pharmaceutical advertising most likely leads to higher persuasiveness of the advertisements. Does this suggest a call for stric-

ter governmental control over pharmaceutical advertising? On the one hand, one might argue that stricter regulations are mandatory in order to protect consumers, especially women as the gender-related analysis showed. On the other hand, existing governmental regulations may also be a primary source of consumers' confidence in governmental oversight in the area. While consumers recognize that governmental guidelines exist, they overestimate the level of protection provided in the area of pharmaceutical advertising. If governmental regulations of pharmaceutical advertising were *loosened* instead, and consumers were made aware of this, they might, in fact, become *more* skeptical of pharmaceutical advertising and question the informational claims made in such messages to a greater extent than they do today. At the very least, consumers should be informed that governmental regulations in the area of pharmaceutical advertising are less stringent than consumers believe them to be.

Another important result of this investigation is that consumers in all three countries showed no difference in their level of skepticism toward advertising for prescription (restricted) drugs vs. non-prescription (non-restricted) drugs. Consumers may not know whether an advertised product or brand is a prescription or non-prescription drug. Often, this information is not explicitly mentioned in advertisements. Additionally, many pharmaceuticals shift from prescription status to non-prescription status, potentially further confusing the consumer. In Germany and Hong Kong, where direct-to-consumer advertising for prescription or restricted drugs is not yet allowed in the form, and to the extent to which it is employed in the U.S., there might be a methodological explanation as well. German and Hong Kong subjects may have had difficulty in hypothetically evaluating their level of skepticism toward commercial messages for prescription (restricted) drugs and therefore were not able to differentiate between advertising for prescription/restricted and non-prescription/non-restricted drugs. Clearly, this methodological explanation is less relevant when one considers that in the U.S., where prescription drug advertising is allowed, subjects still did not differentiate between prescription and non-prescription advertising.

The finding of this investigation that neither Germans, Hong Kong Chinese nor Americans showed significant differences in their level of skepticism toward advertising for prescription (restricted) vs. non-prescription (non-restricted) pharmaceuticals, lead to the assumption that consumers do not differentiate between the two types of pharmaceutical advertising. This is especially interesting as advertising for prescription (restricted) drugs is allowed in the U.S., whereas it is not allowed in Germany or Hong Kong. From a consumers' perspective, the discussion of whether to treat prescription or restricted drug advertising differently from non-prescription (non-restricted) drug advertising (in particular, the discussion whether to maintain or loosen the ban for prescription/restricted drug

advertising in Europe and also in China) seems to be of little relevance. Consumers likely do not mind being confronted with prescription drug advertising, as the results from the U.S. show. Clearly, this interpretation is based on the results of this investigation only, primarily as it relates to the variable of skepticism toward pharmaceutical advertising. Other considerations in the decision of whether to loosen or maintain the ban play an important role as well, but are not addressed here.

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Do Consumers' Assumptions on the Companies' Motives and Differences in Moral Orientation of Men and Women Influence the Persuasiveness of CSR Activities?

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1 Abstract

Corporate social responsibility (CSR) activities of a company can influence consumers' beliefs about a company's engagement to social obligations. Although there is already much research on consumer responses to companies' CSR activities, little is known about the conditions in which CSR activities actually have a positive effect on consumer attitudes towards this company and its brand. We compare the effect of non-altruistic CSR activities which exist when it is evident for the consumers that the company itself benefits economically from such activities with the effect of obviously altruistic CSR activities. Especially, we analyze if altruistic CSR activities should have a fit to the different orientations of morality of men and women.

2 Introduction

Corporate support of social causes has a very long tradition. A description of the history associated with this concept is provided by Carroll (1999).

The concept of CSR is ambiguous and indistinct (Vaaland, Heide, and Grønhaug, 2008, p. 930). The definitions and dimensions of CSR vary. Several marketing related concepts overlap with different aspects of CSR. These concepts include societal marketing (Daub and Ergenzinger, 2005), cause-related marketing (e.g., Barone, Norman, and Miyazaki, 2007; Ellen, Mohr, and Webb, 2000), environmental marketing (e.g., Kärna, Hansen, and Juslin, 2003), environpreneurial marketing (Menon and Menon, 1997), green marketing (Kalafatis

et al., 1999), quality-of-life (Sirgy and Lee, 1996), social responsible buying (Maignan and McAlister, 2003), social sponsorship (Simmons and Becker-Olsen, 2006), and sustainable consumption (Leigh et al., 1988; Dolan, 2002).

Brown and Dacin (1997, p. 68) define CSR of an organization (e.g., a company) as “the organization’s status and activities with respect to its perceived societal obligations“. Maignan and Ferrell (2001) extend this definition to “a citizenship function with moral, ethical and social obligations“. According to Andriof and McIntosh (2001, p. 13), in an organizational context CSR can be regarded to be the willingness to assume social and environmental responsibility. Sen, Bhattacharya, and Korschun (2006, p. 158) distinguish between corporate ability (CA) and CSR. CA refers to a company’s capability to produce quality products, while CSR activities produce consumer associations about the company’s commitment to its societal obligations. A more specific definition of CSR initiatives is provided by Lichtenstein, Drumwright, and Braig (2004, p. 16): “CSR initiatives refer to the various forms of company involvement with charitable causes and the nonprofit that represents them”.

In the last decades, corporate support of social causes has emerged as a popular promotional tool of companies (Luo and Bhattacharya, 2006, p. 1; Simmons and Becker-Olsen, 2006, p. 154; Yoon, Gürhan-Canlı, and Schwarz, 2006, p. 377). A more detailed discussion on several CSR communication strategies is given by Morsing and Schultz (2006). Many companies dispose CSR activities in their advertising campaigns. Luo and Bhattacharya (2006, p. 1) reported that the October 2005 issue of *InStyle magazine* carried more than 25 advertisements including CSR activities. According to the annual ranking of business responsibility by *Fortune*, a business magazine, large companies invest substantial amounts in CSR activities (e.g., *General Motors* donated \$51.2 millions and *Merck* \$921 million within one year). According to a ranking of *Fortune* in 2008, companies like *Vodafone*, *General Electric*, *HSBC Holdings*, *France Télécom*, or *Nokia* were placed among the Top Ten companies with the highest spending for CSR activities. Figure 1 shows two advertisements including CSR activities of two well-known German companies. Most recent examples of CSR activities in a marketing context are the campaigns of *Procter & Gamble*, which produces swaddling clothes known as *Pampers*, and the campaign of *Wick*, a German brand for cold products. *Pampers* (*P & G* respectively) has joined an initiative with *UNICEF* to eliminate maternal and neonatal tetanus. Through this “*One Pack = One Vaccine*” campaign, *Pampers* donates a certain amount of money to *UNICEF* for each package of swaddling clothes sold. In a similar way, *Wick* donates to the *WWF Arctic rescue program*. Considering the dimensions of such activities, avoiding negative effects of CSR and producing positive effects can be regarded as an important marketing goal.



Figure 1: Examples of actual CSR activities

Obviously, companies often do not act as altruistic patrons. They intend to increase sales, to maintain favourable brand images (Barone, Norman, and Miyazaki, 2007, p. 437; McAlister and Ferrell, 2002, p. 698), and to evoke other kinds of positive consumer responses (e.g., Berens, van Riel, and van Bruggen, 2005; Brown and Dacin, 1997; Drumwright, 1996; Du, Bhattacharya, and Sen, 2007; Sen and Bhattacharya, 2001). For example, CSR activities can “humanize” a company or brand, encouraging consumers to not just like, respect or admire the company but actually identify with it (Bhattacharya and Sen, 2003, p. 78). Thus, companies can aim to achieve a win-win situation of the company and the society (McAlister and Ferrell, 2002, p. 698).

3 Previous research and research gap

3.1 Basic research

In table 1 we present an overview of recent research on the impact of CSR activities on consumer responses. Mainly, positive consumer responses are reported. The findings provide evidence that these responses can be observed in experiments (e.g., Du, Bhattacharya, and Sen, 2007; Sen, Bhattacharya, and Korschun, 2006) as well as on the basis of field research data (e.g., Luo and Bhattacharya, 2006).

However, there are important limitations of this finding. Simmons and Becker-Olsen (2006) show that CSR activities affect consumer attitudes negatively when there is a low fit between the CSR activity and the company’s prod-

uct line. For instance, evaluations of a pet food producer deteriorated when the supported CSR activity was a social sports program. Conversely, the evaluation of a supplier of sports equipment deteriorated as a consequence of its sponsorship of an association for humane animal treatment. Yoon, Gürhan-Canli, and Schwarz (2006) provide evidence that even in the condition of a high fit between the CSR activity and the product line of the company, consumer attitudes might deteriorate. These authors considered the case in which the company itself is partly responsible for the existence of the problem the sponsored institution tries to reduce. For instance, a negative effect of a CSR activity was observed when a tobacco company supported an institution which supports research on cancer of the lung.

Furthermore, there is research on the CSR motives the supplier is supposed to pursue (*e.g.*, Barone, Norman, and Miyazaki, 2007) and on the role of fit between the CSR activity and the company's target group (*e.g.*, Barone, Norman, and Miyazaki, 2007). These factors proved to be influencing the sign and the strength of the relationship between CSR activities and consumer attitudes. However, often these authors did not include control groups in their experimental designs. Thus, it is difficult to provide answers to the questions of whether obviously self-interested, non-altruistic motives of the companies or whether a low fit between the CSR activity and the company's target group either deteriorate evaluations of the company or if evaluations are only less positive compared to the conditions of seemingly altruistic motives and a high fit between the CSR activity and the target group.

Table 1: Overview of recent studies on consumer responses to CSR activities

<i>Theoretical background</i>	<i>CSR activity</i>	<i>Experimental design</i>	<i>DV</i>	<i>Main findings</i>
Barone, Norman, and Miyazaki, 2007, Study 3				
categorization theory, consistency theory	fictional retailer supports fight against breast cancer	supplier's motive (sales increase vs. no benefit to the retailer) x CSR-product line fit (low vs. high) x CSR-target group fit (low vs. high)	A _c	positive main effects; positive three-way interaction
Du, Bhattacharya, and Sen, 2007				
persuasion knowledge model, heuristic-systematic model	yogurt producers' effort fighting hunger in the U.S.	engagement of the producer to CSR in the past (none vs. moderate vs. high)	L, BI	positive effect

<i>Theoretical background</i>	<i>CSR activity</i>	<i>Experimental design</i>	<i>DV</i>	<i>Main findings</i>
Luo and Bhattacharya, 2006				
customer satisfaction theory	survey data measuring the intensity of a company's perceived overall CSR activity	none (<i>i.e.</i> , field study)	PQ, I, MV	positive correlations between intensity of CSR and perceived product quality and innovativeness
Sen, Bhattacharya, and Korschun, 2006				
organization identification theory	a packaged goods company's actual donation to a university	awareness of the donation (absent due to asking them before the donation vs. absent after the donation vs. present)	A _c	positive effect
Simmons and Becker-Olsen, 2006, Study 1				
schema congruity theory, priming theories	a company's sponsorship of a social sports program or an association for humane treatment of animals	CSR-company fit (low. vs. high) x sponsoring (yes vs. no) x questioning (before vs. after the sponsoring information)	A _s , CP	positive effect in the high fit condition, negative effect in the low fit condition
Simmons and Becker-Olsen, 2006, Study 2				
schema congruity theory, priming theories	a pet food producer's sponsorship of a social sports program	CSR-company fit (low vs. created) x message source (company vs. the sponsored organization)	A _s , CP	positive effects in the created fit condition and when the source was the sponsored organization
Yoon, Gürhan-Canli, and Schwarz, 2006				
attribution theory, persuasion knowledge model	a tobacco company's support of fight against cancer or of an environment association; replication for an oil company	the problem which is treated by the sponsored organization is partly caused by the company itself (yes vs. no) x message source (company vs. a magazine's report)	A _c , IM	negative effect in the "company is responsible" condition and when the message source is the company

Notes: DV = dependent variable; A_c= attitude towards the company; A_s= attitude towards the sponsorship; L=loyalty; BI= brand identification; PQ= perceived product quality; MV= company's market value; CP= clarity of positioning; I = innovativeness; IM= inferred motives.

3.2 *Gender of the audience*

Barone, Norman, and Miyazaki (2007) defined the CSR target group as those customers who have a strong affinity for the charity activity. An important component of target group definitions often is the gender of consumers.

For example, there is one stream of research concerning CSR activities that focuses on the question of what kind of consumers behaves socially responsible (Roberts, 1995; Dietz, Kalof, and Stern, 2002), is more concerned with environmental issues (*e.g.*, MacDonald and Hara, 1994), and has a higher purchase intention (*e.g.*, Schwepker and Cornwell, 1991) and a higher willingness to pay for “green products” (*e.g.*, DePelsmaker, Driesen, and Rayp, 2005; Laroche, Bergeron, and Barbaro-Forleo, 2001). The results of these studies are heterogeneous. These findings suggest that there might be differences between men and women concerning their response to CSR activities.

A very recent examination conducted by Winterich et al. (2009, Study 3) illustrates that women are more likely to donate to out-groups (*e.g.*, victims of the tsunami in Indonesia) and men are more likely to donate to in-groups (*e.g.*, victims of the hurricane Katrina in New Orleans). Thus, men or women might prefer different kinds of CSR activities. The effect observed by Winterich et al. (2009) was intensified by the consumer’s strength of the moral identity. Blasi (1984) defines moral identity as “the extent to which notions of being moral (*e.g.*, being fair, just, kind) are central, important, and essential to one’s self-identity”. Regarding moral psychology, the justice-care debate introduced by Gilligan (1982) proposes that women and men differ in their basic life orientations, especially in their conceptions of self and morality. According to Yacker and Weinberg (1990, p. 334), men view themselves as being separate from others and tend to think abstractly in terms of justice, reciprocity, and individual rights. Women tend to think contextually in terms of care and responsibility towards others, in terms of connection, and in terms of the preservation of relationships. Thus, the different responses towards CSR activities could have resulted from different conceptions of morality women and men possess. Our examination contributes to the interaction effect of perceived company motives for supporting the CSR activity (justice vs. care) and gender of the audience.

4 Theoretical background and hypotheses

4.1 Perceived motives

Attribution theory (Weiner, 1986) suggests that persons generally tend to identify the cause of events. Thus, consumers may scrutinize the supplier's motives to inform consumers about its CSR activities. Brown and Dacin (1997, p. 77) argue that "consumers are not only (...) aware of what the CSR brand is doing in terms of social initiatives but also make (...) inferences about why the brand is doing so." Consumer inferences about the motives underlying a company's CSR activities can result in consumer beliefs that the company's efforts are either altruistic or non-altruistic. When a non-altruistic motive is assumed, suspicion surrounding the company's activity can prompt consumers to question how genuine or sincere the company's efforts are (Barone, Norman, and Miyazaki, 2007, p. 439). Ellen, Webb, and Mohr (2006, p. 148) suppose that consumers do not necessarily trust in the pro-social position of a company. Yoon, Gürhan-Canli, and Schwarz (2006, p. 378) assume that consumers will not reward a company for its CSR activities unless they trust in the company's pro-social position. Webb and Mohr (1998) reported that some respondents expressed reservations toward a company donating a certain percentage of the sales price to a non-profit organization.

If consumers believe in non-altruistic motives, they are supposed to "undertake a sophisticated attribution process in which they attempt to uncover the underlying, ulterior motives" (Szykman, Bloom, and Blazing, 2004, p. 14). These attributions will result in less positive evaluations. Szykman, Bloom, and Blazing (2004, p. 14) illustrate this effect referring to a "Don't drink and drive" initiative. In this case, a sponsor like "*Mothers against Drunk Driving*" might be regarded to be more sincere than a sponsor like *Budweiser* since this brewing company makes profits by selling alcoholic beverages. Consumers may be suspicious about the motive because the message may be viewed as incompatible with the inferred goal of the sponsor. In this case, consumers are expected to attempt uncovering the benefits that *Budweiser* would hope to achieve by sponsoring a socially-oriented activity that appears to conflict with the organization's motives (Fein, 1996). If the CSR activity does not lead to this sophisticated attribution process, "consumers would have no reasons to suspect the motives of the sponsor" (Szykman, Bloom, and Blazing, 2004, p. 14).

The persuasion knowledge model which was developed by Friestad and Wright (1994) is also used to explain consumer responses to assumed CSR motives. Generally, Friestad and Wright (1994) argue that consumers imagine various persuasion tactics and consider the appropriateness of using such tactics to

manipulate them. Once consumers are suspicious about the motives of a company, they will take steps to protect themselves from the attempt to manipulate them, such as counter arguing the message and discounting the company's arguments. Du, Bhattacharya, and Sen (2007, p. 687) transfer these ideas to CSR activities. They suggest that consumers will "naturally make attributions about the motives underlying a CSR initiative." Campbell and Kirmani (2000) argue that such consumer beliefs have an impact on evaluations when consumers elaborate on the possibility of marketing tactics. The more intense consumers think about a company's persuasion tactic, the less likely they will evaluate the company or its brands in a favorable way (Menon and Kahn, 2003, p. 317).

Summarizing, previous research suggests that consumer beliefs about a company's motives to be engaged in CSR activities is a key factor in understanding the effects of CSR information in advertising campaigns (Barone et al., 2000; Rifon et al., 2004). If consumers assume that a company has a clear short-term economic benefit from CSR activities they may regard such activities as being a form of advertising which aims at influencing consumer behaviour. Even if they have difficulties to understand whether the company has a short-term economic benefit they may mistrust in its pro-social position. Thus, we test:

H1: The attitude toward the brand is negatively affected by CSR activities signalling a high economic benefit for the company.

4.2 Gender of the audience

There are two questions concerning the influence of the gender of the audience on the effects of a company's CSR activities. First, either women or men could respond more intense to such activities. Second, women vs. men could prefer different types of CSR activities.

Some experiments demonstrate that women can be persuaded more effectively by CSR activities than men (Dietz, Kalof, and Stern, 2007; Laroche, Bergeron, and Barbaro-Forleo, 2001). Some other authors report that men react more intense on such information. They argue the men possess more environmental knowledge, concern, and commitment (Mostafa, 2007; Li, 1997; MacDonald and Hara, 1994). Finally, other authors did not observe differences between men and women regarding their response to CSR activities (DePelsmaker, Driesen, and Rayp, 2005; Roberts, 1995; Schwepker and Cornwell, 1991). Thus, there is no consensus on the question of whether men or women can be influenced more by CSR activities.

A reason for the heterogeneous results can be seen in the different moral orientation of men and women. According to Gilligan (1982), men are more likely to adhere to the "ethic of justice" by emphasizing rules and individual rights. Women are more likely to adhere to the "ethic of care" by emphasizing relationships and compassion. The "ethic of justice" implies a justice and rights orientation of men because men are assumed to possess a more individualistic and separate conception of their "self". Males view morality as involving issues of conflict rights. The "ethic of care" implies a care and responsibility orientation of women because women are supposed to perceive their "self" as connected to and interdependent with others. According to this approach, a woman's bases of her "self" are strong and harmonious connections with others and concerns for the well-being and care of her self and others. Females view morality as involving issues of conflicting responsibilities.

Similarly to moral orientations of women and men, CSR activities can be classified by their goals which can be associated with different moral orientations. For example, Carroll (2001) proposes three types of CSR activities referred to as economic, legal and philanthropic responsibilities. Lantos (2001) provides a distinction between ethical, altruistic, and strategic CSR. A more detailed classification is presented by Sen and Bhattacharya (2001, p. 226): (1) community support (*e.g.*, support of arts, health programs, educational, and housing initiatives for economically disadvantaged, generous/innovative giving), (2) diversity (*e.g.*, sex-, race-, family-, sexual orientation-, and disability-based initiatives), (3) employee support (*e.g.*, concern for safety, job security, profit sharing, employee involvement), (4) environment (*e.g.*, environment friendly products, animal testing, pollution control, recycling), (5) non U.S. operations (*e.g.*, overseas labour practises, operations in countries with human right violations), and (6) product (*e.g.*, product safety, research and development/innovation, antitrust disputes). However, we assume that these activities could be classified on a more abstract level into the categories (1) care and (2) justice. For instance, concern for the environment or support for disabled persons indicates "care". On the other side, fight against human right violations may signal "justice". Thus, we test:

H2a: Advertisements including CSR activities signalling "care" have a positive impact on women's attitude toward the brand.

H2b: Advertisements including CSR activities signalling "justice" have a positive impact on men's attitude toward the brand.

5 Experiment

5.1 Pretest

We conducted a pretest to identify CSR activities which are interpreted as being highly beneficial for the company by consumers, *i.e.*, activities, where it is obvious that the company is involved due to its own advantage. Furthermore, we identified CSR activities which respondents attributed either to the “care” or to the “justice” category.

On the basis of focus group discussions we explored appropriate types of CSR activities. We initiated discussions within three groups that ranged in size between three and six participants. One group consisted of men only, another group of women, and the third group was mixed in gender. The focus groups discussed several CSR activities with regard to the motives of the companies (*i.e.*, altruistic vs. non-altruistic) and the moral orientation of each activity (*i.e.*, “care” vs. “justice”). In all three groups, the CSR activities chosen for the main study were classified into the same category. Two activities were attributed to the “highly beneficial for the company” category (*i.e.*, non-altruistic motive), two activities to the “care” category and two activities to the “justice” category.

Based on these findings, we tested the effect of fictional CSR activities for six well-known brands. The CSR activities which we have chosen for our experiment are listed in table 2.

Table 2: Content of CSR activities used in the experiment

<i>Category</i>	<i>Brand</i>	<i>Content of CSR activity</i>
<i>CSR activities signalling a high benefit for the company:</i>		
Mobile phone	Sony	Childcare for their own staff
Textiles	Benetton	Giving away unsalable products to poor people to clear the stock
<i>CSR activities signalling “care” and a low benefit for the company:</i>		
Laptop	Aldi/ Medion	Support of a charity event aiming at collecting donations for schools in Uganda
Sports shoes	Reebok	Support of sheltered workshops for handicapped young adults
<i>CSR activities signalling “justice” and a low benefit for the company:</i>		
Automobile	Opel	Support to standardize young car drivers’ abilities to avoid danger to traffic
Textiles	kik	Micro-credits for persons from the Congo to run a business

5.2 Main study

Experimental design. To test our hypotheses, we conducted an experiment using a 2 (CSR activity: yes vs. no) x 2 (gender of the respondent: female vs. male) x 6 (brand) between-subjects design.

Test stimuli. For each test product, we created two versions of an advertisement. One version did not inform about CSR activities and was created like a usual advertisement, the other version informed about the CSR activity. In the case of advertisements including CSR information, we provided additional information besides the advertisement. This type of information presentation was adopted from Simmons and Becker-Olsen (2006). Examples of the advertisements are shown in figure 2. Note, that the experiment aiming at testing the effect of a fictional CSR activity of Opel was conducted before information about this company's financial difficulties was published by mass media.

Procedure. Data collection took place between 2007 and 2009. First, a filler task was included to distract the respondents' attention from the object of investigation. In the next step, the respondents had contact with the relevant advertisement and they had to evaluate the brand.

Sample. This study was based on a sample of German consumers, who were potential customers of the products. The advertisement which we created to promote automobiles (Opel) was shown to elderly persons. The other ads were presented to younger consumers. These samples mainly consisted of students. The sample sizes in the experiments ranged from 84 to 107 depending on the brand. The exact numbers are given below table 3. The respondents' age ranged from 18 to 59. The participants were randomly assigned to the conditions of the experimental design.

Measures. We obtained a measure of the respondents' attitude toward the brand by asking them to provide their overall opinion about the brand on a seven-point scale with verbal anchors attached to the extreme scale positions (e.g. "very unattractive", "very attractive"). The scale labels were attractive, interesting, likable, something special, appealing, and extraordinary. The six items used to measure attitude toward the brand were averaged to form an arithmetic mean of attitude ($\text{Alpha} = .940$)

Results. The results are reported in table 3. To test our propositions, we calculated mean values for each condition of the experimental design and tested the effect of the presence of CSR activity and the effect of gender by ANOVAs. In hypothesis H1, we expected a negative effect of CSR activities which signal a high economic benefit for the company. Thus, F_{CSR} should be significant. The ANOVA results provide weak support for this assumption ($ps < .10$). In hypothesis H2a, we predicted a positive effect of CSR activities signalling "care"

on women’s attitude toward the brand. Thus, we expected $F_{Interaction}$ to be significant. The results are in line with this assumption since women’s evaluations increased in the case of an ad with CSR information for both brands ($ps < .10$). Finally, in H2b we predicted a positive effect of CSR activities signalling “justice” on men’s attitude toward the brand. This assumption is only supported partly since $F_{Interaction}$ proved to be significant for only one out of two brands at the .10 level. Again, the results of our study provide only weak support of our propositions.







Ad without CSR activity information	Ad including CSR activity information
	 <p>Restbestände aus seinen Filialen kostenlos an Hilfsbedürftige. Damit helfen sie armen Menschen, denen ansonsten das Geld für Kleidung fehlen würde.</p> <p>dp.a. Benetton verteilt in der Aktion „colors help people“</p>
	 <p>dp.a. Reebok übernahm kürzlich die Patenschaft für eine Werkstätte, in der geistig und körperlich behinderte junge Erwachsene Holzspielzeug herstellen. Damit zeigt der Konzern großes Engagement für Schwerbehinderte.</p>
	 <p>MICROCREDIT AFRICA WORKS</p> <p>dp.a. Der Textil-Diskont kikkor vergibt Mikrokredite an Kongoliesen. Dadurch gibt kikkor ihnen die Chance ihre Familie selbständig versorgen zu können und ein eigenes Business aufzubauen.</p>

Figure 2: Examples of advertisements without and with CSR information about CSR activities signalling “justice”

Interpretation. Although we are not able to provide strong support for our hypotheses, this study can be seen as a first step in investigating the effect of the

interaction between the target group's moral orientation and the CSR activity's orientation on brand evaluation. We assume that the lack of strong evidence for our hypotheses results from the chosen manipulation of the test stimuli. Probably, the findings may be as predicted when expressing "economic benefit for the company", "care", and "justice" more clearly. Another explanation of why there is only weak support of the hypotheses might be seen in the test products we used for analysing the effect of CSR activities. As we considered well-known brands CSR activities mentioned in a single advertisement could only produce a small effect. The pre-existing attitude toward the brands may also have had an influence and might have attenuated the effect of CSR activities. Combining unknown brands with a CSR campaign may probably result in stronger effects. We did not include the companies' reputation in the area of social and environmental responsibility into the test design. However, due to the findings of the pre-test, we do not assume that the weak support of the hypotheses results from the respondents' mistrust in the altruistic motives of the companies to perform certain CSR activities.

Table 3: Results of the experiment

Brand	Male consumers		Female consumers		ANOVA		
	without CSR	including CSR	without CSR	including CSR	F_{CSR}	F_{Gender}	$F_{Interaction}$
<i>CSR activities signalling a high benefit for the company:</i>							
Mobile phone (Sony)	4.50	3.76	4.75	4.35	2.965 (.089)	1.625 (.206)	.270 (.605)
Textiles (Benetton)	4.52	3.91	4.99	4.55	3.046 (.085)	3.345 (.071)	.076 (.783)
<i>CSR activities signalling "care":</i>							
Laptop (Aldi/Medion)	4.53	4.19	3.95	4.67	.414 (.522)	.022 (.882)	3.165 (.079)
Sports shoes (Reebok)	3.74	4.02	3.27	4.77	12.214 (.001)	.321 (.573)	5.721 (.019)

Brand	Male consumers		Female consumers		ANOVA		
	without CSR	including CSR	without CSR	including CSR	F_{CSR}	F_{Gender}	$F_{Interaction}$
<i>CSR activities signalling "justice":</i>							
Automobile (Opel)	3.29	4.34	4.09	4.24	5.008 (.027)	1.679 (.198)	2.862 (.094)
Textiles (kik)	1.79	3.07	2.55	2.79	3.770 (.056)	.373 (.543)	1.721 (.193)

Notes: 7-point scale ranging from 1 (negative) to 7 (positive) values. In parentheses: *p* values. Sample sizes: Sony 90, Benetton 84, Aldi/Medion 85, Reebok 88, Opel 107, Kik 85.

6 Managerial implications

Even though there is only weak support for our assumptions, there are some findings that should be kept in practitioners' mind. First, in line with prior research (e.g. Yoon, Gürhan-Canli, and Schwarz, 2006), the economic benefit (if it exists in fact) from CSR activities for the company itself should not be too obvious to the consumers, because otherwise consumers are likely to assign self-serving motives to the company. The CSR activity might "backfire" when consumers have a reason to doubt the companies' altruistic motives. In this condition, they might evaluate the company more negatively than without the CSR activity. Second, companies which intend to conduct CSR activities should choose projects which are preferred by their audience. Based upon our preliminary findings we recommend suppliers of female products (e.g. cosmetics) to select CSR activities signalling "care" whereas suppliers of male products (e.g. manual equipment) should concentrate on CSR activities signalling "justice".

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Part VI

Media Placement, Brand Placement, Public Relations and Viral Marketing

Media Placement versus Advertising Execution

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1 Abstract

We make three contributions towards understanding how engagement with the surrounding editorial context affects reactions to ads. First, while previous studies have shown that respondent-level engagement affects ads, we argue that vehicle-level engagement is more relevant to placement decisions and show that magazine-level engagement affects actions taken from seeing an ad. Second, we compare the relative importance of engagement to the execution factors size, position and colour, and show engagement is of comparable importance. Third, evaluations are done with more realistic procedures than previous studies and with real ads.

The effectiveness of an advertisement depends on the product being advertised and characteristics of the execution such as the quality of the ad itself, the size of the ad and location in the medium (e.g. back cover, inner front cover, etc.). An additional factor, which has received substantial attention in the advertising community, is reader engagement with the media context itself. Many studies have shown that when consumers are highly “engaged” with a media vehicle they can be more responsive to advertising (e.g. Aaker & Brown 1972; Feltham & Arnold 1994; Coulter 1998; Gallagher *et al.* 2001; DePelsmacker *et al.* 2002; Nicovich 2005; Bronner & Neijens 2006; Cunningham *et al.* 2006; Wang, 2006). Others have called for additional research on how the surrounding context affects reactions to ads (Galpin & Gullen 2000; Baltas 2003, p. 512).

While this conclusion is not surprising, its implications for media planning are potentially profound because the price of most advertising is determined by audience size and execution factors such as position and size, without considering engagement in any formal way. For example, the price of print advertising is determined by circulation, the location of the ad within the publication and characteristics of the ad such as the number of colours. Likewise, the algorithms used to place banner and sidebar ads do not consider consumer “engagement” with the

hosting site. If engagement with the vehicle affects reactions to ads then it should be considered when deciding which vehicles to use.

At the same time, advertisers are searching for ways to overcome the problems of ad clutter and avoidance (Cho & Cheon 2004), and media organisations are going bankrupt as advertising revenue streams disappear and circulation declines. Focusing on the media context is a potential solution to both problems. For advertisers, who have (at least some) control over where their ads appear, we know that context can affect reactions to ads and should therefore be considered when selecting media vehicles. Media organisations with exceptionally engaging content argue that they should be able to charge a premium price for their advertising inventory. Both advertisers and media companies are searching for media-neural metrics for the purpose of common-currency comparisons, e.g. a website with a print vehicle (Winer 2009).

One reason why media planners have not explicitly accounted for media context in their models is that they have not had systematic and widely available measures of context, but this is changing. Bronner and Neijens (2006) have developed scales to measure the consumer's experience with different media and shown that these measurements predict reactions to ads. Calder and Malthouse (CM) have independently developed similar experience scales and shown similar predictive validity (e.g. Malthouse et al. 2007; Calder and Malthouse 2008; Calder et al. 2009). They have also conceptualized *media engagement* as the *collective experiences that a reader has with the editorial content* and shown how to measure it as a second-order construct from first-order experiences.

The Bronner-Neijens and Calder-Malthouse studies have advanced our understanding of media context and ability to measure it, but many additional questions must be answered before experiences and engagement can be routinely incorporated in media-placement decisions. This research makes three contributions towards this goal. First, previous research has focused on the effect of *the respondent's engagement* with the vehicle on ads, but media are usually purchased at the *vehicle level*. Advertisers buy space in magazines and TV programs; they do not buy individual readers or viewers. This research tests whether the *average level of engagement with a vehicle* affects reactions to ads.

The second contribution is to compare the potency of engagement (media placement) with that of execution factors currently used to price advertising, in predicting advertising effectiveness. This raises the possibility of "trading off," for example, ad size or location with selecting more engaging vehicles. In doing this, we attempt to monetise the value of engagement.

The third contribution concerns the robustness of the engagement effect. Does the relationship between engagement and advertising effectiveness hold up over a broad cross-section of real ads from different product categories? And,

along the same lines, this research employs a more stringent, behavioural measure of advertising effectiveness and a more realistic testing procedure than previous studies.

2 Literature review and hypotheses

2.1 *Experiences and engagement*

There are many independent streams of research examining consumers' experiences with media. While there is substantial overlap between the experiences posited by the different streams, unfortunately they are not entirely consistent. Certain experiences exist in some frameworks but not others. Among the experiences that consistently exist in multiple frameworks, there are often subtle differences in the way in which they are conceptualized. In some cases, multiple experiences under one framework are subsumed by a single experience of another.

The uses and gratifications (U&G) approach provides a functionalist explanation of why people use media and has been an active area of research since the 1940s (e.g. see Ruggiero 2000 for a recent survey). The U&G literature is vast; McQuail (1983, pp. 82-3) gives a concise summary that is often cited:

- *Information* – finding out about relevant events and conditions in immediate surroundings, society and the world; seeking advice on practical matters or opinion and decision choices; satisfying curiosity and general interest; learning, self-education; gaining a sense of security through knowledge.
- *Personal Identity* – finding reinforcement for personal values; finding models of behaviour; identifying with valued others (in the media); gaining insight into one's self.
- *Integration and Social Interaction* – gaining insight into the circumstances of others: social empathy; identifying with others and gaining a sense of belonging; finding a basis for conversation and social interaction; having a substitute for real-life companionship; helping to carry out social roles; enabling one to connect with family, friends and society.
- *Entertainment* – escaping, or being diverted, from problems; relaxing; getting intrinsic cultural or aesthetic enjoyment; filling time; emotional release; sexual arousal."

U&G approaches have been used in marketing. For example, Bronner and Neijens (2006) measure eight experiences that are consistent with the U&G approach: practical use, social, identification, pastime, transformation, stimulation, information, and negative emotion. The Calder-Malthouse experiences are also consistent with U&G. Both teams show how to measure different aspects of the U&G framework. Nambisan and Baron (2007) applied a variation of the U&G constructs to explain virtual customer environments with four experiences: cognitive, social integrative, personal integrative and hedonic. Childers et al. (2001)

discuss utilitarian and hedonic (a type of “entertainment” in the U&G approach) experiences as explanations of online shopping behaviour. The same approach is also followed by Fiore et al. (2005) and Cotte et al. (2006). Flow is another construct that has received substantial attention (e.g. see Hoffman & Novak 2009) and is consistent with the U&G approach of understanding the consumer experience with media.

Clearly there are many different dimensions of consumer experience with media and different media vehicles create different experiences for their readers and viewers. Calder et al. (2009) proposes that different experiences are manifestations of the second-order construct they call *engagement*. There are many different ways of being engaged with a vehicle. For example, some media are engaging because they inform their consumers and give good advice. Other media help their consumers relax and escape from the pressures of daily life. Some media could do both. Engagement is a higher-level measurement of consumers’ relationship with the surrounding media context than individual experience measures. Both are useful – experience measures provide a greater level of specificity, while engagement provides an overall measure.

It is unnecessary for purposes of this article to sort out differences in the ways that various frameworks have conceptualized experiences because, for the purpose of measuring engagement, all we need is a set of experiences that can serve as indicators of the engagement construct domain. No set of indicators would be exhaustive of this domain but this is not required from a measurement point of view.¹ Our approach is to develop scales measuring a representative set experiences that parallel those noted in the literature. We shall then factor analyse the experience measures and test whether they could plausibly be manifestations of a second-order engagement construct.

1 The question arises of whether to treat experiences and engagement as formative or reflective. We follow Jarvis et al. (2003) criteria for making the decision. We treat both as reflective (a Type I second-order factor specification in the language of Jarvis et al.). In the case of experiences, the items are manifestations of some experience, are interchangeable, and should covary. The items we have used represent a sample from the respective construct domains, e.g. there are many ways that a person can have a utilitarian experience and different items could represent the construct domain equally well. Thus, experiences are reflective according to the Jarvis et al framework. We also think of engagement as a reflective construct because we view experiences as manifestations of engagement (reflective) rather than as “defining characteristics” (formative).

2.2 *Engagement and advertising effectiveness*

Bronner and Neijens (2006) compare the experiences of different types of media with the experiences of advertising content. Malthouse et al. (2007) and Calder et al (2009) show that various experience measures are associated with copy-testing measures of magazine and banner ads. They find, for instance, that the consumer's experience of the usefulness of a site is related to the ads on that site being experienced as useful.

There are several theoretical explanations for why engagement should affect reactions to advertising including categorization theory (Cohen & Basu 1987) and affect transfer (e.g. Broniarczyk & Alba 1991, p. 215). Dahlén (2005) does a literature review of media context effects and summarizes three possible theoretical rationales for why context should affect reactions to ads. The first is the mood congruency-accessibility hypothesis: "The ad context makes a certain mood or affect more accessible and relieves the processing of stimuli with similar moods or affects (p. 90)." The second is the congruity principle: "the medium and the advertised brand converge and become more similar in consumers' minds (p. 90)." The third is that the context serves as a cognitive prime that "activates a semantic network of related material that guides attention and determines the interpretation of the ad (p. 90)." It should be noted that these explanations are not alternative explanations but rather all of them are plausible mechanisms for how media context can affect advertising. They lead us to formally hypothesize:

H1: The average level of engagement with a media vehicle increases advertising effectiveness.

The distinction between this hypothesis and those tested previously is that the relationship is studied at the vehicle level rather than respondent level. Both levels are important; media buyers typically buy a vehicle rather than individuals and so we should test the relationship at the vehicle level. It is possible for individual-level engagement to be associated with advertising effectiveness, but not vehicle-level engagement. While informative, it could be the case, however, that this overall level of engagement might not be associated with greater ad effectiveness. This could be true even though at the level of individual readers there is an association between engagement and advertising effectiveness. Figure 1 illustrates how this could be the case. The scatter plot for each vehicle is shown by the ellipses. Within each vehicle, those who are more engaged rate have higher ad effectiveness. Notice, however, that there is no relationship between the level of engagement with the vehicle and ad effectiveness. The present research, there-

fore, addresses the question of whether the overall average level of engagement with a magazine affects reactions to ads.

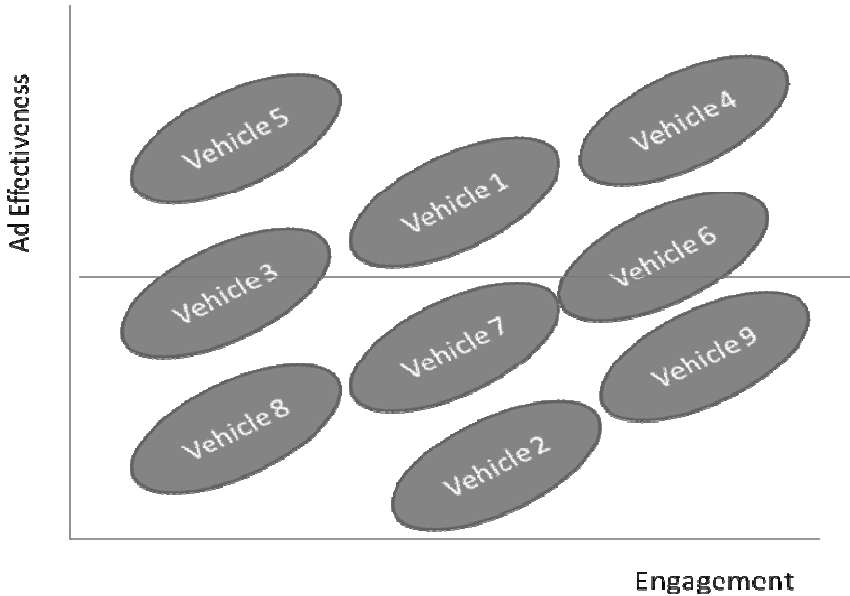


Figure 1: Possible relationship between engagement and ad effectiveness, where within any vehicle, individual-level engagement has a positive relationship with ad effectiveness, but there is no relationship between vehicle-level engagement and effectiveness.

3 Methodology and results

Survey. This research examines 72 magazines across 15 genres and over 5000 ad executions using the VISTA Print Effectiveness Rating Service offered by the Affinity copy-testing service, which has become an industry standard in the United States. The 72 magazines are the largest magazines in the US. For each of the 5000 ad executions we know (1) the characteristics that usually determine their price including size (third page, half page, full page, two-page spread, multi-page unit), position (run of book, back cover, inner back cover, inner front cover), and colour (four colours or less than four); and (2) a measure of advertising effectiveness for a sample of readers. Affinity surveys readers by first screen-

ing potential respondents for issue-specific readership by show the front cover of the magazine. Qualifying respondents are provided with a series of visual, on-screen prompts and asked questions designed to collect ad effectiveness ratings, editorial readership information and reader attributes. This is a more realistic procedure than those in previous studies because the ad is surrounded by the original editorial content. Each advertisement and editorial feature is viewed by a minimum of 100 respondents, with most (75%) respondents exposed to 20 advertisements and two editorial features. There are 25,705 unique respondents in this research for the readership measurement, and each of them focused on only one of the 72 magazines. On average respondents rated 19.6 ads with a standard deviation of 1.6, minimum of 11 and maximum of 30. The 25,075 individual respondents yielded a total of 503,443 ad effectiveness observations.

Table 1: Questions and standardized factor loadings from second-order model

Utilitarian	Loading
The magazine gets me to try new things	0.7669
I really like the tips in the magazine	0.8056
I use the magazine to learn how to make things	0.6441
It shows me how to do things the right way	0.7506
Transportation	
I lose myself in the pleasure of reading it	0.7868
It's an escape	0.8381
The magazine takes my mind off other things that are going on	0.8268
I like to picture things in my own mind while I am reading it	0.7121
I can picture myself at the scene of the events and places described	0.6551
Make me smarter	
It addresses issues or topics of special concern to me	0.7934
It's important that I remember later what I have read in this magazine	0.7762
It updates me on things I try to keep up with	0.7941
I look at the magazine as educational. I am gaining something	0.7863
Sophisticated	
The magazine is very sophisticated	0.7375
It is very professional	0.8100
The articles really are in-depth	0.8175
They do a good job of covering things. They don't miss things.	0.7969
Engagement	
Utilitarian	0.8672
Transportation	0.8146
Makes me smarter	0.8172
Sophisticated	0.6340

Scales. The scales used to measure four experiences (Table 1) were developed in Malthouse *et al.* (2007). Constraints on the length of the survey and respondent fatigue limited us to four experiences, which were selected to represent a range of magazine experiences from the U&G framework. Advertising effectiveness is measured by showing respondents an ad *surrounded by the original editorial content*, and then asking if they recall seeing it in the particular issue. Those who did not recall seeing the ad were shown the next one. Respondents who did recall seeing the ad were asked a series of questions about brand awareness and the following eight actions they could have taken as a result of seeing the ad: being more favourable to the brand, gathering additional information, visiting the brand's web site, visiting a store, recommending the product to someone, purchasing the product, or taking another action. Instead of looking at those actions individually, we count the number ticked as our measure of *actions taken*.

Measuring respondent-level experiences and engagement. We develop a scale to measure engagement in two steps following Calder *et al.* (2009). First, the measurement properties of the 4 experience scales are studied with a confirmatory factor analysis measurement model allowing correlations between all first-order experience factors. The model fits acceptable well with GFI=0.90, CFI=0.92, NNFI=0.90, and RMSEA=0.0683. Table 1 gives the question wording, estimated standardized loadings, and reliabilities. Next, we estimate a second-order factor analysis model, where the covariances between the experience factors are hypothesized to be due to a second-order *engagement* construct. The fit statistics are good with GFI=0.89, CFI=0.91, NNFI=0.90 and RMSEA=0.0775. Engagement will be estimated by the simple mean of the experience scores. The average value of *respondent-level engagement* is 3.52, the standard deviation is 0.50, the quartiles are 3.17, 3.55, and 3.88, and the range is 1 to 5.

Mean engagement by magazine. The first contribution of the paper is to study how magazine-level engagement affects ads. To do this, we computed the average level of engagement for each of the 72 magazines. Mean engagement can be more actionable than respondent-level engagement because advertisers buy a magazine rather than individual readers. The average of the 72 values of *magazine-level engagement* is 3.52, the standard deviation is 0.15, the quartiles are 3.44, 3.54, and 3.62, and the range is 3.00 to 3.82. Thus, some are more engaging than others; we would like to know whether ads placed in those with higher means perform better.

Explaining ad effectiveness with engagement and execution variables. We estimate a hierarchical linear model (HLM) predicting actions taken for those who recall seeing the ad using magazine- and respondent-level engagement, and

the execution factors size, location and colour.² More precisely, for respondent j of magazine i , y_{ij} is the value of actions taken and x_{ijk} is the value of engagement or the execution dummy k ($k=1$ for magazine-level mean engagement, $k=2$ for individual-level engagement, and $k=3, \dots, 11$ are for execution dummies). Then

$$y_{ij} = \alpha + \beta_1 x_{i1} + \sum_{k=2}^{11} (\beta_k + b_{ik}) x_{ijk} + e_{ij},$$

where α and β_k are the intercept and slopes across all ads, b_{ik} are normal random variables with means 0 and standard deviations σ_{bk} quantifying specific effects for magazine i , and e_{ij} is a residual with mean 0 and standard deviation σ_e .³

Table 2 reports parameter estimates from the HLM. The first contribution of the paper is to test whether engagement at the magazine-level is related to ad effectiveness. The magazine-level slope is 0.9972, which is significantly different from 0 and positive, indicating that ads appearing in magazines that are, on the average, more engaging have more actions taken. This implies that the effectiveness of ads can be improved by selecting more engaging media vehicles. The slope for respondent-level engagement (0.7851) is also positive and highly significant, indicating that, among the readers of a magazine who recall seeing the ad, those who are more engaged with the editorial content take more actions. The random effect for individual-level engagement (0.1005) is significant, indicating that the effect of respondent-level engagement on ads varies across publication; since the slopes are distributed normally across magazines, we estimate that the slopes for 99.7% of all magazines have slopes within 3 standard deviations: $0.7851 \pm 3 \times 0.1005 = [0.4836, 1.0866]$. The slopes of essentially all magazines are thus positive, showing that respondent-level engagement affects actions taken very generally.

The size of an ad also affects actions taken. The base category is the full-page ad. Actions taken are, on average, 0.2222 higher for two-page spreads than for full-page ads. Multi-page units have even slightly higher actions taken, while half- and third-page ads have lower values of actions taken, on average. Four-colour ads have values of actions taken that are 0.2339 higher than non-four-

2 Some levels of the execution variables have very small sample sizes and these are dropped from this analysis. For example, only one of the ads was a "center spread," so ratings of this ad were dropped from this analysis.

3 One may question why there is no random effect for magazine-level engagement or the intercept. The values of magazine-level engagement are constant within a magazine and so there is no need to allow for the within-magazine slope to vary across magazines. A random intercept would be redundant with the magazine-level effect, since we assume the intercept for magazine i is a function of magazine-level engagement, i.e. $\alpha + \beta_1 x_{i1}$.

colour ads. None of the coefficients for ad position are significant, suggesting that none of the special positions are different from run-of-book ads.

Table 2: Parameter estimates from HLM predicting actions taken (n=258,882)

Parameter	Fixed Effects			Random Effects	
	<i>b</i>	Std Err (<i>b</i>)	<i>P-Value</i>	σ	<i>P-Value</i>
Intercept	5.8977	0.6986	<.0001		
Individual Engage	0.7851	0.01577	<.0001	0.1005	<.0001
Magazine Engage	0.9972	0.1990	<.0001		
Ad Size					
Full Page	0				
Two-Page Spread	0.2222	0.05490	<.0001	0.4241	<.0001
Multi-Page Unit	0.3090	0.06230	<.0001	0.4797	<.0001
Third Page	-0.7437	0.1070	<.0001	0.7581	<.0001
Half Page	<i>-0.2821</i>	0.1184	0.0207	0.8101	<.0001
Ad Position					
Run of Book	0				
Back Cover	0.03277	0.09391	0.7282	0.6672	<.0001
Inner Back Cover	-0.1267	0.1131	0.2662	0.8377	<.0001
Other	0.02818	0.08878	0.7519	0.6583	<.0001
Inner Front Cover	-0.1734	0.1095	0.1181	0.8122	<.0001
Colour					
Four Colour					
Not Four Colour	-0.2339	0.08005	0.0049	0.5525	<.0001
Residual				2.9925	<.0001

The second contribution is to discuss the relative importance of engagement and execution factors. Consider a media placement decision between a magazine with moderately-low engagement, e.g. the first quartile is 3.44, and one with moderately-high engagement, e.g. the third quartile is 3.62. The difference in engagement is $3.62 - 3.44 = 0.18$ and this model predicts that this an ad in the latter publication would have actions taken that are $0.18 \times 0.9972 \approx 0.18$ higher than in the former, on average. This change in actions taken is comparable to increasing the size of an ad from a full page to two pages (0.2222), or changing an ad from black and white to four colours (0.2339).

4 Discussion and conclusions

We have shown that higher levels of advertising effectiveness, as indicated by actions taken, are associated with both individual readers who are more engaged and magazines that are more engaging. The former finding confirms those from other studies and adds evidence of the robustness of the effect. The latter extends our knowledge of context effects by showing that the relationship also holds at the vehicle level. A more engaging magazine – one with a higher overall average level of engagement – will have a higher overall level of advertising effectiveness than a less engaging one, on the average. In other words, the engagement of the audience as a whole with the media vehicle is reflected in the effectiveness of an ad for the entire audience. Moreover, the magnitude of the effect of magazine-level engagement is comparable to the execution factors that currently determine the price of ad space including size, position and colour. The effects of engagement exist at the vehicle level and are roughly as important as factors that currently determine the price of an advertisement.

These findings are subject to the limitations of this study. It is an observational study and is thus more vulnerable to omitted variables. Advertisements for different product categories likely appear in different magazines. Respondents self-select which magazines they wish to read and how engaged they wish to be. Further research using true experimental designs and alternative measures of advertising effectiveness is desirable.

Although ongoing research is desirable, the implications for advertising and media planning of the present findings are clear. It would be useful for media companies to report overall levels of engagement with their properties. Obviously the procedures used in measuring engagement would need to be standardized for comparison across vehicles in the same way that is currently done for readership/audience size measures.

With such measurements, differences among, say, magazines could be reflected in the cost of advertising. Going back to the example above, where the impact of greater engagement for one magazine versus another was the equivalent of increasing the size of an advertisement from one page to two pages or black-and-white to 4 colours, the higher level and the lower level of engagement should be reflected in the price of an ad. Advertisers should be willing to pay a premium for ad space in an engaging magazine comparable to the current difference in price between one- and two-page ads. Likewise, the price should be correspondingly lower for an advertisement in the lower engagement magazine. For example, the European edition of *Time* magazine (TIME EMEA) currently charges €51,050 for a full-page, black-and-white ad, and €78,280 for a full-page, colour ad. If the effect of going from black-and-white to colour is comparable to

the difference between a moderately-low and moderately-high engagement magazine, then the premium for moderately-high engagement should be approximately €78,280 – €51,050 = €27,230.

In our opinion it is in the interest of advertisers and, potentially, of media companies to factor engagement metrics into their buying and selling decisions. In the case of media companies, there is an opportunity to use engagement metrics as a way of creating added value for advertisers by monitoring and improving the overall level of engagement with their content.

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Brand Placements in Movies: The Impact of Modality, Prominence and Plot Connection on Attitude and Behavioral Intention

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1 Purpose of the study

The aim of this study is to examine the impact of three essential brand placement characteristics on brand attitudes towards and purchase intentions of brands placed in movies. Previous studies examining the effectiveness of brand placement have yielded mixed results. The mixed findings indicate that not all brand placements are equally effective. This may be due to a differentiating impact of varying types of brand placements. Modality, prominence and plot connection are key constructs of brand placement that have been repeatedly shown to influence brand placement effectiveness. In the past, a majority of empirical studies measured the effectiveness of brand placements in terms of how well they are remembered (Babin and Carder 1996; Gupta and Lord 1998; Johnstone and Dodd 2000; Nelson 2002; Roehm, Roehm and Boone 2004; Vollmers and Mizerski 1994). However, since research has shown that recall may be a poor predictor of persuasion (Mackie and Asuncion 1990), research on the effectiveness of brand placements should rather focus on attitude and behavior effects. This study investigates differences in respondents' attitudes (affective) and purchase intention (conative) towards the placed brands, according to the placements' varying levels of modality, prominence and plot connection. To explain these effects, we draw from Paivio's dual-coding theory (1986), the Persuasion Knowledge Model (Friestad and Wright 1994) and Russell's (in)congruency principle (2002).

The contribution of this study is that it uses these frameworks to investigate three essential brand placement dimensions in one comprehensive real-life study on brand attitudes and purchase intention. As far as we know, no study has focused on these three fundamental placements variables and their interactions si-

multaneously. Moreover, this study was conducted in a natural exposure setting: respondents visited the movie theatre in their own leisure time, accompanied by their friends and/or family. In contrast, the greater part of recent studies involving brand placement have been conducted in an experimental setting. Problems typically related to these kinds of ‘forced exposure’ designs are that (1) researchers run the risk of testing subjects who are suspicious of the true purpose of the experiment, thereby compromising research results, and (2) subjects tend to attend to stimuli more than they otherwise would. A natural exposure setting alleviates these problems and ensures its ecological validity (see discussion in Deighton, Romer & McQueen 1989). Also, as opposed to experiments where researchers test the effects of exposure to brand placement within one scene or a short segment of a television program or movie (e.g. Gupta and Lord 1998, d’Astous and Seguin 1999; Roehm, Roehm and Boone 2004) – an unrealistic simulation of a typical brand placement exposure setting –, the full movie-going experience design of this study takes into account the amount of cognitive and emotional ‘clutter’ associated with watching an entire movie. It is also important to note that external validity of the results is further enhanced by examining more than one film. As such, we are able to filter out any unwanted effects due to characteristics of or response to the movie, as well as idiosyncratic effects of specific brands placed in a given movie.

The following sections outline the expectations regarding the persuasive impact of each type and combination of placements.

2 Theoretical background and hypotheses development

To identify the psychological processes that determine the effectiveness of different types of brand placement dimensions, we will distinguish between (1) the two placement dimensions that determine its appearance, namely *modality* and *prominence*, and (2) the placement dimension that determines the brand’s level of integration into the story line of the program, namely *plot connection*. We start from the assumption that the psychological processes that lead to a placement’s persuasiveness (an increase in brand attitude and purchase intention) are different for both categories.

2.1 Appearance

2.1.1 Modality

As shown by several authors (Gupta and Lord 1998; Karrh 1998; Russell 1998), a brand placement can be either visual only, auditory only or combined audio-visual. The first mode involves showing a product, logo, billboard or some other visual brand identifier without any relevant message or sounds on the audio track which draw the attention to the product. The second mode involves the mention of a brand name or a character conveying brand-related messages in audio form, without showing the product on the screen. The third mode involves showing a brand and at the same time mentioning the brand name or conveying a brand-relevant message in audio form (Gupta and Lord 1998). A commonly cited explanation for differing effects caused by modality of brand placement (Gupta and Lord 1998; Russell 1998; Ferraro and Avery 2000) is Paivio's dual-coding theory (1986), which focuses on encoding differences between visual and auditory information. Pictures are encoded as imaginal codes (mental pictures) and words are depicted as verbal codes, each type corresponding to a different type of mental processing. A stimulus that combines textual information with a related picture (i.e. an audiovisual placement) is expected to generate a higher level of imagery thinking than a stimulus that only contains textual information (i.e. a purely auditory placement). The effect of imagery is found to be positive on the evaluation of information in most studies (e.g. Babin & Burns 1997), because imagery thinking is likely to pertain to pleasant emotional and affective elements of the stimulus (e.g. Bone & Ellen 1992). This reasoning leads us to our first hypothesis:

H1: Audiovisual placements are more persuasive (resulting in higher brand attitude and purchase intention) than auditory placements.

2.1.2 Prominence

According to Gupta and Lord (1998), placements in any of the three modes may be relatively prominent or subtle. They define prominence as the extent to which the brand placement possesses characteristics designed to make it a central focus of audience attention, for example by way of making the product (or any other brand identifier) highly visible by virtue of size and/or position on the screen or of its centrality to the action in the scene. Subtle visual placements are those in which the brand is not shown prominently (e.g. small in size, a background prop

outside of the main field of visual focus, lost in an array of multiple products or objects, low time of exposure). Other authors have added extra aspects to the prominence construct: close-up of the product or logo, type of display, camera view, brand-character interaction, primacy vs. recency, number of mentions and/or modality of presentation (Russell 1998; Brennan, Dubas & Babin 1999; Ferraro and Avery 2000; Roehm, Roehm and Boone 2004; La Ferle and Edwards 2006; Gupta and Gould 2007). Gupta and Lord (1998) argue that those characteristics which render a brand placement prominent are likely to attract viewers' attention to the brand. Although prominent placements have the ability to attract attention which leads to increased memory, at the same time, the audience might start wondering about the reasons for the placement.

The Persuasion Knowledge Model (PKM) posits that when consumers recognize a communication as a persuasion attempt, they process the message differently than they would if no such recognition occurred (Friestad and Wright 1994). An increase in explicit memory for a brand may therefore be accompanied by the retrieval of strategies to defend against persuasion, thereby possibly leading to a more negative brand attitude. Previous brand placement studies have indeed hypothesized negative attitude effects to occur after exposure to prominent placements (Bhatnagar, Aksoy and Malkoc 2004; McCarty 2004). However, we propose that placement prominence will interact with plot connection in its effect on attitudes and intentions. (see below: H_5) but that prominence in itself will not have a significant effect. Therefore, we do not formulate a main effect hypothesis for prominence.

2.1.3 The interaction between modality and prominence

Audiovisual placements are believed to lead to imagery thinking, and thus to a more elaborate processing of brand information than purely auditory placements. Therefore, the psychological processes that underlie the PKM are more likely to be triggered in the audiovisual modality than in the purely auditory modality, implying that an audiovisual placement in combination with a high level of prominence leads to a decrease in brand attitudes and purchase intention as opposed to an audiovisual lowly prominent (subtle) placement. Since (1) an auditory only placement will not lead to imagery thinking, the PKM processes will not be triggered as much and since (2) prominence in itself is not expected to affect attitudes or behavioral intention, a difference in prominence level will not affect the persuasiveness of purely auditory placements.

H2: Subtle audiovisual placements are more persuasive than prominent audiovisual placement; brand attitude and purchase intention do not differ between subtle and prominent placements for auditory placements.

2.1.4 Integration in the story line: plot connection

In some cases the placed brand makes a significant contribution to the story, regardless of the prominence level of its presence. Russell (1998) calls these *plot placements*. A plot placement may consist of any combination of visual and auditory components and can be conceived as a brand placement that represents some level of connection between the product and the plot. Whereas a placement with lower plot connection does not contribute much to the story, a placement with higher plot connection takes a major place in the story line or builds the persona of a character. For example, in several James Bond movies the main character is clearly identified with the Aston Martin brand, which thus constitutes a high plot connection. It has often been suggested that the more a brand is connected to the plot, the more effective the placement (d'Astous and Seguin 1999; d'Astous and Chartier 2000; Russell 2002; Bhatnagar, Aksoy and Malkoc 2004; Yang, Roskos-Ewoldsen and Roskos-Ewoldsen 2004; Sheehan and Guo 2005). This is usually attributed to the fact that a plot connected placement is naturally woven into a story, thereby causing less counterarguing by the audience than in the case of a brand which is placed for no apparent reason other than commercial motives. This academics' perspective is congruent with the natural intuition of brand placement practitioners, who – as a survey conducted in 2003 indicated – believe that placements work best when the brand is shown in a manner that makes it integral to the story line (Karrh, McKee and Pardun 2003). McCarty (2004) links the likelihood of a higher order processing in case of high plot connection to the concept of transformational advertising. *Transformational advertising* is advertising that transforms or changes the experience of using a product such that the product becomes more than it would otherwise be, making it “richer, warmer, more exciting, and/or more enjoyable” (Puto and Wells 1984). In a similar way, a viewer's perception of the experience of using a brand can be transformed because the brand is embedded in a movie, thereby leading to improved affective or conative outcomes. The processing of highly plot connected placements could also be explained by social learning theory: the influence of models (such as the actors in the movie) operate principally through their “symbolic representations of modeled events, rather than specific stimulus-response associations” (Bandura 1971). Therefore, the mere observation of the behavior and attitudes exhibited by models influences one's own behavior and attitudes.

Taking celebrity endorsement literature into account, this effect can even be enhanced if the ‘models’ are A-list celebrities (as is often the case with brand placement in Hollywood movies): an admirable character using a particular brand implicitly tells the audience that this is the “in” or “cool” brand of a particular product category or the way to the good life (McCarty 2004). We posit the following hypothesis:

H3: More plot connected placements are more persuasive than less plot connected placements.

2.1.5 The interaction between plot connection and appearance

Russell (2002) found that the modality of the presentation of placements (visual and auditory) and the level of plot connection interact to influence memory and attitude change. To explain this, she turned to the (in)congruency literature, stating that congruent placements appear acceptable to viewers and do not prompt them to think about the reason for their presence in the program. In contrast, incongruence between modality and plot connection is likely to raise viewers’ suspicion and counter argumentation. Empirical research has shown that the increased elaboration associated with extreme incongruence has an adverse effect on evaluations (Lee and Mason 1999; Meyers-Levy and Tybout 1989), similar to the psychological processes underlying the PKM. According to Russell (2002), both modality and plot connection signal how much meaning a placement carries. Since auditory presented information is inherently more meaningful than visual information (Russell 2002), auditory placements are more congruent with a high plot connection than visual placements. Taking Russell’s incongruency principle one step further, since both verbal and non-verbal systems can have additive effects on human understanding if the two types of representation correspond to the same object (Paivio 1986), audiovisual placements contribute more to the narrative structure of the story than auditory placements. In the context of our study, audiovisual placements that contribute substantially to the story line (highly plot connected) can therefore be considered more congruent than audiovisual lowly plot connected placements. Likewise, audio placements that do not contribute much to the story line (lowly plot connected) can therefore be considered more congruent than audio placements that are highly plot connected.

H4: Audio placements that are lowly plot connected are more persuasive than audio placements that are highly plot connected, and audiovisual highly plot connected placements are more persuasive than audiovisual lowly plot connected placements.

Earlier, we hypothesized that prominence will not have a significant main effect on brand attitudes and purchase intention, but that it interacts with plot connection. This interaction effect can be explained by the attitudinal (and behavioral) effects of (in)congruency as well. In case of a subtle brand placement where the brand itself plays a meaningful role in the story, or in case a brand is presented highly prominent while not having anything to do with the story, viewers may perceive these as incongruent placements. Based on the (in)congruency principle, we expect:

H5: Subtle/lowly plot connected placements are more persuasive than subtle/highly plot connected placements, and prominent/highly plot connected placements are more persuasive than prominent/lowly plot connected placements.

3 Procedure

To test the hypotheses, we first conducted a content analysis on two Hollywood movies, namely *Bride Wars* and *The Women*. To assess the modality, prominence and plot connection levels of the brand placements, a coding instrument was developed on the basis of existing literature. The following variables were included in the coding instrument: (1) modality of presentation, (2) time on screen/number of mentions in the same scene, (3) visibility of the brand name, (4) appearance of the brand in close up, (5) appearance of the brand in the fore-/background, (6) amount of other branded products shown or mentioned in the same scene, (7) character interaction, and finally (8) plot connection. Item (1) was used to define modality; items (1) to (7) were used to define prominence. Plot connection was measured using a three-item measure, used in an experiment by Russell (2002), which served as a guideline to rate the level of a brand's plot connectedness, on a high-low scale: (“_ plays an important role in the story”; “Without the references to _, the story would be different”; and “_ is connected to the plot”). Table 1 summarizes which brand placement characteristics were measured and how they were combined to lead to various levels of these placement dimensions.

Table 1: Definition of mode, prominence and plot connection based on placement characteristics

		activated channel visual	auditory	time on screen	brand name visibility	brand close up	fore- /background	visual exclusiveness	character interaction	auditory exclusiveness	brand repetition	
Modality	visual only	x										
	auditory only		x									
	audiovisual	x	x									
Prominence level	high	x		min. 5 sec	clearly		foreground	yes				
		x			clearly	yes						
		x			clearly		foreground		main character			
		x	x							main character		
	low	x		max. 5 sec	unclearly						yes	yes
		x			unclearly		background					
		x		max. 5 sec					no			
moderate		x								no		
	moderate	all other placements										
Plot connection level	none	visual only placements that carry no meaning to the story										
	low	visual only placements that carry a limited amount of meaning to the story										
		auditory only placements that receive no further attention in the story										
	moderate	audiovisual placements that receive no further attention in the story										
		auditory only placements that carry a limited amount of meaning to the story										
high	audiovisual placements that carry a limited amount of meaning to the story											
	high	all placements that receive increased attention through identification with the character, or by assigning special meaning to the brand in the story										

To gauge data reliability and validity in this study, two coders independently coded both movies. One coder extensively tested the coding instrument beforehand to be able to identify coding problems early and correct them, as advised by Perreault and Leigh (1989). This pretesting resulted in training material - containing information on how one specific brand placement incidence is defined, what is considered a brand, how character interaction is defined, and so on - that both coders used to assist them in their eventual task. Each coder eventually placed every brand placement (57 in *The Women*, 35 in *Bride Wars*) in a modality (auditory, audiovisual) x prominence (subtle, prominent) x plot connection (low, high) framework. Both coders placed 43 of the 49 brands (87.8%) in the same cell of this 2x2x2 framework; agreement on modality was 100%, agreement on prominence level was 91.8%, agreement on plot connection level was 93.9%. Disagreement was eventually solved by discussion. No visual-only brand with high plot connection was found in either of the movies, therefore the “visual” mode was excluded from the analysis. Nine brands were selected in the two movies such that the two coders agreed on their placement characteristics and seven conditions were represented by one brand and one condition by two brands (Table 2). Since only two-way interactions are studied, this means that each effect is tested based on at least two brands per condition.

Table 2: Brands used in the study

	Subtle		Prominent	
	Low plot connection	High plot connection	Low plot connection	High plot connection
Auditory	MTV*	Botox*	iPod**	Plaza**
Audiovisual	Dove*	Tiffany's & Co.**	Lexus*	Vera Wang** & Saks 5 th Avenue*

* The Women

** Bride Wars

This study was carried out in the premieres of two Hollywood movies (*The Women* and *Bride Wars*) in a Belgian movie theatre that were only open to women. E-mail addresses were collected just before the movie, and a web link containing the questionnaire was mailed a few days after seeing the movie. A sample of 453 women rated the brands on brand familiarity, attitude towards the brand and purchase intention. Brand familiarity (Bf) and purchase intention (Pi) were measured by means of three-item seven point scales and brand attitude (Ab) with a four-item seven-point scale. The Ab and Pi scores for all nine brands were placed in one dataset, one brand below the other, which resulted in a useful sample of 1101 observations for Ab and 1102 for Pi. Summated scales for Bf, Ab and Pi were calculated (all Cronbach $\alpha \geq .720$). ANOVA and simple effect tests were conducted to investigate the impact of the three independent variables and their interactions on brand attitude and purchase intention. Brand familiarity has been shown to be an important variable that can influence consumer processing of brand information (Campbell et al. 2003). Therefore, brand familiarity was used as a covariate in the model to account for Ab and Pi differences related to varying familiarity levels for the nine brands. Movie liking was also measured, but left out of the final model since it had no significant impact on Ab and Pi.

4 Results

Brand familiarity proved to be a positively influencing covariate, significant in both the Ab ($F(1, 1093)=384.047, p<.001$) and Pi ($F(1, 1094)=393.105, p<.001$) analysis. Audiovisual placements resulted in a more positive Ab ($M = 5.22$) than auditory ones ($M = 4.43$) ($F(1, 1093)=177.424, p<.001$), but there was no significant difference for Pi (auditory: $M = 3.69$; audiovisual: $M = 3.65$) ($F(1, 1094)=.226, p=.635$). H_1 is accepted for brand attitude but not for purchase intention. Prominence was found to significantly influence Ab ($F(1, 1093)=98.542,$

$p < .001$) and Pi ($F(1, 1094) = 3.812, p = .051$), with prominent placements (Ab: $M = 5.13$; Pi: $M = 3.75$) leading to better results than subtle placements (Ab: $M = 4.52$; Pi: $M = 3.59$).

The interaction between mode and prominence has a significant impact on Ab and Pi (Figure 1): subtle audiovisual placements were found to have a more positive influence on both Ab ($M = 5.25$) (although not significant: ($F(1, 1092) = .34, p = .562$)) and Pi ($M = 4.14$) ($F(1, 1093) = 71.45, p < .001$) than prominent audiovisual placements (Ab: $M = 5.18$; Pi: $M = 3.17$), while in the case of audio mode, prominent placements were found to enhance Ab ($M = 5.07$) ($F(1, 1092) = .265.21, p < .001$) and Pi ($M = 4.34$) ($F(1, 1093) = 132.11, p < .001$) more than subtle placements (Ab: $M = 3.79$; Pi: $M = 3.04$). These results partly support H_2 in case of audiovisual placements but not in case of audio mode.

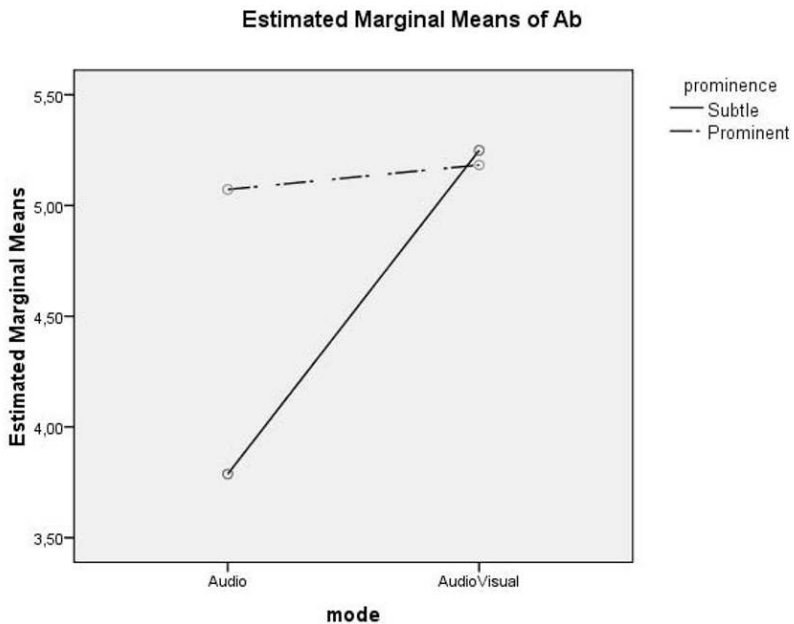


Figure 1: Modality-prominence interaction effect on brand attitude

Integrating the brand into the story line was found to substantially diminish Ab (high PC (Plot Connection): $M = 4.72$; low PC: $M = 4.92$) ($F(1, 1093)=10.489$, $p<.001$) as well as Pi (high PC: $M = 3.40$; low PC: $M = 3.94$) ($F(1, 1094)=40.155$, $p<.001$). H_3 is not supported. Low plot connected audio placements are found to generate better Ab ($M = 4.72$) ($F(1, 1092)=54.94$, $p<.001$) and Pi ($M = 4.22$) ($F(1, 1093)=83.10$, $p<.001$) than high plot connected audio ones (Ab: $M = 4.14$; Pi: $M = 3.16$). Highly plot connected audiovisual placements had a more positive impact on Ab ($M = 5.30$) ($F(1, 1092)=6.27$, $p=0.012$), than lowly plot connected audiovisual placements ($M = 5.13$), but not on Pi ($M = 3.66$ and 3.64 respectively) (however, this result is not significant: $F(1, 1093)=.20$, $p=.657$) (Figure 2).

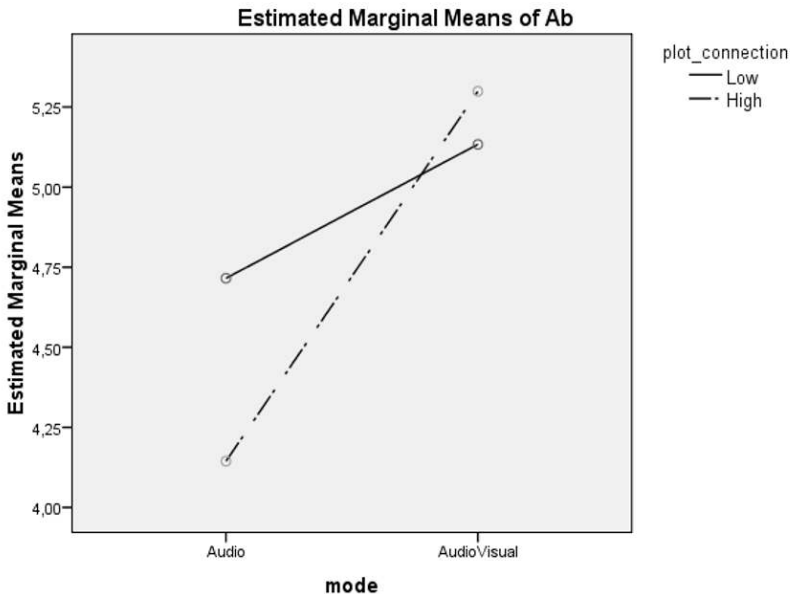


Figure 2: Modality-plot connection interaction effect on brand attitude

H_4 is therefore supported for brand attitude but only partly for purchase intention. Subtle/lowly plot connected placements are found to generate more favourable Ab ($M = 4.84$) ($F(1, 1092)=43.28$, $p<.001$) and Pi ($M = 4.35$) ($F(1, 1093)=150.13$, $p<.001$) than subtle/highly plot connected placements (Ab: $M = 4.20$; Pi: $M = 3.53$). Moreover, prominent/highly plot connected placements are found to be

more persuasive (Ab: $M = 5.24$; Pi: $M = 3.98$) ($F_{Ab}(1, 1092)=7.34, p=.007$ and $F_{Pi}(1, 1093)=18.65, p<.001$) than prominent/lowly plot connected placements (Ab: $M = 5.01$; Pi: $M = 2.83$) (Figure 3). H_5 is fully supported.

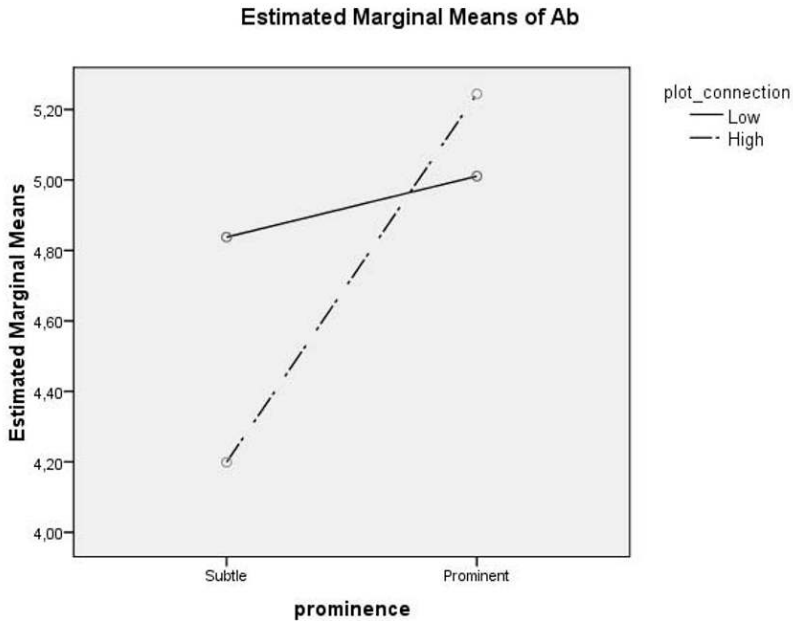


Figure 3: Prominence-plot connection interaction effect on brand attitude

5 Conclusion and discussion

Prominence and plot connection level have a significant impact on both Ab and Pi; modality only influences Ab. The effect of modality is as expected, but for prominence and plot connection we find unexpected results. The unexpected negative effect of a higher level of plot connection on attitudes and behaviour, could be explained by the line of reasoning of Balasubramanian et al. (2006), who posit that increasing brand information in placements is likely to decrease both affective and conative outcomes, because messages with substantial product information cannot qualify as congruent placements that blend seamlessly with editorial content (substantial product information is congruent with ads, not with

placements). Since it is likely that audiences perceive highly plot connected brands in movies to contain too much product information, this rationale could be an explanation for the effect we found. In the context of this study, the expected and significant interaction effects with modality and plot connection is at least as relevant. We argued that for auditory placements there would be no differences between subtle and prominent placements, but found that prominent placements in audio mode are more persuasive than subtle placements. This finding suggests that if the absence of the imagery component in audio only placements is compensated by a higher prominence, the brand placement can lead to more positive attitudes. As expected, prominent audiovisual placements are likely to trigger PKM and can harm brand attitude and purchase intention. As for the modality-plot connection and the prominence-plot connection interaction effects, we confirm and generalize Russell's placement congruency theory (2002) in that it also holds in case of other types of modality and other appearance factors such as prominence.

The greatest limitation of this study is that we had to exclude visual mode from the analysis. Future studies should include more movies to not only involve the visual mode but to also broaden the range of the research by adding more levels of prominence and/or plot connection (low, medium, high). More insight is also needed in the main and interaction effects of other independent variables such as program type, placement priming, fit between brand and movie/character (Balasubramanian, Karrh and Patwardhan 2006). Further, since existing brands were placed in the movies studied, prior brand attitude could be included as a control variable. Future research should also include recall to gain a full picture of the impact of placements characteristics and potentially different effect of placement types on attitudes and memory.

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What are the Effects of a Combination of Advertising and Brand Placement?

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1 Introduction

The effectiveness of traditional advertising is increasingly debated (Lemonnier, 2008; Redondo and Holbrook, 2008). Traditional advertising is increasingly avoided (Bronner and Neijens, 2006; Franz, 2000). Therefore, advertisers try to find new ways to reach their target groups.

In addition, advertisers are in need of opportunities to attach favorable association to their brands. Functionally, products have become more and more alike, and therefore, brand images and brand associations become the defining principle for success (Franzen and Bouwman, 1999).

To reach attentive audiences and to add favorable associations to their brands, advertisers are looking for alternative advertising formats. One of these formats is brand placement, which is defined as ‘the compensated inclusion of brands or brand identifiers, through audio and/ or visual means, within mass media programming’ (Karrh, 1998; Karrh, Frith, and Callison, 2001, p. 4). Because brand placements are integrated into editorial content, advertisers are more likely to reach an attentive audience than within traditional advertising blocks, which are increasingly avoided (Gould, Gupta, and Grabner-Kräuter, 2000; Smit and Neijens, 2000; Yang and Roskos-Ewoldsen, 2007). Furthermore, favorable characteristics of the editorial content (a television program or a radio program) can be transferred to the brand (Van Reijmersdal, Neijens, and Smit, 2007). Brands integrated into the content can profit from the credibility of editorial content or from the images conveyed for example when a talk show host mentions a brand within a program, or when James Bond uses Heineken in his movies.

Brand placements can take different forms and can be very subtly integrated into the editorial content. To avoid that the audience does not notice the brand, brand placement is often accompanied by traditional advertising. The idea is that a brand placement has the advantages mentioned above (higher reach and a posi-

tive context), but needs to be reinforced by traditional advertising. Or as the vice president of marketing for Chrysler and Jeep states “traditional commercials resonate better when they accompany products placed within a show” (Steinberg and Vranica, 2004).

The use of a combination of advertising and brand placement is based on assumptions of synergy effects between the two. This means that the combination of two different promotional formats is more effective than one format alone, because the combination profits from advantages of both formats. Although brand placement and advertising are often used together in media campaigns (White, 2006), their effects have not been examined. The literature on brand placement has mushroomed in the last five years (Van Reijmersdal, Neijens, and Smit, 2009), but these effects have not gained scientific attention.

Furthermore, The literature on brand placement focused on television and movies (e.g., Gupta and Lord, 1998; Matthes, Schemer, and Wirth, 2007; Van Reijmersdal, 2009; Van Reijmersdal et al., 2007), on brand placement in games (e.g., Mau, Silberer, and Constien, 2008; Nelson, Keum, and Yaros, 2004; Yang, Roskos-Ewoldsen, Dinu, and Arpan, 2006), in print media (Cameron, Ju-Pak, and Kim, 1996; Kim, Pasadeos, and Barban, 2001; Van Reijmersdal, Neijens, and Smit, 2005), on the internet (Becker-Olsen, 2003), and even in popular songs (Friedman, 1986) and in novels (Friedman, 1985), but not on brand placement on radio. This is surprising for two reasons, first, because advertisers are increasingly interested in brand placement opportunities in radio programs. Radio brand placement is considered to be a possible successful alternative to advertising (Ackermann, 2007; Parry, 2008). Second, it is surprising that brand placement on radio has not been studied because radio soap operas are considered to be one of the first manifestations of brand placement (Lavin, 1995). Thus, both from an academic and a societal perspective, insights into effects of radio brand placement are needed.

The present study adds to the literature by studying the effects of a combination of advertising and brand placement, and by focusing on a medium that has not been studied before in relation to brand placement, namely radio.

2 Literature Overview

2.1 Brand placement combined with advertising

Together, brand placement and advertising might lead to synergy effects. Naik and Raman (2003, p. 375) define synergy as the situation in which “the combined effect of multiple activities exceeds the sum of their individual effect.”

However, the effects of the combination of brand placement and advertising compared to only advertising are still unknown.

In the literature on multiple media campaigns, synergy is a popular topic (see for example, Dijkstra, 2002; Havlena, Cardarelli, and De Montigny, 2007; Lardinois and Quester, 2001; Naik and Raman, 2003). Studies have compared the effects of disseminating the same message via different media with the effects of repeatedly communicating a message via the same medium. The results, however, are ambiguous. Some studies showed synergy effects on attention, message credibility, and positive thoughts of television and print advertising (Dijkstra, 2002; Naik and Raman, 2003), or of television and internet advertising (Chang and Thornson, 2004; Dijkstra, 2002). Other studies have shown that a combination of different media does not lead to more effects than placing advertising in one medium, for example television (Dijkstra, Buijtel, and Van Raaij, 2005; Edell and Keller, 1989).

The present study does not focus on advertising in different media, but on different advertising formats in one medium. These multiple format campaigns show similarities with multiple media campaigns. In both multiple media campaigns and campaigns that combine brand placement and advertising, the message is repeated. In the first case, repetition occurs in different media; in the second case in the same medium but in different formats.

Many studies have shown that repeated exposure to advertising (see for example, du Plessis, 2005; Krugman, 1972) and to brand placement increases memory (Van Reijmersdal et al., 2007); however, repetition can also lead to irritation and other negative effects, a process known as wear-out (Nordhielm, 2002). When the message is presented in different media or in different formats, audiences are confronted with novel stimuli each time they encounter the message in a different medium or format. Confrontation with novel stimuli increases the change of attention and processing of the message (Chang and Thornson, 2004). Thus, synergy effects might not only occur for multiple media campaigns, but also for multiple format campaigns.

Another similarity between multiple media and multiple format campaigns is that the source of the messages varies within the campaign. On the one hand, multiple media campaigns present messages for example via television and radio. On the other hand, multiple format campaigns that combine brand placement and advertising present messages via a program and a commercial. This might result in multiple source effects. Research has shown that the same information coming from different sources is perceived as more credible and reliable than the same amount of information coming from one source (Chang and Thornson, 2004; Harkins and Petty, 1981; White, 1975). The higher credibility seems to function as a motivator for message processing (Harkins and Petty, 1981). Be-

cause both multiple media and multiple format campaigns use different sources, synergy effects might occur for both types of campaigns. With respect to brand placement, source credibility and intended exposure theories, postulate that the combination of advertising and brand placement might be more effective, than advertising alone.

In general, audiences spend less effort processing the information in advertisements and even ignore advertising because they perceive this information to be less credible and biased in favor of the advertiser (Nebenzahl and Jaffe, 1998). This might result in lower memory scores for advertising alone than for advertising combined with brand placement. Similarly, intentional exposure theory states that people use media for its editorial content, such as the programs, the articles, etcetera, and not for the commercials (Gupta and Lord, 1998). Therefore, audiences are more likely to pay more attention to editorial content, in which brand placements are integrated, than to advertising. As a consequence, the combination of brand placement and advertising might be more effective than advertising alone.

In sum, theories and empirical findings on synergy effects not only provide ground for studying messages in different media but also for messages presented in different formats, for example brand placement and advertising. As synergy effects have not been studied for the specific combination of brand placement and advertising before, the following research question was formulated:

RQ1: Is there a difference between the effects of advertising alone and the combination of advertising and brand placement on brand awareness?

RQ2: Is there a difference between the effects of advertising alone and the combination of advertising and brand placement on brand attitudes?

2.2 Underlying mechanisms

To obtain a better understanding of synergy effects, insights into the processes that underlie these effects is needed. Besides perceptions of multiple sources, one of these processes might be “forward encoding.” Forward encoding implies that exposure to messages in different media influences the processing of both messages (Edell and Keller, 1989). Exposure to the first message can leave a trace in memory and can prime interest in the message. This makes the processing of the second message easier and increases the change of attention to the second message. In other words, encoding of the second message is facilitated by the exposure to the first message, which leads to better memory. Consterdine (1990) showed that after reading a print ad, respondents were able to recall more details of television commercials that followed the print ad. Dijkstra (2002) also con-

cluded that print messages before television or internet messages facilitate encoding of the subsequent ad. Lord and Putrevu (1998) showed that a combination of different promotional formats in newspapers, such as coupons, photos, advertisements and articles, led to more attention and higher recall than single formats. Forward encoding might explain possible synergy effects between brand placement and advertising as well. The processing of the placement could influence subsequent processing of the advertising. The perception of multiple sources, a journalist or editor and an advertiser, might contribute to synergy between brand placement and advertising too. The present study investigates whether the processes of forward encoding and multiple source perceptions that underlie synergy effects occur after exposure to a combination of brand placement and advertising. This leads to the following research questions:

- RQ3*: Does a combination of brand placement and advertising lead to forward encoding and multiple source perceptions?
- RQ4*: What are the effects of forward encoding and multiple source perceptions on brand awareness?
- RQ5*: What are the effects of forward encoding and multiple source perceptions on brand attitudes?

3 Method

3.1. Respondents and Materials

A total of 102 students between 18 and 40 years ($M = 22.18$, $SD = 3.92$) from the University of Amsterdam participated in the research (response rate 37%) via an online survey. Most participants were female (70%). Two different radio fragments were created from existing radio material which included either a commercial or both a brand placement and a shorter version of the same commercial (synergy condition) for the same digital camera brand. Both radio fragments included part of a radio program and a commercial block. Each fragment lasted for 2.5 minutes and the portion that focused on the brand was 30 seconds in both conditions. The brand was mentioned three times in both conditions. Thus, the exposure duration of the brand was the same in both conditions. The brand placement was an original giveaway for a digital camera brand which was not edited for this experiment. A digital photo camera was given away to a listener who was on the phone during the program. The presenter and the winner talked about the camera and its functions. The respondents were randomly assigned to one of the two conditions.

After the exposure, participants were first asked about personal characteristics such as age, level of education, and radio use, to clear short term memory. Then they were asked about their evaluation of the program fragment, followed by questions about top of mind awareness and brand attitudes.

3.2 Measures

3.2.1 Brand awareness

Brand awareness was measured with a top-of-mind awareness (ToMA) question: respondents were asked to write down as many digital photo camera brands as possible, in the sequence in which the brands came to mind (Gruber, 1969). If the digital camera brand from the fragment was the first brand that was mentioned it was coded as 1, all other options were coded as 0 ($M = 0.21$, $SD = 0.41$).

3.2.2 Brand attitude

Attitude toward the brand that was placed was measured with three items based on research by Spears and Singh (2006). The items were: 'I think [brand name] is nice,' 'I think [brand name] is good,' 'I think [brand name] is fun.' These items were measured on a scale ranging from 1 (*strongly disagree*) to 5 (*strongly agree*). A reliability tests showed that these items together form a homogeneous scale (Cronbach's Alpha = .89). The scale items were averaged to create one measure for brand attitude ($M = 4.48$, $SD = 0.99$).

3.2.3 Multiple source perceptions

To measure the multiple source effect in the synergy condition, three items were used based on Dijkstra's advertising persuasiveness measure (2002). Each item started with the sentence: "After hearing the giveaway and commercial for [brand name] :" followed by "I thought the way [brand name] was advertised is very believable," "I thought it must be a popular brand," or "I thought [brand name] must be a good brand because it spends a lot of money on advertising," measured on a scale from 1 (*strongly disagree*) to 5 (*strongly agree*). A reliability test showed that the homogeneity of the scale was just above the threshold of .60 (Nunnally and Bernstein, 1994), Cronbach's Alpha = .62, $M = 2.59$, $SD =$

0.61. Scale items were averaged to create a single measure of multiple source perceptions.

3.2.4 Forward encoding

Three items were used to measure forward encoding on a scale from 1 (*strongly disagree*) to 5 (*strongly agree*). The items were “I became more interested in the ad after hearing the giveaway,” “I wanted to know more about [brand name] after hearing the giveaway,” and “I wanted more information about [brand name] after hearing the giveaway.” These items were based on research by Dijkstra (2002). After a reliability test, the scale items were averaged to create a single measure of forward encoding (Cronbach’s Alpha = .87, $M = 1.97$, $SD = 0.79$).

3.2.5 Respondent characteristics

To see whether the random assignment of respondents to the experimental groups was successful, several characteristics were measured. Respondents were asked for their radio use, attitude toward the radio station, brand use, interest in digital cameras, age, sex, and level of education.

Radio use was measured by asking how many days a week the respondents listen to the radio ($M = 3.28$, $SD = 2.27$) and how many hours the respondents listen to the radio on an average day ($M = 1.69$, $SD = 0.79$). Interest in digital cameras was measured with three items on a scale ranging from 1 (*totally not interested*) to 5 (*very interested*): “I am interested in digital cameras,” “I am interested in buying a digital camera,” and “I am interested in advertising for digital cameras.” After a reliability test, scale items were averaged to create a single measure for interest in digital cameras (Cronbach’s Alpha = .62, $M = 3.26$, $SD = 1.16$). Respondents’ attitude toward the radio station was measured with four items on a five point scale ranging from 1 (completely disagree) to 5 (completely agree), based on Chang and Thornson (2004). The items were “I think Caz radio is nice,” “I think Caz radio is amusing,” “I think Caz radio is good,” and “I think Caz radio is interesting.” To create one construct for attitude toward the radio station, the scale items were averaged (Cronbach’s Alpha = .90, $M = 5.19$, $SD = 1.04$).

4 Results

4.1 Background differences between the conditions

ANOVA showed that there were no significant differences between the conditions with respect to respondents' age, sex, level of education, radio use, attitude toward the radio station, brand use, or interest in digital cameras ($p > .05$).

4.2 Effects on top of mind awareness

To test the effect of advertising versus advertising in combination with brand placement on the top of mind awareness of the brand, a nonparametric test was performed. The results showed that the combination of advertising and brand placement leads to significantly more top of mind awareness than advertising alone, $\text{Chi}^2(1) = 7.81, p = .005$. When confronted with the combination of formats, 32% of the listeners mentioned the stimulus brand as the first digital camera brand they knew, whereas only 10% of the listeners who heard only the advertising mentioned the brand first.

4.3 Effects on brand attitude

With respect to the effects of the advertising formats on listeners' attitude toward the brand, ANOVA showed that there was no significant effect, $F(1, 100) = .291, p = .59, \eta^2 = .003$. This means that the brand attitudes of people who heard the commercial were the same as brand attitudes of people who heard the commercial in combination with the brand placement. The mean scores for brand attitude are portrayed in Table 1.

Table 1: Effects of Advertising Formats on Brand Attitude

Condition	Advertising	Ad and Brand placement
Brand attitude	4.52 (1.03)	4.41 (0.95)

Note: Mean scores with standard deviations between parentheses.

4.4 Multiple source perceptions and forward encoding

The results showed that there was a synergy effect between brand placement and advertising for top of mind awareness of the brand. There was no synergy effect for brand attitude. Nevertheless, it is interesting for both effects to analyze whether the processes that play a role in creating synergy effects are present. Research question 3 asked whether forward encoding or multiple source perceptions are activated when listeners are exposed to the combination of brand placement and advertising. The mean scores for multiple source perceptions were between “do not agree” and “neutral” ($M = 2.59$, $SD = 0.61$), which indicates that respondents did not perceive multiple source effects in the synergy condition. The mean scores for forward encoding showed that this process was denied by respondents ($M = 1.97$, $SD = 0.79$).

Research question 4 is about the relation between forward encoding and multiple source perceptions on the one hand and brand awareness on the other hand. Even though forward encoding or multiple source perceptions were not present over all, variance between respondents in the presence of these processes might explain differences in brand awareness. Correlation analyses showed that there was no significant relation between forward encoding and brand awareness (Pearsons's $r = .28$, $p = .06$). With respect to multiple source perceptions, analyses indicated that there was no significant relation between perceptions of multiple sources and brand awareness either (Pearsons's $r = .10$, $p = .23$). This means that the synergy effects of the combination of brand placement and advertising on brand awareness are not related to processes of multiple source perceptions or forward encoding.

For brand attitudes, correlational analyses showed that there was a significant relation between forward encoding and brand attitude (Pearsons's $r = .34$, $p = .02$). This means that listeners who experienced forward encoding after exposure to the advertising in combination with the brand placement, were significantly more positive about the brand. With respect to multiple source perceptions, analyses showed that there was no significant relation with brand attitude (Pearsons's $r = .12$, $p = .24$).

5 Conclusion and Discussion

The present study was the first to focus on the effects of the combination of advertising and brand placement on audience responses. The results show that this combination leads to higher top-of-mind awareness than exposure to advertising alone. As the time spent on the brand was equal in the advertising alone and the

synergy conditions, this effect can fully be attributed to the combination of the different formats, and not to increased exposure time. This leads to the conclusion that adding brand placement to a commercial significantly increases brand awareness.

These findings are in accordance with those of Lord and Putrevu (1998) who showed that a combination of different promotional formats such as brand placement articles, advertising, and coupons in newspapers resulted in higher memory than single formats.

The present study also shows that brand attitudes do not differ between exposure to advertising alone and the combination of advertising and brand placement. On the one hand, this shows that brand attitudes are equally affected by the one or two formats. On the other hand, it could also be that brand attitudes are not affected at all. Brand attitudes are rather stable evaluations and it is very likely that one exposure cannot change people's brand attitudes. It is known from the literature, that repetition is needed to be able to make even little changes in attitudes (Ajzen and Fishbein, 1980; Krugman, 1972).

The present study not only examined the presence of synergy effects but also the underlying mechanisms. Mechanisms of forward encoding or multiple source effects were not related to the effects on top of mind awareness. The results also show that exposure to both formats does not result in much forward encoding or multiple source effects. This means that other mechanisms must underlie the synergy effects on brand awareness. It could be that the principles of intended exposure and source credibility do explain the effectiveness of combining brand placement with advertising.

The results also show that perceptions of forward encoding are positively related to brand attitudes. Thus, people whose interest in the message is primed by the first message showed significantly more positive attitudes toward the brand. The causality of these effects is not tested, thus it could just as well be that people who have more positive attitudes toward the brand are also more interested in the messages about the brand.

When the effects on brand awareness are related to previous research on synergy effects, one must note that previous studies on synergy effects focused on multiple media campaigns and not on multiple format campaigns within one medium. The present results for brand awareness seem to indicate that synergy does also occur when the message is placed in one medium, with different formats, but that different mechanism underlie these effects.

Previous research has shown that placement modality (audio, visual, or audiovisual) influences its effectiveness (Gupta and Lord, 1998; Law and Braun, 2000; Russell, 2002); however, the effects of brand placement in an audio-only medium remained unstudied. This study showed that the combination of adver-

tising and brand placement in an audio only medium can significantly increase top of mind awareness, when compared to advertising alone.

5.1 Practical implications

The present research has some implications that might help practitioners and especially advertisers in developing their strategy for effective communication on radio. If advertisers aim to increase brand awareness, the current study would suggest that adding brand placement to a radio commercial is very effective. A shorter commercial that is combined with attention to the brand within the editorial content of a radio program significantly increases brand awareness. However, the present study showed no effects on brand attitude. Therefore, the effectiveness of advertising and brand placement on radio in improving brand attitudes needs more research before recommendations can be done.

5.2 Limitations and future research

A limitation of the present study is that brand awareness was measured almost directly after exposure to the radio fragment. Although questions about radio use and personal characteristics were posed first, the questions about awareness and brand attitudes were posed minutes after the exposure. The question is whether these effects also hold on the long term. Do brand placement and advertising have the same effects on brand memory after a few hours or after a few days? Future research could demonstrate whether radio brand placement effects sustain over time.

As the present study was the first to focus on synergy effects between brand placement and advertising, future research is needed before reliable conclusion can be drawn. The present study showed that the combination of advertising and brand placement resulted in more top of mind awareness than advertising of the same length. Future research might show whether a combination of brand placement and advertising in a medium other than radio leads to synergy effects as well.

Future research is also needed to show which mechanisms underlie multiple format effects. The present study showed that principles of forward encoding and multiple source perceptions do not apply to the combination of advertising and brand placement. Future research could focus on source credibility and intentional exposure as mechanisms underlying effects of combinations of advertising and brand placement.

The present study showed no effects on brand attitudes. This could be due to the fact that there was only one exposure. Future research is needed to determine whether brand attitudes are affected by repetitious exposure to brand placement and advertising combinations.

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Personal Branding and the Role of Public Relations

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1 Introduction

Personal Branding is becoming an important factor, above all in connection with the *marketing* of individuals (personality or celebrity marketing). Agencies and consultants are increasingly accompanying politicians, businessmen and women, scientists, artists and sports professionals as well as individuals from showbiz, the fashion and TV worlds as they become public figures/personal brands, with the result that over the last 50 years, the branding process for individuals has increased substantially. Marketing and PR experts have developed many strategies for achieving and sustaining high visibility and have refined their methods for delivering the brand. In his book, "High Visibility. The Making and Marketing of Professionals into Celebrities", Kotler, one of the best known experts on marketing, analysed the US market for celebrities with his team and attributed PR with the most dominant role of all communication disciplines: "the most essential support for most aspirants comes from public relations" (cf. Rein et al., 1997: 268). In the third (revised and expanded) edition of "High Visibility" with the new subtitle "Transforming Your Personal and Professional Brand" the authors claim that "PR is essential because all aspirants in the visibility-marketing process need distribution of their image. The role PR plays in the visibility industry involves enabling, designing, managing, and protecting the brand image" (Rein et al., 2006: 290).

This paper focuses on a theoretical and analytical approach to the topic, starting off with the origins and development of this booming branding market. This is followed by a description of different counselling models in theory and practice as well as an ideal public relations concept for planning how to position people effectively. Society's role in the emergence of the phenomenon of personalization is discussed within the context of marketing communication and organizational communication management, emphasizing that personal communication management or personality PR is a responsible management task.

2 Social and historical background

The phenomenon of personalization and the various ways in which individuals present themselves go back to the very dawn of humanity. People have always used a rich repertoire of techniques, either consciously or unconsciously, so as to leave a lasting (positive) impression on others. In an analysis of the history of PR (cf. Nessmann, 2000, 2004, 2005), concrete case studies (of kings, emperors, statesmen, businessmen, etc.) revealed that over the last 2000 years, famous and influential historical personalities have used numerous methods which would nowadays go under the heading of PR techniques, such as deliberately making use of 'fashionable' clothing, hair styles, make up and accessories; basking in the limelight of others and surrounding themselves with VIPs; staging important social events (weddings, birthday parties, celebrations marking moments of personal success) or publishing documents, manifestos, books, memoirs, autobiographies, etc. Thus, strategies involving the personalization, staging or positioning of individuals, as described in this paper, have, in fact, always existed, and always will. However, it was not until the early 1980s that Personality PR became a distinct discipline, with its own market and growing professionalization, as will be seen below.

The neo-liberal model of business and society has accelerated the personalization factor and associated phenomena of how individuals present themselves. In the western industrialized world, the trend over the last few decades has clearly been towards individualization. Values such as self-realization, self-fulfilment and self-satisfaction are playing an ever more important role. Happiness, pleasure and enjoyment of life are the new merits which are increasingly observed in members of today's so-called affluent society. People expect a lot more from life; they want to live their own lives, be fulfilled, find their own personal style and be unmistakable and unique. Personality and individuality are becoming increasingly important values.

The motor of individualization is running at full speed; the battle for recognition is becoming tougher; the magic force of attention is gaining a new dimension. More specifically, the requirements of the labour market have changed: more and more people are chasing after fewer and fewer jobs. Competition amongst job seekers is increasing and the selection procedures are becoming tougher. Modern-day capitalism, compounded by the negative excesses of globalization, needs flexible people who have to constantly promote, assert and position themselves anew. Not only freelancers find themselves in such a situation; even employees and those in management positions (CEOs) are affected.

Against this background, CEO communication or CEO positioning is growing in importance (cf. Gaines-Ross, 2003; Becker/Müller, 2004; Deek-

eling/Arndt, 2006; Hohegger Research, 2006; Zerfaß/Sandhu, 2006; Biehl, 2007; Sandhu/Zielmann, 2010; Szyszka, 2010). Communication management for individuals, or personal branding, is turning into an indispensable component of corporate and marketing communications. Within the context of marketing communication, personalization is principally about the deployment of individuals (ideally governed by strategic planning) for the purposes of internal and external communication, i.e. a method of staging and positioning companies/individuals, and thus a communication strategy or a possible variation on the strategy of communication management. Personal Branding is becoming a key factor – for one-person businesses, small and medium-sized enterprises and large listed companies alike. It is becoming essential to open up companies and their management to the public eye and to increase their transparency. The stakeholders' interest is growing in what type of person the boss is and media reports focus ever more strongly on the individuals who run a company. Thus the media are the most important driving force behind personalization (cf. Ben-tele/Fähnrich, 2010; Brettschneider/Vollbracht, 2010).

3 The marketing model as presented in the literature

Over the last few years, very many 'how to' books have been published, providing tips on *promoting, marketing or branding yourself* and dealing with a wide range of concepts connected with the marketing of individuals. As part of the Personal Communication Management¹ research project at the University of Klagenfurt, all relevant books on this topic were collected and analysed, resulting in the first, comprehensive review of the literature.²

1 Personal communication management (PCM) is defined by the author as a collective name for all forms of professionally organized communication (i.e. systematically planned, continually carried out and properly evaluated) by and for individuals in all areas of society, e.g. politicians, businessmen and women, artists and freelance professionals (lawyers, doctors, life coaches, education counsellors, management and business consultants, therapists, etc.). The overriding aim is to successfully position individuals and, to a certain extent, the companies they work for, in the public eye.

2 The most important authors of books published on this topic in English are listed by year of publication: Rein et al., 1987/1997/2006; Dainard, 1990; Leeds, 1992; Franklin, 1996; Ballback/Slater, 1998; Rye, 1998; Bridges, 1998; Peters, 1999; Baker, 2000; Herman, 2000; Spillane, 2000; Roffer, 2000; Trout/Rivkin, 2000; Inches, 2001; Ries/Trout, 2001; Edwards, 2002; Genasi, 2002; Graham, 2002; Montoya et al., 2003; Montoya/Vandehey, 2005; Pringle, 2004; McNally/Speak, 2006; Arruda/Dixson, 2007; Marcum/Smith, 2007; Van Yoder, 2007; Redmond/Holmes, 2007. A longer list of books published in German and English can be sent by e-mail on request: karl.nessmann@uni-klu.ac.at.

In a theoretical meta-analysis of published works, the author of this paper identified different counselling models which vary particularly in terms of conception and planning. The criteria for the meta-analysis were: Which terms do the authors use? Which theoretical approaches do they base their work on? Which instruments and methods do they propose to achieve high visibility or a personal brand? The quality of these works differs widely, many of them giving advice in the 'how-to' format, although some are partially based on solid theoretical foundations. In addition, there is little agreement on the terminology and thus the differences between personal branding, marketing and PR are not very clear. This is one area where a lot of theoretical work still needs to be done.

One aspect that really sticks out in these 'how-to' books, whether scientifically grounded or not, is the way that the language is strongly business oriented. The authors talk about the 'individual as a company', or the 'individual as a product' who is 're-packaged' as something to be sold. 'Manage yourself as you would manage a successful business' is the creed some authors preach. The concept of the market has become the dominant metaphor. To a certain extent, individuals are degraded to purely economic units. Many authors deal with what is actually quite a contradictory topic in a one-sided, yet catchy way and socially critical questions are usually ignored. Against this background it is hardly surprising that the topics of promoting/marketing/branding yourself generate a lot of scepticism in many people – at least in Europe – and are generally seen negatively (cf. Nessmann, 2005). Depending on their professional background, the authors approach the topic either from a PR perspective or from a marketing perspective, with the majority taking the latter as their starting point.

The marketing or branding model follows the 'people as brands' approach, taking advantage of the findings of modern marketing and brand management. Advocates of this model work with the umbrella terms of personal marketing/personal branding and generally operate on the classic marketing model (market analysis, segmentation, selection, etc.) and follow the 4 Ps when drawing up their concepts, namely *product*: services, proposals, individual qualities; *price*: the conditions under which the person is prepared to offer their services (fees, salary); *place*: where the person offers their 'products' or services; and *promotion*: communication tools like advertising, sponsoring, testimonials, public relations, etc., whereby public relations is ascribed a significant role. In the literature, different marketing styles are also described for launching aspirants. (1) the *pure selling approach*, where the agent sees the client as a fixed product that simply has to be sold; (2) the *product improvement approach*, where the agent takes a value-added approach, adding value to the performer's ability to attract the market's interest; and (3) the *market fulfilment approach*, where the agent searches in the abundant pool of minimally qualified aspirants for the one

who is most promotable into this role (cf. Rein et al., 2006: 143-144). Just what a personal brand is and how personal branding works are aspects which are not dealt with satisfactorily, authors being content to list characteristics which aspirants should have in order to be defined as a 'brand', such as the 'right' attitude(s), 'pure' motivations, a 'natural' ability, the necessary 'talent', inborn charisma, etc.. A well grounded theoretical definition of these concepts does not exist and also appears to be very elusive, as can be seen in many papers in the book on personalization edited by Eisenegger/Wehmeier (2010). Despite these shortcomings, the following generalizations seem to hold:

Personality brands are highly visible; they are unique, authentic, immediately recognizable; they stand for quality, exude exclusivity, arouse feelings, bring across values and visions; they create added value, etc.. Almost all authors recommend that potential personality brands should reflect on their own identity in terms of *Who are you? What do you do? What do you want to stand for? What are your strengths? What can you do particularly well or better than many others? What makes you different? How can you create value for your target market?* Once you have done your homework, it is a question of communicating characteristics and competences with the help of PR. Section 5 illustrates the role that PR can play in the branding process, but first it would be useful to take a closer look at the personality or visibility market.

4 The personality market

The first studies undertaken in the Personal Communication Management research project³ revealed that the market is booming in Europe (cf. Nessmann, 2002, 2005, 2010). Well-known politicians, managers and stars from showbiz often have their own team of experts who advise them in all aspects of publicity. In stark contrast with the American market, however, hardly anybody ever talks about this type of consultancy work in Europe, preferring to see it as an *undercover activity* which is carried out confidentially and very discretely. Nevertheless, personalization is seen as a key factor for successful marketing and organizational communication and is unlikely to disappear from the everyday work of agencies and consultants.

3 The Personal Communication Management (PCM) research project, including a focus on continuing education, was initiated by the author of this paper at the University of Klagenfurt in 2003. The many different ways in which individuals present themselves have since been investigated in a number of seminar papers and diploma dissertations.

4.1 *The 'key players' on the personality market*

In a somewhat simplified overview, the personality market can be broken down into four *key players*: the protagonists, the media, the audience and the consultants. None of them can function in a vacuum and thus they co-exist in a kind of symbiosis.

As far as the *protagonists* are concerned, the spectrum ranges from largely unknown individuals to prominent figures from various fields (politicians, managers, sports personalities, movie stars, etc.). They are all interested in pushing their way into the media and aim to profit from making themselves better known, thus benefiting from increased popularity, power, influence or financial success. A higher degree of popularity, however, can also increase the risk of scandal (cf. Eisenegger/Imhof, 2008) but this is a risk which some individuals (particularly from the worlds of politics, culture and show business) are consciously prepared to take and, indeed, some of them even stage-manage and deliberately spread rumours in order to attract the media's attention.

The *media* (print, TV, radio, internet, etc.) include more reports on the protagonists and profit from increased circulation and sales figures. Prominent personalities are very newsworthy. The more an event is endowed with a personal factor, i.e. the more it deals with the actions or fate of individuals, the more chance it has of becoming a news item. It is noticeable that personalization in the media has become increasingly important over the last few years and the media are focusing more on individuals in their reports. The disadvantage is that, at the same time, content-oriented, factual reporting is given a less prominent role (cf. Bentele/Fährnrich, 2010; Brettschneider/Vollbracht, 2010).

The *audience* consumes these stories, takes part in what is going on, identifies with the celebrities and profits from satisfying their voyeuristic needs. Obviously audiences bring different levels of interest and intimacy to their relationships with 'their' celebrities. Rein et al. (2006) liken these levels to an "Audience Intensity Ladder". She starts with (1) *invisible consumers*, who are indifferent to media packaging, dislike identifying with personalities, or lack the capacity to idolize, followed by (2) *watchers*, who read newspapers or watch movies, (3) *seekers*, who attend their favourite singer's concerts or politician's speeches, (4) *collectors*, who accumulate souvenirs or other objects associated with the person, (5) *interactives*, who communicate with their stars via e-mail, websites or blogs, (5) *insiders*, who have lunch with their stars, for example, and finally (6) the *ensnared*, who are so obsessed that the relationship can become negative, threatening, or even fatal.

The *consultants* (marketing, advertising, public relations consultants) mediate between the protagonists, the media and the audience; they publish books,

hold seminars and make a profit from charging fees. This kind of advice has to be given in a responsible manner in which sensitivity and tact are essential, alongside numerous other qualifications and skills. Goals are usually many sided and sometimes quite ambivalent. Very often the most important goals are power, fame or financial success, etc.. At the same time, however, it is often a case of publicizing personal achievements, putting across points of view or creating a sense of credibility, acceptance, likeability, understanding and trust. These somewhat contradictory goals explain why personality consultants do not always succeed in helping their clients to create a consistent and authentic image of themselves.

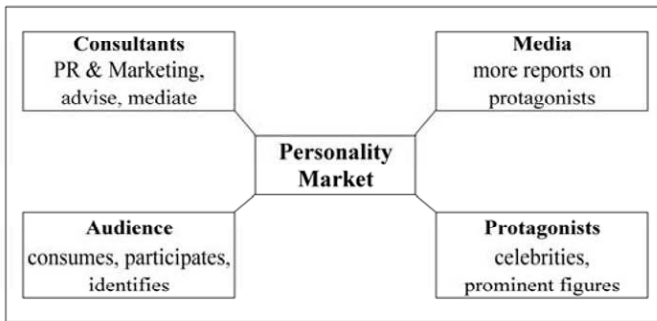


Figure 1: The key players on the personality market

4.2 The visibility industry

In the third edition of "High Visibility" the authors describe the visibility industry as consisting of "specialists who take unknown and well-known people, and design and manufacture their images, supervise their distribution, and manage their rise to high visibility" (Rein et al., 2006: 34). Its function is to design, create, and market faces as brands. The major participating sub-industries are: the communication industry (newspapers, magazines, radio, TV, film), the entertainment industry (theatre, music or dance halls, movie studios, sports arenas), the coaching industry (music, drama, speech or modelling teachers), the legal and business services industry (lawyers, accountants, investment counsellors), the endorsement industry (souvenir, clothing, games and toys manufacturers), the representation industry (agents, personal managers, promoters), the appearance industry (costumers, cosmeticians, hairstylists) and last but not least the

publicity industry (publicists, public relations firms, advertising agencies and marketing research firms). On closer inspection, it is not that easy to differentiate clearly between some of these fields. The tasks carried out by public relations firms, personal managers or coaches, for example, can overlap, depending on the personal qualifications of the consultant at hand. What is immediately obvious from this list of key industries is the rapid increase in the scope and significance of the personality market.

The sub-industry of *publicity* (which we will look at in more detail) is the most important field and a much more cost effective communication strategy than traditional advertising, according to the authors. Publicity is the voice of the personal brand. The major functions and tools of publicists are: arranging press conferences and interviews, preparing press kits, writing news releases, press statements and speeches, planning publicity tours and major events, networking with members of the press, coaching the aspirant, etc.. Traditionally the marketing communication experts have designed the strategy and PR has then helped them to put the plan into action. But in the meantime, "PR has moved its influence closer to the decision-making point. PR firms, by adding market researchers, running their own focus groups, and encouraging full-service planning, are making and recommending fundamental strategy decisions" (Rein et al., 2006: 290).

5 A PR concept for positioning people effectively

If Personality PR is to be carried out professionally, it should be done so conscientiously, systematically and continually. The clients' communicative appearances should be planned strategically. During the Personal Communication Management project at the University of Klagenfurt, an ideal concept was developed for clients in politics, business, culture, sport and education, etc. (cf. Nessmann, 2005) which has since been modified and adapted (cf. Nessmann, 2007, 2008, 2010). The main phases are presented below, bearing in mind that there are no standard solutions. PR concepts cannot be bought off the peg but are always tailor-made. Everybody is an individual and therefore every PR/communication concept is different. As a result, personality consultants/coaches have to be very cautious and take account of individuals and their unique environment.

5.1 Briefing

Every counselling or PR/communication concept begins with a briefing session to clarify the client's problems, viewpoints and goals as well as their time frame and budget, which obviously vary considerably from client to client. Thus, the main aim of a relatively unknown *artist* may be to make her name better known. A *young businessman* who has just taken over the family business, for example, may initially wish to position himself within the company and 'win' the confidence and understanding of his employees. And as a third example, a well-known *politician* is electioneering and is primarily interested in the positioning of her image and issues.

5.2 Analysis

After clarifying the starting position, stock has to be taken of all facts relating to the individual and/or the company, e.g. how well known, image and reputation, values, visions, networks, market position, competitors, communication activities to date, etc.. These are then analysed, e.g. target performance comparison and SWOT analysis. The overriding goal of this comprehensive and usually very time-consuming phase is to establish (a) the client's core qualities, their key identity or branding, (b) their USP or individual personal trademark, (c) their value-oriented model (mission statement), (d) a brand name (pseudonym, nickname, associations).⁴ These personal characteristics are then compared and matched up with the company-specific characteristics (brand core, company's mission statement, strategy, philosophy, etc.). This analysis forms the basis for the next steps. Qualitative target group surveys, perception tests or quantitative data can be used to ascertain the relevant factors for the client's reputation.

5.3 Strategy

The strategy is at the heart of every concept and consists of four steps: formulating the individual's and the company's communication goals, target groups, messages and guidelines. Here it is a question of working out realistic and checkable communication goals, identifying the most important target groups, stages and networks for the individual or company, formulating relevant key messages and

4 Examples: ARNI for Arnold Schwarzenegger, governor of California, ANGI for Angela Merkel, the German chancellor, Mr KELLY for the CEO of the international snack manufacturer Kelly.

establishing strategic guidelines for communication. The strategy block involves complex planning which must be approached very scrupulously. The individual elements are all inter-related and cannot be considered separately. The actual communication goals are derived from the situation analysis carried out in the first phase. Depending on the initial position and ultimate goal, it can be a question of making the person, and consequently the organization, better known, creating a positive image, (re)establishing credibility, arousing attention and interest, creating or preventing media presence, making personal or corporate achievements visible or creating acceptance, sympathy, recognition or trust.

Concepts involving CEOs have to combine core corporate themes with core personal messages, i.e. the topics must be relevant for the company and stakeholders alike, and the key messages must be formulated according to the strategy and specifically for the situation. To come back to our case studies, the *young businessman* who wants to establish himself in relation to internal and external stakeholders and who is interested in gaining the confidence and understanding of both can concentrate on issues relevant to the work place and/or future company strategies. The *artist* could address socio-political topics affecting the target group which fit in with her personality profile. The *politician*, in contrast, will communicate the topics brought up by her party as part of its issues management policy, associating them with her personal preferences, strengths, experiences and values, etc..

Identifying these four strategic elements is a very individual process which can only be outlined briefly here. Establishing strategic guidelines requires an especially sensitive approach for it is generally at this stage that fundamental decisions are made on what type of communication should take place, e.g. loud or soft, emotional or objective, media-centred or dialogue-oriented, provocative or consensus-oriented. The politician, the young businessman and the artist all have to find their own personal style of communication. This, again, depends on their individual values and their particular character as well as on the existing culture or philosophy of the organization. The task of personality consultants/coaches is to help their clients to find their own paths by asking supportive questions.

5.4 *Tactics*

Following the analytical and strategic phases described above, the measures to be taken are planned in detail in the *tactics* phase. The specialist literature lists a wealth of person-related PR tools but rather unsystematically. Borrowing from

current management terminology, I will attempt to systematically classify the numerous individual tools into four clusters.

Self-management – documentation of personal data: In this cluster, the data are documented which were ascertained by the coach and client while taking stock and analysing the situation. The minimum requirements are an up-to-date curriculum vitae with the most important facts and figures, a photo archive and a personal 'branding dossier'. The latter is a personal description covering questions which journalists are asking more frequently nowadays, such as strengths, weaknesses, successes and failures, goals, visions, characteristics, passions, values, hobbies, likes and dislikes, motto, philosophy of life, mission statement, etc.. The task of personality consultants is to prepare their clients for these and other questions. Experience has shown that working out good answers is not that easy and takes up a lot of time.

Impression management – self-presentation techniques: This cluster includes all types of behaviour and forms of communication with which individuals can influence and control the impression they would like to leave on stakeholders. Literature on impression management has identified a wealth of defensive and assertive self-presentation techniques which individuals can use, depending on the situation, to steer their image in a certain direction.⁵ Impression management is fundamentally about decent behaviour, respect and politeness, honest and open dealings with people. That also includes keeping promises, admitting mistakes, confessing to weaknesses and apologizing if necessary.⁶ Experience shows that it is not easy for consultants to convince their clients of the necessity of such tactics (e.g. apologies). They generally tend to dispute, retract or deny responsibility, etc.. All in all, this is a very delicate and demanding area of coaching. However, numerous surveys have confirmed that virtues like politeness, friendliness, honesty, helpfulness, modesty and sincerity are most appreciated, with arrogance and dishonesty being perceived most negatively. Conscious use of language, rhetoric, clothing, symbols, symbolic behaviour, office furnishings, etc. are also self-presentation techniques. The effects of individual tactics have been proved in many a survey. The general public is increasingly aware of impression management details like outfit or accessories. The media sometimes include very detailed reports on the clothing and hair styles of

5 It is almost impossible to keep track of the literature on impression management. There is a good overview of numerous academic surveys and experiments in English in Rosenfeld et al. (2002) or in the German-language classics by Mummendey (1995) and Ewert/Piwinger (2007).

6 As an analysis of the election results shows, Arnold Schwarzenegger was re-elected governor of California in 2006, amongst other reasons, because he made use of the apology strategy. He admitted his mistakes, signaling to the voters that he had learnt from his errors.

prominent figures. In this light, it can certainly make sense to involve external experts (e.g. for colour or style consultations).

Media management – positioning topics: This cluster of tools is about protecting clients from bad publicity on the one hand and generating positive news on the other. It is about dealing with journalists correctly in order to position topics selectively in the media. Basically, all the classic tools of media work are at our disposal, e.g. press releases, press conferences, letters to the editor, guest commentaries, interviews, statements, home stories, reports, story telling, etc.. This cluster does not only cover the mass media but also media produced for the individual, such as a personal website, blogs, business cards, signed cards or postcards, posters, brochures or books (memoirs, autobiographies, non-fiction). The importance of photos, and especially portraits, should be particularly stressed. Although scientifically proven, the powerful effects of pictures and photos are still generally underestimated in everyday public relations practice.

Out of all the PR tools mentioned above, the *internet* offers countless possibilities to increase the level of familiarity and improve the reputation of a person (and/or an organization). As the internet pervades different spheres of life to an ever increasing extent and online media are used more frequently, it is becoming more and more important for people to pay attention to the way in which they are presented in the internet (known as their digital reputation) and to actively cultivate their online image with passive and active strategies. Passive strategies involve people finding out what information is actually available on them in the internet by using search engines such as Google, Yahoo, etc.. Active strategies involve people actively drawing attention to themselves, e.g. by posting information on themselves and on specific topics in the internet and networking with the help of numerous Web 2.0 applications. In addition to setting up a personal website and/or blog, the following online instruments in particular should be highlighted: (1) Social or business networks (like Studivz.net, myspace.com, facebook.com, xing.com, linkedin, lifestream.fm, friendfeed, twitter, etc.), (2) Photo and video sharing communities (flickr.com, youtube.com), (3) Social bookmarking where personal favourites can be stored centrally (delicious.com) and (4) Meta-networks which link all personal profiles (claimID.com, FindMeOn.com) (cf. Nessmann, 2009).

The task of personality consultants is to precisely and creatively plan, arrange and stage-manage the individual tools to suit the particular strategy. It is primarily a case of stage-managing events (e.g. public appearances) with the aim of creating something newsworthy for the media (event management). A second task is to show clients in a favourable light in personal talks with journalists, for example by admitting certain of their weaknesses but simultaneously emphasizing their strengths, goals or objectives. Another job of personality consultants is

to prepare their clients for public appearances (news programmes, chat shows or public speeches). In this situation it can again be useful to involve external specialists (e.g. media or communication trainers). The training programme should not, however, be reduced to learning rhetorical and journalistic skills but should have a holistic goal which includes the client's basic values, strengths, weaknesses and preferences as identified in the analysis phase.

Social management – taking on social responsibility: This cluster covers all social activities and the client's social commitments, such as being involved in associations, clubs, interest groups; providing financial support for charitable institutions (donations, sponsoring); taking part in public debates, panel discussions; holding lectures or seminars; taking on socio-political responsibility (e.g. acting as a contact person for cultural, political, economic, academic or sports institutions, associations, interest groups) and participating in all forms of networking (real and virtual, like facebook). The great effects of small tokens of appreciation should not be underestimated either, e.g. personal gifts, birthday greetings, spontaneously calling friends, colleagues or journalists, or personal invitations to dinner or a business lunch. Those in management positions (particularly CEOs) must obviously coordinate all of these activities with the company's strategies (especially corporate citizenship, corporate governance, corporate social responsibility).

5.5 *Implementation and evaluation*

When putting these tactics into effect, certain fundamental principles have to be observed. All these activities are only credible when they are honestly intended and not at variance with the client's character, values or personal convictions. Trust, credibility and authenticity arise when statements, actions and values coincide. In other words, individuals appear to be authentic, trustworthy and credible when their deeds (actions) are consistent with their words (statements) and values (ethical and moral principles). Not every measure suits every type of person. We would not suggest that somebody who dislikes public speaking should hold a series of lectures; likewise somebody who does not like writing should not be asked to write guest commentaries in newspapers.

In conclusion, whether the client is an artist, businessman or politician, a package of tools has to be put together which suits the individual. If one of our three fictitious 'clients' is a sports enthusiast (e.g. golf player or marathon runner), we will select the appropriate forums, such as sports events or sports magazines concentrating on golf or running. If somebody is interested in art, we will find appropriate platforms (e.g. art associations, previews at art galleries) or draw

up an art sponsoring project. If somebody is already very well known and has a high popularity rating, a testimonial campaign could be interesting in certain circumstances. Finally, personality concepts for clients should include evaluative methods, i.e. the personality consultant should decide what methods and tools can be used to actually check whether the formulated goals have been achieved. The evaluation proposals (monitoring success and effectiveness) can also be developed as an independent package. Large-scale PR campaigns for managers should include a precise definition of what is to be examined, who should do the evaluation, how much time this will take and how much money is available. Basically there is a whole collection of tools at our disposal in this field.

Summative evaluation is about checking at the end of a campaign whether and to what extent the communicative goals formulated in the strategic phase were actually achieved, e.g. by ascertaining how well known the manager is now, carrying out a new image survey or analysing the client's media appearances. In personality communication, a *formative evaluation* is a more constant process of analysis and reflection by the individual. With the help of the personality coach, the client's statements and actions are critically analysed relating to the intended effect (particularly in terms of credibility and authenticity). The findings then form the basis for continued work.

6 Conclusions and prospects

Personality PR or Personal Communication Management as a form of coaching or counselling places special emphasis on individuals and their characters (values, strengths and weaknesses) and positions them in the most important markets (i.e. capital, sales, labour markets or public opinion). Personality consultants/coaches help their clients to achieve the following: (1) to recognize their personal potential (strengths, weaknesses, values, visions); (2) to leave a lasting impression on groups which are relevant for them, both internally and externally (impression management); (3) to create a positive reputation (reputation management); and (4) to position themselves as a 'brand' in the public eye (personal branding).

Here Personality PR is defined as a coaching and counselling service, although the transitions are fuzzy. *Consultants*, for example, generally develop communication concepts and give their clients tips, suggestions and advice, while in their role as *coaches*, experts endeavour not to tell their clients what to do but rather to accompany them through a process involving supportive questioning. This should prevent coaches from becoming part of the system, on the one hand, and ensures that 'coachees' do not identify with the experts' advice too

closely and stop paying attention to their own experience and ideas for solutions, on the other. Clients are offered several alternatives and have to decide for themselves which option is best. Here it is particularly important not to think on the processing level, i.e. not to concentrate on contents (*which solution is possible?*), but to act on the processing level (*how can clients arrive at their solution?*). Coaches do not give priority to their own ideas and solutions but believe in the competence and self-responsibility of their clients: everybody can find their own solutions; everybody is responsible for themselves.

From the perspective of corporate communication, Personality PR is a responsible management task and the chances and dangers of its strategies must be carefully considered. In terms of 'integrated communication', managers' public appearances must harmonize with the organization's other communicative efforts; the corporate brand and personal brand must be coordinated. Personalization must not turn into an end in itself (ego marketing by vain managers) but must be in the company's service. Personality communication is not just about pure publicity, cheap sales tricks, egocentric self-presentation or short-term attention. Personalization should not be confused with 'privatization' either: individuals' private lives should remain private, if at all possible. The individuals' actions must harmonize with their statements and values.

PR, marketing or communication consultants interested in personal communication management must acquire additional knowledge from the fields of coaching, branding, reputation management and impression management alongside sound experience in their field. Training opportunities already exist, such as the seminars offered by the International Federation of Image Consultants, but they are very specialized, focusing solely on colour and image consultation (www.ificgroup.com). In the US, William Arruda and his team organize seminars on personal branding, but mostly from the perspective of self-marketing and career advancement (www.reachbrandingclub.com). An all-encompassing course for ongoing personal branding consultants/coaches covering all the relevant skills and knowledge areas relating to the positioning of individuals on a professional basis has not yet been established. A step in this direction was taken with the part-time further education course "Personal Communication Management" for marketing and communication experts launched in 2006 at the University of Klagenfurt in Austria. This one-off continuing education course dealt with the positioning of individuals, providing both a solid theoretical foundation and practice-oriented work (www.uni-klu.ac.at/~knessman).

This paper provides a snapshot of how the field is developing at present, coupled with a critical analysis of branding and public relations literature. It reminds the reader that the personality or visibility market is booming and that different counselling models exist in theory and practice. A public relations con-

cept on the positioning of individuals developed by the author is also included. In general, however, hardly any research has been carried out into personal branding and related topics like personal marketing, personal public relations, etc., and it would certainly be highly desirable to continue the academic discourse on the phenomena and concepts presented here.

Relating to the 'key players' on the personality market mentioned in passing above (protagonists, media, audience and consultants), numerous theoretical and empirical research projects could be initiated. The various ways in which *protagonists* in politics, business, the arts and sport, etc. present themselves could be surveyed and categorized. In the field of *media*, developments in personalized reporting in the print media, TV, radio and internet could be analysed. The *audience* could be investigated from the perspective of why they are so interested in reports on celebrities and how they identify with the protagonists, etc.. And finally, the work of *consultants* should be analysed to ascertain how the counselling market is developing at present and who is offering what kind of consultation service, etc.. In other words, there is plenty of research to be carried out. *Pure research* must also be encouraged, covering, for example, historical, psychological, sociological and economic studies on the development of personality communication, or leading to the development of accepted theoretical concepts and terminology, etc.. At the same time *applied research* should be driven forward, including comparative studies on personalization in politics and business at regional, national or international levels. And finally, there is not enough *empirical research* investigating the effectiveness of personalization strategies, presenting successful or unsuccessful case studies, or looking into the opportunities and risks of personal branding, etc.. This list could be added to ad infinitum but one thing is clear: research in this field is best carried out on an interdisciplinary basis. As the author found out in his theoretical meta-analysis of published works, the topic can be viewed from many perspectives (economic or business studies, political science, sociology, psychology, educational studies, media and communication studies, etc.). Research could contribute not only to providing a theoretical basis for the practical challenges of personalized communication but also to optimizing processes in practice. For positioning people is a task of great responsibility as quite a lot is at stake: trust, understanding, acceptance, credibility, integrity and – last but not least – the reputation of the individual and the company.

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Agent-Based Modelling: A New Approach in Viral Marketing Research

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1 Abstract

The importance of word-of-mouth (WoM) is completely underestimated by many media persons and still being neglected by several researchers. Since word-of-mouth typically cannot be planned or purchased in a strict sense, it is often left aside in media analyses and explanation models. However word-of-mouth is the most important factor in buying decisions across many different branches. The work presented in this chapter is a first attempt to introduce Agent-based Modelling (ABM) into marketing and advertising research in order to gain a deeper understanding for fundamental processes and underlying principles related to viral marketing and the spreading of word-of-mouth. By applying Agent-based Models the spreading of word-of-mouth and viral marketing dynamics can be simulated based on a bottom-up approach. Our simulation results reveal vital implications for viral marketing strategies and word-of-mouth campaigns.

2 Introduction and background

Potential consumers are facing an overload of traditional advertising and therefore do not notice many advertising messages or even deliberately refuse to notice them. On this account viral marketing and word-of-mouth recruitment are supposed to gain more and more attention in companies marketing strategies. Generally speaking, viral marketing, which was established in literature by Jeffrey Rayport (1996), uses customers to recruit other customers. The promoted message is not transmitted via traditional media but carried by the customers themselves. Many different kinds of viral marketing and related marketing techniques, such as guerrilla marketing or buzz marketing, have emerged. Within this

paper, we will focus on the oldest, but most effective form of viral marketing, namely word-of-mouth (WoM). With the increase of the popularity of the internet and of new communication channels such as discussion forums, chat rooms, blogs etc. during the last years, WoM gained even more relevance, since WoM published online usually stays available for a long time (Schindler and Bickart 2005).

Personal recommendations are the strongest and most important factor for the success of a product. Long ago this fact has already been recognized by social scientists (e.g. Whyte 1954, Katz and Lazarsfeld 1955). Nevertheless collective behaviour in general and word-of-mouth in particular are still scarcely understood. Moreover the importance of WoM is completely underestimated by many media persons and still being neglected by several researchers. One reason for this shortcoming is that WoM typically cannot be planned or purchased in a strict sense, as e.g. Schultz et al. (2009) argue.

What we often observe in markets is not rational and independent behaviour of customers but “contingent behaviour” (Schelling 1978/2006); behaviour that depends on what others are doing. This behavioural pattern rests upon two mechanisms, namely that people behave “other-directed” (Riesman 1952/2001) and that they are susceptible to “psychological contagion” (Pelzmann 2007). Viral marketing utilises these principles, which entail collective dynamics that can neither be foreseen nor analyzed with traditional research methods and may even give birth to mass movements under certain conditions.

People are generally embedded in an environment, which influences their decisions, behaviours and behavioural attitudes and which in turn is also affected by their actions and choices. The concept of other-directedness implies that people use the behaviour of peers and other acquaintances to align themselves (Riesman 1952/2001). Particularly conditions of uncertainty and disorientation lead to a shift in consumer behaviour, where reasoning, evaluation of fundamentals, genuine individual decision-making processes and utilitarian ideals are displaced by pecuniary and psychological emulation and responses to other people’s behaviour (Pelzmann 2005). Often it simply is the observed outcome or result of the application of a certain behaviour by others, which makes people decide one way or the other (Schelling 1978/2006). Accordingly customers generally don’t buy in isolation; they often buy in reaction to the buying of other customers or the recommendations made by others. As customers, we are more often than not part of a collective, although we are not necessarily aware of this fact. Consciously or not, humans are other-directed beings and viral marketing or word-of-mouth campaigns make use of this fact. But at all times a human being needs to believe in his self-reliance and his individuality. When it comes to manipulation

through any suggestive authority, everyone envisions himself as exceptionally sovereign¹ (Pelzmann 2010).

The second principle, contagion, is defined as the spreading or transmission of influence from one individual to another in a certain setting via direct or indirect contact (Dodds and Watts 2004, 2005). Psychological contagion, the central principle of mass movements and mass phenomena, takes place in the heads of people. “Psychological viruses” are transmitted via social interactions. Susceptible people are influenced by the attitudes or the behaviour of other people in single or multiple contacts, either directly with already infected individuals, e.g. through word-of-mouth, or indirectly through the sentiment within a certain environment, such as euphoria. If a person has contact with one or more “infected” persons, she may become infected, too. A successful infection depends on a person’s susceptibility to a certain psychological virus and is only achieved if the single or multiple exposures to the contagious entity are sufficient in terms of magnitude of influence within a certain time-frame. Additionally an often forgotten but essential aspect has to be considered: Similar to the Anopheles, which transmits human malaria and only serves as carrier for the virus, uninfected people may carry a psychological virus, respectively an advertising message, as well. Think about a customer, who recommends a certain product or a particular store to a friend. The customer may do so because he considers this recommendation to be valuable to his friend, and not necessarily because he is an enthusiastic purchaser of this product or keen customer of this store. An individual may carry an advertising message without being susceptible to it and even without being aware of the fact of being a carrier (Brudermann 2009).

Concerning mass movements and the spreading of word-of-mouth the common view exists that reaching critical mass is the crucial point for success and thus the widespread propagation of a contagious entity (see e.g. Dodds and Watts 2004, 2005). The concept of critical mass has been transferred from nuclear physics to the social sciences. It assumes that there is some self-sustaining activity, which once a certain level of propagation has been achieved cannot be stopped from the outside until all available energy has been used up or environmental conditions have changed dramatically. We tested this assumption within our research.

When it comes to psychological contagion and mass dynamics, traditional research methods reach their limits. In order to understand the underlying principles and connections of collective behaviour, a completely different methodology is needed. We therefore apply a novel and alternative research method,

1 This is true at least for most citizens in western cultures.

namely a specific simulation technique that allows us to advance the understanding for fundamental processes related to viral marketing campaigns.

3 Simulation and Agent-Based Modelling (ABM)

Within the social sciences simulation is a young but fast growing discipline. Simulations generally endorse the understanding for complex connections and correlations (Axelrod 2006a). In the scientific context simulation is valuable in those fields, where the prospects of other methods are limited and where mathematical models do not suffice to describe facts and relations. In contrast to traditional modelling approaches Agent-based Modelling, which is a sub-discipline of simulation, focuses on the description of interactions of individuals, called “agents”, with other individuals as well as the description of their interactions with their environment. Agent-based models follow a bottom-up approach and thereby serve as a process-orientated alternative to descriptive mathematical models or traditional top-down approaches. The modelling is done on a micro level while the effects of the micro behaviour on the macro level are simulated. That however does not exclude the consideration of reciprocal effects between macro and micro level. Modelling also includes the dynamics of process cycles, such as in our case the spreading of word-of-mouth. By integrating such dynamics, agent-based models illustrate how individual decisions or choices and individual behaviour may lead to emerging structures and organization on a higher level.

While many explanation models in economics, marketing and psychology are based on the assumption of the individual being the crucial criterion, agent-based models go far beyond. They consider that individuals may belong to a collective, which they possibly do not understand and which they sometimes do not even notice at all, comparable to ants which build architecturally impressive anthills in the collective, although not a single individual ant intends that. In a similar way humans often show collective behaviours which exceed the horizon of an individual. The use of financial innovations during the boom preceding the recent recession serves as a perfect example. While only a few used them, these innovations were negligible from a macro-economic point of view. Their use by many actors had an incomparable stronger effect, which most actors had not foreseen. Eventually financial innovations were one of the causes for the recent global crisis (Fenzl 2009).

The collective affects the individual behaviour and at the same time the collective is an aggregation of individual behaviour. Humans act on and are influenced by their local environment (Goldstone and Janssen 2005). That is where

Agent-based modelling comes into play. In a nutshell, the principles of ABM are as follows:

- *Decentralization*: The algorithmic description is done on agent level. There is usually no global algorithm. Agents act and interact without a central top-down control.
- *Local information*: An individual does not have perfect knowledge but only local information about its own environment and the agents within it. Particularly an agent has no insight into the overall system.
- *Simplicity*: Agent-based models often rely on simple assumptions, as their purpose is usually not to offer exact representations of certain empirical situations, but to advance the understanding for fundamental processes, such as in our case the spreading of word-of-mouth and the efficiency of viral marketing campaigns.

Agent-based models address a variety of problems in many disciplines, like political science, social sciences, economics, behavioural finance and even evolutionary biology (Hamilton 1990, Axelrod 1997, 2006a, 2006b, Epstein and Axelrod 1996, Epstein 2002, Goldstone and Janssen 2005, Miller and Page 2004, Tesfatsion 2003, Lovric et al. 2009). We apply ABM to analyse the spreading of word-of-mouth. By this unconventional means we aim to derive implications for the design of viral marketing campaigns.

4 An agent-based contagion model

Our Agent-based Modelling approach orientates itself on epidemic threshold models (Granovetter 1978). We trade the fact that an individual is joining the viral marketing campaign as if he was “infected” – infected with the psychological virus which the campaign relies on.

4.1 Modelling the individual

In our model, an individual – simply called agent from now on – can adopt three different states²:

2 One may extend the model by a fourth state “immune” to integrate the “healing” of agents - meaning that an agent, who had already been infected with the virus, has recovered and is not susceptible to the virus for a certain time span. We did not consider this aspect for the simulations discussed in this paper.

- *Susceptible*: The agent so far had no contact with the virus respectively he has not yet heard anything about the subject of the viral marketing campaign.
- *Latent*: The agent already got in touch with the virus, respectively the campaign, e.g. because one of his friends told him about it. However, he will not influence the attitudes of his friends, colleagues or neighbours towards the promoted product, store or message.
- *Infected*: The agent is infected with the psychological virus respectively he has joined the campaign and now is an active part of it. He is not necessarily aware of this fact. Nonetheless he will tell his friends or colleagues about the subject of the campaign and therefore influence their attitudes towards the promoted product, store or message. Note that he is not necessarily a buyer of the product or a customer of the store himself.

Every agent has a certain threshold, which determines how easy or hard his state may be changed from “susceptible” or “latent” to the state “infected” by the influence of other infected agents in his environment. Some agents will join immediately once one single person in their environment has joined the campaign and others will only join once a majority of people in their environment has joined. Some will always join, others will never do. Of course in reality this threshold should not be regarded just quantitative. Whether someone gets infected depends not only on how many others in his environment join the campaign but also who does. Some people have greater influence than others and of course influence on each other is asymmetric. However, within our simulation model we have to simplify and therefore view every single agent as equal regarding his influence on others. “Threshold”³ is defined as the required number of infected individuals in a person’s environment to switch this person’s state to “infected”. Expressed in a formal way, this threshold can be viewed as a function of the person herself, her environment as well as certain general conditions and circumstances:

$$T_p = f(\text{Person} \times \text{Environment} \times \text{Circumstances})$$

For illustration purposes consider the following hypothetical example: A viral marketing campaign solicits fully organic but slightly more expensive baby food.

3 Of course a general threshold for a person does not exist. People are differently susceptible to different kinds of messages.

A mothers' threshold towards purchasing this kind of food and talking about it to other mothers or gossiping about it depends on three parameters⁴:

- *Person, e.g.:* What are the mothers' attitudes towards organic food? How large is her income? Does her baby suffer from any diseases etc.?
- *Environment, e.g.:* What are the attitudes of people in her environment towards organic food in general? How many other young mothers with which attitudes and with witch preferences are in her environment?
- *General Circumstances, e.g.:* Has a recent food scandal occurred or is there a hype under way, which promotes organic food and demonises non-organic food?

While changes in the first two parameters only affect the thresholds of one individual or a few people, changes in general circumstances affect the thresholds of many. As a result viral marketing campaigns need adequate circumstances and appropriate general conditions to succeed. For example, a viral marketing campaign promoting gun sales would have little chance to succeed in most countries of the European Union at the moment. However if sudden political change causes riots or a civil war, success prospects could rise immediately, because many people's thresholds towards buying a gun would alter in response to the new political and social setting.

4.2 Modelling the aggregation

Our simulation model allows for randomness, a factor which is often neglected by models in economics and psychology. To visibly model the interaction of the individual agents, we placed them randomly on a cell in a simulation field. Figure 1 shows a small example field.

4 Note that there may be an existence of mutual interdependencies between these parameters. This aspect is not discussed here.

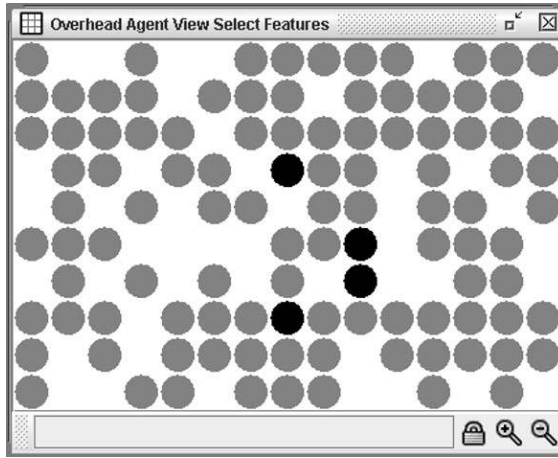


Figure 1: Simulation field example

In our research we carried out our simulations⁵ on much larger fields sized 100 x 100 cells occupied by up to 8.000 agents. The grey circles represent uninfected, susceptible agents, while the black ones represent infected agents⁶. Every agent has his own personal environment, a so called communication neighbourhood, which is for our purposes composed by all agents who are not further away than three cells in each direction. Agents communicate only with agents within their communication neighbourhood. The thresholds of the overall population of agents are described by the Gaussian normal distribution⁷. As a result of the random placement of agents and the fact that not every single field on the simulation field is occupied, neighbourhoods have different sizes, with a maximum of 48 neighbours. We also tested larger and smaller neighbourhoods but this did not bring forth significant differences in the simulation results.

Simulations are carried out stepwise. They start with the placement of agents on the field and the placement of a so-called initial seed of initially infected agents. The state of a single agent depends on the states of his neighbours: If the ratio of infected neighbours exceeds his threshold in one step, he becomes infected in the next step, too. Remember that the agent has no overview over the

5 We used an Open Source Software tool named Ascape (see <http://ascape.sourceforge.net>) for our simulations.

6 Latent agents are not colored separately in this figure, they are grey, too.

7 Ceteris paribus, using other distributions with the same average threshold did not show significant changes in the results.

whole system. He has only local information since he just “sees into” how many others in his communication neighbourhood are infected.

5 Simulation results

To acquire valuable data we carried out simulations a 100 times with each parameterization and discovered some surprising results.

5.1 *Critical mass – insufficient as explanation model*

Many existing explanation models reduce the question, whether mass propagation of a psychological virus is achieved or not, basically to one single factor, namely the factor of critical mass. They postulate some kind of self-sustaining activity, which cannot be stopped from the outside as soon as a certain level of propagation has been reached. Our simulations however show a completely different picture. When observing the variables visible on the macro level, such as degree of propagation or recent growth rate, we cannot predict the further development of these variables, even in our relatively simply arranged simulations. If one does not have accurate knowledge of all parameters in the simulation model, both on the micro- and macro-level, it is impossible to determine this critical mass, which must be achieved at least in order to guarantee mass propagation.

Experience shows that social scientists cannot determine critical mass either for concrete phenomena or for viral marketing campaigns. The variety of variables and influences makes it incalculable and unpredictable. Therefore there is no clear and at the same time correct mathematical definition for critical mass in the social sciences. Critical mass is a vague concept, which can neither be supported by empiricism nor by simulation.

5.2 *Interplay of several factors*

Not one single factor but the interplay of several factors makes the difference between mass propagation and a flop. These factors are: (1) the number and the influence of initial agents - those agents who are infected with the psychological virus in the earliest stage and/or deliberately bring it to the outside world. (2) The density and closeness of these initiators and (3) the density of the total population. (4) The average individual thresholds in the overall population as well as (5) randomness. The relations between these factors and the probability for a

widespread propagation of a psychological virus in a given population are as follows.

5.3 *Small cause, large effects*

It is not surprising that mass propagation gets more likely the lower the individual thresholds are on average. However it is astonishing that even a small decrease of the average threshold may have strong effects. Minimum shifts in the average thresholds sometimes determine whether mass propagation is possible or not; small changes on micro level may have dramatic effects on the macro level. In our simulations a reduction of the mean value of the threshold distribution from 70 to 60 – in terms of percentage of infected people in an agent’s environment – did not bring about significant changes in the propagation rate. A reduction of the mean from 43 to 41 percent however led to a massive increase in the propagation rate. As shown in figure 2, the correlation between average thresholds and expected propagation rate is described by an S-curve, with the average propagation rate jumping from low to high within a very small corridor. Surely, one cannot transfer these absolute numbers found in our simple simulation model to reality. Nonetheless this result provides an important implication for word-of-mouth campaigns as well as for mass movements: Sometimes a slight shift in the average susceptibility of a population towards a certain message or a “psychological virus” will determine whether a viral marketing campaign succeeds or fails or whether a mass movement emerges and spreads widely or perishes in an early stage.

Simulations brought along an additional result: If the thresholds in the population are low, a small number of initial agents are sufficient to make mass propagation likely. Higher thresholds require a larger group of initial agents and/or initiators with stronger influence. This relationship is non-linear: If thresholds are too high, even a large number of initial agents will not suffice to guarantee mass propagation.

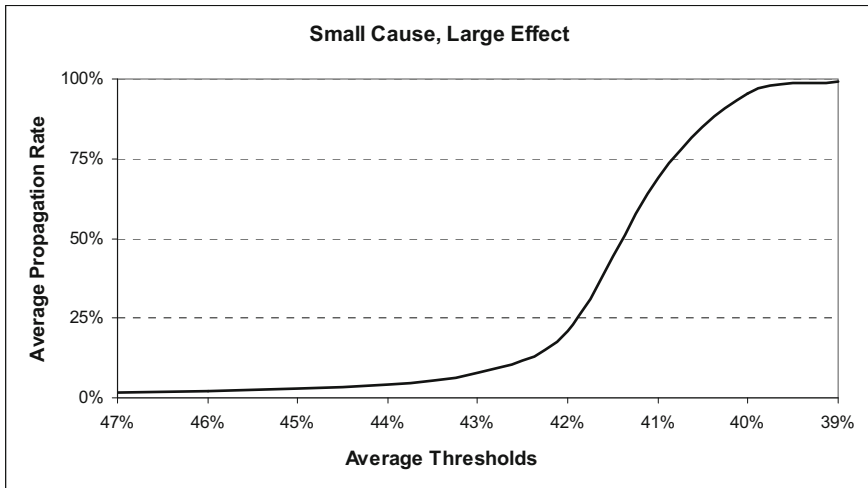


Figure 2: Correlation between average thresholds in the population and expected propagation rate

5.4 Density and closeness

Density and closeness of initial agents play a crucial role: If the initial agents are scattered among the total population, they can only attract others with low thresholds. Indeed propagation may remain locally limited because agents with higher thresholds will not be attracted by scattered agents. If the initial agents are however pooled and close together, they will reach more agents in their environment than only a few individuals or any single individual agent could do. This however involves the risk that the initial agents might remain a closed group of outsiders. It therefore depends on the average thresholds of actors, whether concentrated or scattered agents are more successful. If average thresholds are low, scattered agents will have more success: Propagation takes place faster and reaches a higher degree. If individual thresholds are high, prospects of success are generally lower and even will approach zero, if initial agents are scattered. In this case mass propagation is hardly possible. However a more concentrated appearance of initial agents will increase the probability that at least some parts of the population will become infected.

Figure 3 outlines the correlation between the density of initial agents and the average propagation rate. Curve A represents a setting, where the population

is very susceptible to a certain psychological virus, meaning the average thresholds are low. In this case one generally can expect a very high propagation rate. However the propagation rate will decrease, if the initial agents act entirely scattered or too close. A very high propagation rate is most likely, if the initial agents act fairly, but not entirely scattered. Curve B represents a setting with medium average thresholds. Success prospects are considerably lower in this case; a high propagation rate will neither be reached by scattered, nor by closed initial agents. The happy medium brings along the best results. Finally, curve C represents a setting, where the population is scarcely susceptible to the psychological virus, respectively the thresholds are high. The expected propagation rate is very low in this case but still will be somewhat higher, if the initial agents act concentrated and close together.

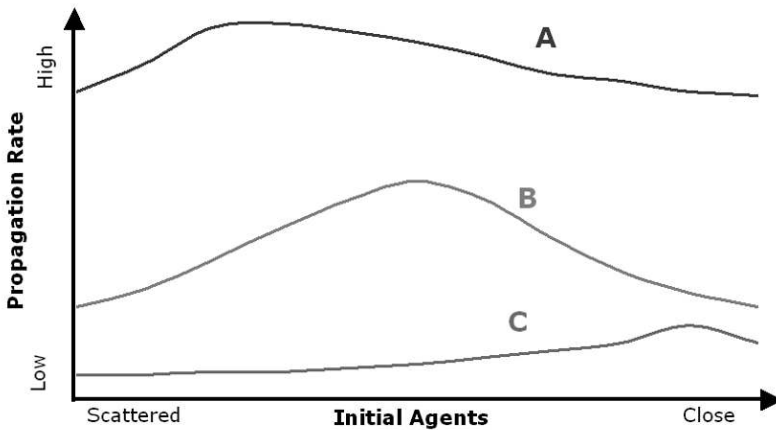


Figure 3: Correlation between the density of initial agents and expected propagation rate

5.5 Randomness

Randomness has so far mostly been neglected in economic and psychological models. Generally, its importance is underestimated in most sciences as well as in every day life (Taleb 2007). Randomness has been integrated into the simulation models on the micro level, as individual participants took coincidental plac-

es on the simulation fields and got their thresholds assigned by a probability distribution function. For the macro level this implies that a higher number of initial agents on the one side or lower thresholds on the other side do not automatically lead to stronger propagation, although its probability is increased.

6 Implications for viral marketing campaigns

6.1 Focus or scatter?

As our simulation results show, scattered “viral agents” will only attract many others, if the susceptibility to the virus is high and the thresholds in the population are low. If the susceptibility on the contrary is low, initial agents have to appear pooled and close together. By this means they will reach more agents in their environment than scattered agents would do. Since the individual only has local information, an infected mass that occurs pooled seems much larger to him than it actually is. Figure 4 shows an example. The light grey marked agents are confronted with a majority of infected agents in their close neighbourhood and therefore will also become infected, although the ratio of infected agents in the overall population is very small. The density of infected agents in one area increases the probability for new infections in this area, but may lead to a closed group of infected ‘outsiders’, whereas agents outside this cluster remain uninfected.

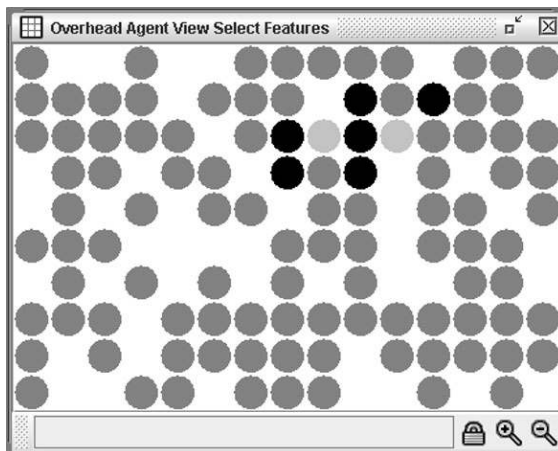


Figure 4: Global minority, local majority

By appearing to be large a concentrated crowd will even attract individuals with higher thresholds in its environment. Given low susceptibility and high thresholds this is the only strategy that may succeed. If the campaign target is a fringe group, focussed viral agents are promising as well. But given medium or high susceptibility, this strategy could turn out to be a boomerang, since a concentrated group of initial agents might also be perceived as a closed group of outsiders and therefore would remain small. Hence one should consider dispersing initial agents to a certain degree whenever thresholds are lower and susceptibility is higher.

6.2 Adapt to general conditions and circumstances

For viral marketing one needs nutrient media: Appropriate general conditions and circumstances that allow the message to spread widely. Given too high thresholds, a viral marketing campaign has almost no chance to succeed.

6.3 Consider randomness

One has to take into account that even the best planned campaign, which implements these principles, may not lead to satisfying results. Since general conditions and social mood are usually hard to assess, a marketing campaign will also need luck. When individual decisions are subject to social influence, collective behaviour does not simply sum up pre-existing individual preferences. Hence there are inherent limits on the predictability of aggregate outcomes, irrespective of how much skill or information on individual preferences one has.

7 Discussion and open questions

Some questions related to word-of-mouth still have to be clarified. For example it is a highly relevant but still open question, how to exactly initiate, plan and foster positive word-of-mouth, be it directly or indirectly. Actually, WoM campaigns are rarely a “stand-alone” solution. When planning a marketing campaign, one cannot isolate WoM from other communication channels. The question however is which channels to use and how to combine them to generate WoM effectively. Furthermore it would be vital to know for both, advertisers and researchers, under which circumstances WoM campaigns can succeed or cannot succeed. Since WoM typically cannot be planned or purchased in a strict sense, it

is often left out from media analyses and explanation models, despite the fact that it is the most important factor in buying decisions across different branches (Schultz 2009). But if the strongest and most important factor simply is excluded from explanation models and media analysis, there clearly is a problem with their accuracy and validity.

The work presented in this chapter is a first attempt to introduce agent-based simulation models into marketing and advertising research to resolve these shortcomings. Given the fact that even relatively simple simulations provide us with unexpected and remarkable results, Agent-based models can be seen as a promising technique for future research. As a matter of fact most research questions cannot be answered by the sole use of Agent-based models. Nevertheless ABM has to be considered as an additional and valuable tool that can be applied wherever and whenever other research methods fail or reach their limits – as they do for example when it comes to the investigation of collective behaviour in general and word-of-mouth in particular.

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