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Application of Stereotypes in Marketing:
Gender Cues and Brand Perception

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Abstract

Stereotypes and their applications and implications have emerged as an important area of investigation in the field of marketing. Yet, despite the growing interest and relevance of stereotypes among marketing scholars, the marketing literature lacks a cohesive understanding of their concept and application. In particular, little research in the field of consumer behavior has examined the effects of stereotypes on brand perception and the subsequent influence on consumer purchase intention.

The goal of this dissertation is to create a deeper and more cohesive understanding of stereotypes and their implications for marketing practitioners, with a particular focus on gender stereotypes and brand perception. This dissertation consists of three projects.

The first project outlines a conceptual framework of stereotypes and their application in the field of marketing by integrating knowledge from social psychology literature with knowledge from consumer behavior and marketing. Based on this framework, gaps in the marketing literature are identified and suggestions for future research are provided.

Building upon project one, project two seeks to identify applications of stereotypes in the field of marketing. In particular, project two explores whether the use of gender stereotypes via gender cues (e.g., colors such as blue or pink) in a product description can influence brand perception along the warmth and competence dimensions and, consequently, impact upon consumer purchase intention. Further, the effect of gender cues is tested dependent upon the gender type of the product. The results indicate that feminine cues enhance perceived

warmth which, in turn, increases purchase likelihood for masculine products.

Perceived warmth serves as a mediator between the gender cue and purchasing likelihood, yet competence does not.

Project three builds upon and integrates the findings from project two by investigating the effect of gender cues in the presence of warmth and competence cues. Thereby, a theoretical framework is proposed which takes multiple warmth and competence cues into account. Subsequently, this theoretical framework is used to assess the effects of gender cues, as well as warmth and competence cues, on consumer perception of brands and their purchase intention. Consistent with the theoretical framework, this project explores that feminine cues enhance perceived brand warmth and purchase intention when paired with a high competence cue, yet backfires when paired with a low competence cue. In contrast, implicit masculine gender cues enhance perceived brand competence and purchase intention when paired with low competence cues yet backfire when combined with high competence cues.

Overall, this dissertation proposes recommendations on how practitioners are able to effectively use gender cues (i.e., butterflies, bears, circles, squares, colors such as pink and blue) as part of gender stereotypes within a firm's marketing efforts (i.e., background of print ads or on the product packaging) to achieve desired consumer brand perception and improve purchase likelihood.

This thesis is dedicated to you Mum.

Kaempfen, Kaempfen, Kaempfen!

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Auch eine Schnecke kommt ans Ziel....

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Chapter 1: Introduction

Building brand equity has become one of the most engaging fields of marketing in recent years. Companies invest a lot of time and money in building positive brand equity (e.g., Smith, Gradojevic, & Irwin, 2007). For example, the top 200 brands in the world have a combined annual spend of over 7 US billion in advertising dollars to promote their brands to various customer segments (Bristow, Schneider, & Schuler, 2002). However, return on these investments has decreased over the years largely due to consumers often having very low attention spans when exposed to companies' communications and advertising efforts (Greenwald & Leavitt, 1984; Heath & Nairn, 2005; Krugman, 1971). Hence, the challenge for marketers today is to enhance brand perception within a very restricted time frame as well as take into consideration the fleeting attention span of consumers.

Utilization of stereotypes can play a key role in accomplishing this task because stereotypes are activated almost automatically, in less than milliseconds (Bargh, 1997), and are proven to affect human perception (Fiske, Cuddy, Glick, & Xu, 2002). The goal of this dissertation is to investigate when, which and whether or not stereotypes can be utilized by marketers to assist in building a desired brand perception. In particular, we investigate how one can effectively employ *gender stereotypes* to enhance perception of a brands warmth and competence. Further, we examine conditions where gender stereotypes are most effective in building positive brand perception. This chapter introduces the definition of the main constructs and the outline of the dissertation.

1.1 Definitions of Key Constructs in this Dissertation

Brand Perception of Warmth and Competence

People evaluate others, interpret behavior and form impressions in a ‘split-second’ on the basis of their apparent warmth and competence (Ybarra, Chan, & Park, 2001). These dimensions account for 82% of the variance in people’s perceptions of everyday social behavior of others (Wojciszke, Bazinska, & Jaworski, 1998). Although scholars continue to debate definitions and the exact content of these concepts (Aaker, 1997; Grandey, Fisk, Mattila, Jansen, & Sideman, 2005; Judd, James-Hawkins, Yzerbyt, & Kashima, 2005), they do consent that the concept of warmth reflects traits related to perceived intent; including sincerity, helpfulness, friendliness, morality and trustworthiness. Moreover they agree that the concept of competence includes traits related to ability, including skills, intelligence, efficacy and creativity (for a review, see Fiske, Cuddy, & Glick, 2007).

Recent research also identifies warmth and competence as the two fundamental dimensions of social perception applicable to firms and brands (Aaker, Garbinsky, & Vohs, 2012; Aaker, Vohs, & Mogilner, 2010; Fournier & Alvarez, 2012; Keller, 2012; Kervyn, Fiske, & Malone, 2012). Aaker et al. (2010) found that consumers perceive for-profit organizations as more competent than non-profit organizations and non-profits as warmer than for-profits. Likewise, Kervyn et al. (2012) demonstrated that consumers categorize brands based on perceived ability (which represents competence) and intentions (which represent warmth). They found that both dimensions independently increase purchase intention and loyalty. In order to enhance purchasing behavior, marketers should seek to increase consumer

perception of the brand's competence and/or warmth. Accordingly, in this dissertation we explore how perceptions of warmth and competence can be enhanced to improve marketing efforts. In doing so we demonstrate that *stereotypes* are a powerful tool for marketers, and can be utilized to enhance warmth and competence of a brand.

Utilizing Stereotypes in Marketing

Numerous studies in the field of social psychology confirm that stereotypes impact human perception and behavior (e.g., Bargh, Chen, & Burrows, 1996; Cuddy, Fiske, & Glick, 2007; Devine, 1989). Furthermore, stereotypes and their applications have emerged as an important area of investigation in marketing (e.g., Aaker et al., 2010; Campbell & Mohr, 2011; Homburg, Wieseke, Lukas, & Mikolon, 2011; Lee, Kim, & Vohs, 2011). Homburg et al. (2011) state that “the concept of stereotypes, typically grounded in personality, social, and cognitive psychology, is highly relevant for the field of marketing” (p. 677). Moreover, stereotypes in marketing have been shown to influence consumer perception, emotions, memory and behavior (e.g., Babin, Boles, & Darden, 1995). Yet, despite the growing interest and relevance of stereotypes among marketing scholars, the literature still lacks a cohesive understanding of the concept and applications of stereotypes in a consumer setting. In particular, little research into consumer behavior has examined the effects of stereotypes on brand perception. As a result, to understand how stereotypes can be employed to enhance brand perception, it is crucial to understand their characteristics.

Stereotypes can be defined as beliefs about characteristics – including traits, attitudes, behavioral tendencies, goals and goal commitment – of members of

certain groups (Aarts et al., 2005; Ashmore & Del Boca, 1981; Fiske, 1998; Hilton & von Hippel, 1996; Stangor & Lange, 1994; Van Boven, Kane, McGraw, & Dale, 2010). The content/traits of stereotypes differs across categories (e.g., old people are wise, women are warm, salesperson is pushy); however, Fiske et al. (2002) have proposed the stereotype content model (SCM) which suggests that almost all stereotypes are perceived on the same two fundamental dimensions of warmth and competence. For example, the stereotypical woman is viewed as warm while the stereotypical man is viewed as competent (Asbrock, 2010; Eagly & Mladinic, 1994; Eagly, Mladinic, & Otto, 1994).

Stereotype *activation* is “the increased accessibility of the constellation of attributes that are believed to characterize members of a given social category” (Wheeler & Petty, 2001; p. 797). Stereotype activation can occur relatively quickly and almost automatically (e.g., Dovidio, Evans, & Tyler, 1986). In fact, stereotypical characteristics are activated when a human is either consciously or unconsciously exposed to a stimulus related to a stereotyped group (Bargh, 1994; Blair & Banaji, 1996; Devine, 1989; Kawakami, Dion, & Dovidio, 1998). Further, academic literature has established that a cue which is related to the stereotyped group can be sufficient to activate stereotypical content (e.g., Banaji & Hardin, 1996; Deaux & Lewis, 1984). For example, a cue which is related to the typical female (e.g., long hair or feminine perfume) activates the stereotypical feminine content of warmth; on the other hand, a cue which is related to the typical male (e.g., short hair or masculine perfume) can trigger the stereotypical masculine content of competence (Eagly & Mladinic, 1994; Eagly et al., 1994).

Although social psychology studies have shown that gender cues can activate the content of gender stereotypes, to the best of our knowledge there are no

empirical studies that have investigated the effects of gender cues incorporated into advertising or product packaging (e.g., butterfly or the color pink for feminine cues) on consumer brand perception along the warmth and competence dimensions. Hence, in this dissertation we focus on investigating how gender cues enhance consumers' brand perception and subsequent purchase intention.

Furthermore, recent academic literature has stressed the importance of simultaneously accounting for multiple warmth and competence cues (Aaker et al., 2010). Yet, to the best of our knowledge, to date no research has undertaken a systematic attempt to develop a theoretical model to account for the effects of multiple warmth and competence cues on brand perceptions and purchase intentions. In this dissertation we develop and empirically test a theoretical framework for cue interactions and test it empirically (across 3 experiments). We thereby examine how consumers react to gender cues when exposed to additional warmth/competence cues.

1.2 Problem Statement and Outline of this Dissertation

Problem Statement

The primary goal of this dissertation is to investigate how one can utilize stereotypes effectively in marketing. Social psychology research confirms that stereotypes can have a remarkable impact on human thought and behavior (e.g., Bargh et al., 1996; Devine, 1989). In addition, recent findings in the marketing literature provide further evidence that the concept of stereotypes and their application is also extremely relevant for the field of marketing (Homburg et al., 2011). Folkes and Matta (2013) emphasize gender stereotypes as particularly powerful when compared with other social categories. For that reason, in this

dissertation we focus on the applications of stereotypes in marketing with a particular focus on gender stereotypes and their impact on brand perception and consumer behavior.

The central problem statement of this dissertation is to investigate:

How and under what conditions can gender stereotypes be effectively utilized in order to enhance brand perception and purchase likelihood?

Contributions

In the first part of this dissertation we develop a marketing stereotype framework which integrates knowledge from the social psychology research into consumer behavior/marketing research. Based on this framework we identify gaps in the literature for a cohesive understanding of the complexities of stereotypes and their influence in the field of consumer behavior and marketing. This framework, alongside suggestions for future research, is aimed to stimulate progress in this area of research.

In the second part of this dissertation, we identify future research opportunities, fill a number of gaps and thereby make several main contributions to extant literature. First, we contribute to the gender stereotype literature (Banaji & Hardin, 1996; Deaux & Lewis, 1984). Social psychology literature previously demonstrates that cues which are related to a gender can activate the content of gender stereotypes (warmth and competence). With this research we extend this social psychology phenomena from an interpersonal social setting to a consumer setting, namely to brand perception. Our research provides consistent and robust evidence that implicit gender cues (symbols and colors) increase dimensions of

warmth and/or competence (asymmetrically dependent on the presence of competence cues).

Second, we contribute to research on perception of warmth/competence in a consumer setting (Aaker et al., 2010, 2012; Fournier & Alvarez, 2012; Keller, 2012; Kervyn et al., 2012). We explore conditions in which implicit warmth and competence cues (gender cues) affect brand perception and subsequent consumer purchase intentions. We investigate how consumers react to the interaction between multiple warmth and competence cues.

In addition, our research provides important managerial insights. We reveal that feminine cues such as butterflies, circles and colors (e.g., pink) or masculine cues such as bears, squares and colors (e.g., blue) incorporated into product packaging or in the background of a print advertisement can have both beneficial and/or harmful brand consequences. In our research we demonstrate which of those gender related design elements incorporated into marketing efforts are the most effective in enhancing brand equity and under which circumstances.

Outline of this Dissertation

This dissertation comprises three papers, presented respectively in chapters 2, 3 and 4. In the first paper (Chapter 2) entitled “Application of Stereotypes in Marketing: Research Findings and Direction for Future Work”, we develop a conceptual framework of stereotype application to marketing. In this chapter we distinguish between two types of stereotyping: self-stereotyping and other-stereotyping, and highlight relevant research that has been completed in both marketing and consumer behavior disciplines. Throughout the chapter, we identify gaps in the literature where more research is required and propose several

research questions. This paper is prepared for submission to a peer-reviewed journal (target outline *Journal of Consumer Psychology*). Chapter 3 is a peer reviewed paper accepted for publication in *Advances in Consumer Research*¹. Building upon paper 1, in paper 2 (Chapter 3) entitled “Brand Perception: Influence of Gender Cues on Dimension of Warmth and Competence”, we seek to identify applications of stereotypes in marketing. In particular, based on one experiment we test whether use of gender stereotypes in a product description can influence brand perception, along the dimensions of warmth and competence, and consumer behavior. Further, the effect of gender cues is tested dependent upon the gender type of the product. In paper 3 (Chapter 4) entitled “Warmth and Competence: How and When Implicit Gender Cues Enhance Brand Perception”, we build upon and integrate the findings of paper 2. Specifically, we investigate the effect and underlying mechanisms of gender cues in the presence of warmth and competence cues. We thereby develop and empirically test a theoretical framework for cue interaction (i.e., warmth and competence cues). The research methods we use to test our framework consist of three experimental studies. Paper 3 is prepared for submission to a peer-reviewed journal (target outline *Journal of Consumer Research*).²

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² For the sake of coherence, the entire dissertation is written in American English (as the papers are submitted or prepared for American Journals). Style of references, citations, tables and figures are in line with the guidelines (with some minor adjustment to fit this dissertations format) of the respective (target) journals.

References

- Aaker, J., Garbinsky, E. N., & Vohs, K. D. (2012). Cultivating admiration in brands: Warmth, competence, and landing in the “golden quadrant”. *Journal of Consumer Psychology, 22*(2), 191–194.
- Aaker, J. L. (1997). Dimensions of brand personality. *Journal of Marketing Research, 34*(3), 347.
- Aaker, J., Vohs, K. D., & Mogilner, C. (2010). Nonprofits are seen as warm and for-profits as competent: firm stereotypes matter. *Journal of Consumer Research, 37*(2), 224–237.
- Aarts, H., Chartrand, T., Custers, R., Danner, U., Dik, G., Jefferis, V., & Cheng, C. (2005). Social stereotypes and automatic goal pursuit. *Social Cognition, 23*(6), 465–490.
- Asbrock, F. (2010). Stereotypes of social groups in Germany in terms of warmth and competence. *Social Psychology, 41*(2), 76.
- Ashmore, R. D., & Del Boca, F. K. (1981). Conceptual approaches to stereotypes and stereotyping. In D. L. Hamilton (Ed.), *Cognitive Processes in Stereotyping and Intergroup Behavior* (Erlbaum., pp. 1–35). Hillsdale, NJ.
- Babin, B. J., Boles, J. S., & Darden, W. R. (1995). Salesperson stereotypes, consumer emotions, and their impact on information processing. *Journal of the Academy of Marketing Science, 23*(2), 94–105.
- Banaji, M. R., & Hardin, C. D. (1996). Automatic stereotyping. *Psychological Science, 7*(31), 136–141.

- Bargh, J. A. (1994). The four horsemen of automaticity: Awareness, intention, efficiency, and control in social cognition. In R. S. Wyer, & T. K. Srull (Eds.), *Handbook of social cognition*. Erlbaum.
- Bargh, J. A. (1997). The automaticity of everyday life. In R. S. J. Wyer (Ed.), *Advances in Social Cognition* (10th ed., pp. 1–61). Mahwah, NJ: Erlbaum.
- Bargh, J. A., Chen, M., & Burrows, L. (1996). Automaticity of social behavior: Direct effects of trait construct and stereotype-activation on action. *Journal of Personality and Social Psychology*, *71*(2), 230–244.
- Blair, I. V., & Banaji, M. R. (1996). Automatic and controlled processes in stereotype priming. *Journal of Personality and Social Psychology*, *70*(6), 1142–1163.
- Bristow, D. N., Schneider, K. C., & Schuler, D. K. (2002). The brand dependence scale: Measuring consumers; use of brand name to differentiate among product alternatives. *Journal of Product and Brand Management*, *11*(6), 343–356.
- Campbell, M. C., & Mohr, G. S. (2011). Seeing is eating: How and when activation of a negative stereotype increases stereotype-conducive behavior. *Journal of Consumer Research*, *38*(3), 431–444.
- Cuddy, A. J. C., Fiske, S. T., & Glick, P. (2007). The BIAS map: Behaviors from intergroup affect and stereotypes. *Journal of Personality and Social Psychology*, *92*(4), 631–648.

- Deaux, K., & Lewis, L. L. (1984). Structure of gender stereotypes: Interrelationships among components and gender label. *Journal of Personality and Social Psychology*, 46(5), 991–1004.
- Devine, P. G. (1989). Stereotypes and prejudice: Their automatic and controlled components. *Journal of Personality and Social Psychology*, 56(1), 5–18.
- Dovidio, J. F., Evans, N., & Tyler, R. B. (1986). Racial stereotypes: The contents of their cognitive representations. *Journal of Experimental Social Psychology*, 22(1), 22–37.
- Eagly, H., & Mladinic, A. (1994). Are people prejudiced against women? Some answers from research on attitudes, gender stereotypes, and judgments of competence. *European Review of Social Psychology*, 5(1), 1–35.
- Eagly, H., Mladinic, A., & Otto, S. (1994). Cognitive and affective bases of attitudes toward social groups and social policies. *Journal of Experimental Social Psychology*, 30(2), 113–117.
- Fiske, S. T. (1998). Stereotyping, prejudice, and discrimination. In D. T. Gilbert, S. T. Fiske, & G. Lindzey (Eds.), *Handbook of Social Psychology* (4th ed., pp. 357–411). New York: New York.
- Fiske, S. T., Cuddy, A. J. C., Glick, P., & Xu, J. (2002). A model of (often mixed) stereotype content: Competence and warmth respectively follow from perceived status and competition. *Journal of Personality and Social Psychology*, 82(6), 878–902.

- Fiske, S. T., Cuddy, A. J. C., & Glick, P. (2007). Universal dimensions of social cognition: Warmth and competence. *Trends in Cognitive Sciences, 11*(2), 77–83.
- Folkes, V. S., & Matta, S. (2013). When a product takes on characteristics of the person who created it: Sometimes it sounds sweeter. *Journal of Consumer Psychology, 23*(1), 19–35.
- Fournier, S., & Alvarez, C. (2012). Brands as relationship partner: Warmth competence, and in-between. *Journal of Consumer Psychology, 22*(2), 177–185.
- Grandey, A. a., Fisk, G. M., Mattila, A. S., Jansen, K. J., & Sideman, L. A. (2005). Is “service with a smile” enough? Authenticity of positive displays during service encounters. *Organizational Behavior and Human Decision Processes, 96*(1), 38–55.
- Greenwald, A. G., & Leavitt, C. (1984). Audience involvement in advertising: Four levels. *Journal of Consumer Research, 11*(1), 581–592.
- Heath, R., & Nairn, A. (2005). Measuring affective advertising: Implications of low attention processing on recall. *Journal of Advertising Research, 45*(2), 269-281.
- Hilton, J. L., & von Hippel, W. (1996). Stereotypes. *Annual Review of Psychology, 47*, 237–272.
- Homburg, C., Wieseke, J., Lukas, B. A., & Mikolon, S. (2011). When salespeople develop negative headquarters stereotypes: Performance effects and

managerial remedies. *Journal of the Academy of Marketing Science*, 39(5), 664–682.

Judd, C. M., James-Hawkins, L., Yzerbyt, V., & Kashima, Y. (2005).

Fundamental dimensions of social judgment: Understanding the relations between judgments of competence and warmth. *Journal of Personality and Social Psychology*, 89(6), 899–913.

Kawakami, K., Dion, K. L., & Dovidio, J. F. (1998). Racial prejudice and

stereotype activation. *Personality and Social Psychology Bulletin*, 24(4), 407–416.

Keller, K. L. (2012). Understanding the richness of brands relationship: Research

dialogue on brands as intentional agents. *Journal of Consumer Psychology*, 22(2), 186–190.

Kervyn, N., Fiske, S. T., & Malone, C. (2012). Brands as intentional agents

framework: How perceived intentions and ability can map brand perception. *Journal of Consumer Psychology*, 22(2), 166–176.

Krugman, H. E. (1971). Brain wave measurement of media involvement. *Journal*

of Advertising Research, 11(1), 3–9.

Lee, K., Kim, H., & Vohs, K. D. (2011). Stereotype threat in the marketplace:

Consumer anxiety and purchase intentions. *Journal of Consumer Research*, 38(2), 343–357.

Smith, D. J., Gradojevic, N., & Irwin, W. S. (2007). An analysis of brand equity

determinants: Gross profit, advertising, research, and development. *Journal of Business and Economics Research*, 5(11), 103–116.

- Stangor, C., & Lange, J. E. (1994). Mental representations of social groups: Advances in understanding stereotypes and stereotyping. *Advances in Experimental Social Psychology* (Vol. 26, pp. 357–416). Academic Press.
- Van Boven, L., Kane, J., McGraw, A. P., & Dale, J. (2010). Feeling close: Emotional intensity reduces perceived psychological distance. *Journal of Personality and Social Psychology*, 98(6), 872–885.
- Wheeler, S. C., & Petty, R. E. (2001). The effects of stereotype activation on behavior: A review of possible mechanisms. *Psychological Bulletin*, 127(6), 797–826.
- Wojciszke, B., Bazinska, R., & Jaworski, M. (1998). On the dominance of moral categories in impression formation. *Personality Social Psychology Bulletin*, 24(12), 1251–1263.
- Ybarra, O., Chan, E., & Park, D. (2001). Young and old adults' concerns about morality and competence. *Motivation and Emotion*, 25(2), 85–100.

Chapter 2: Application of Stereotypes in Marketing: Research Findings and Direction for Future Work

Role and Contribution of Co-Authors

Alexandra Hess, Valentyna Melnyk and Carolyn Costley

I, Alexandra Hess, am chiefly responsible for the conception, review of literature, as well as the writing of this manuscript. Valentyna Melnyk supervised each step of this process. In particular, Valentyna Melnyk gave conception advice on this work and commented on all versions of the manuscript. Carolyn Costley gave conception advice and edited the final paper.

Abstract

Stereotypes and their applications and implications have emerged as an important area of investigation in marketing. Yet, despite the growing interest and relevance of stereotypes among marketing scholars, the marketing literature lacks a cohesive understanding of their concept and application. In this review we develop a marketing stereotype framework for stereotype activation and consequences by integrating knowledge from the social psychology research into consumer behavior/marketing research. Further, within this framework we distinguish between two types of stereotyping: self-stereotyping and other-stereotyping. In this paper we also identify gaps in the literature where further research is required and formulate a series of related research questions.

2.1 Introduction

Every year companies spend many millions of dollars investing in building and maintaining their brand equity (Bristow, Schneider, & Schuler, 2002). Yet, return on these investments has decreased over the years largely due to consumers having very low levels of involvement with a firm's communications and advertising (e.g., Bauer & Greyser, 1968; Greenwald & Leavitt, 1984; Heath & Nairn, 2005; Krugman, 1965). On air time for advertising is limited, with 39% of TV advertising as short as 15 seconds long ("Media trends track: Network TV activity by length of commercial," 2010). Print advertising faces a similar problem with advertising frequency in magazines exceptionally high (Pieters, Warlop, & Wedel, 2002). Adding to the competition for consumer attention, evidence suggests that consumers restrict their attention of a single print advertisement to as little as 1.73 seconds on average (Pieters & Wedel, 2004). Hence, the challenge for marketers today is to enhance brand perception within very restricted time frames, and taking into consideration the consumers' fleeting attention span. We suggest that using *stereotypes* can help accomplish this task, primarily because they have a major influence on consumer brand perceptions. In fact, consumers activate stereotypes in less than milliseconds; almost automatically (Bargh, 1997).

Stereotypes and their application have recently experienced a growth in interest amongst marketing scholars (e.g., Aaker, Vohs, & Mogilner, 2010; Campbell & Mohr, 2011; Homburg, Wieseke, Lukas, & Mikolon, 2011; Lee, Kim, & Vohs, 2011). While social psychologists have learned much about the formation, maintenance and activation of stereotypes, consumer behavior and marketing scholars know less about the application and consequence of stereotypes.

Homburg et al. (2011) emphasized the relevance of stereotypes in a marketing context and called for more research in finding possible applications of stereotypes in the field of marketing.

To effectively use stereotypes, it is crucial for the disciplines of consumer behavior and marketing to understand the concept of stereotypes. Hence, in this review we develop a marketing stereotype framework that integrates knowledge from the social psychology research into consumer behavior/marketing research. Within the framework we distinguish between stereotypes that relate to someone's own group membership (self-stereotype) and stereotypes that relate to groups (or objects) of which a person is not a member of (other-stereotypes). For each of these forms of stereotyping we describe the activation process, moderating variables and consequences. In doing so we highlight relevant research, across self- and other-stereotypes, that has been completed in both marketing and consumer behavior disciplines. We focus on the influences of different stereotypes on indirect behavior, memory and automatic behavior. We also identify gaps in the literature for a cohesive understanding of the complexities of stereotypes, their influences on consumers, and their implication for practitioners.

Within this review, we first introduce the concept of stereotypes and give a brief description of their theoretical foundations. We then describe how and when people activate other- and self-stereotypes and describe the consequences. Moreover, we explain several key stereotypes and their relevance to the fields of marketing and consumer behavior. Each section is followed by possible research questions that could guide future research.

2.2 Stereotypes: Theories and Domains

Lippmann (1922) first introduced the term “stereotype” with the words: “Pictures in our head. Maps for dealing with the world” (p. 69). In this review we adopt the viewpoint that stereotypes are beliefs about characteristics -- including traits, attitudes, behavioral tendencies, goals and goal commitment -- of groups of individuals (Aarts et al., 2005; Ashmore & Del Boca, 1981; Fiske, 1998; for a review see Hilton & von Hippel, 1996; Stangor & Lange, 1994).

The main process behind the formation of stereotypes is categorization. Social categorization is the classification of people into groups on the basis of common characteristics, whereby people differ between in-groups (own group) and out-groups (other group) (Fiske, 2000; Tajfel, 1981). Categorization occurs easily and frequently; human beings are unaware they are doing it (Taylor, Fiske, Etcoff, & Ruderman, 1978). In fact, cognitive psychologists have discovered that the human brain seems to almost automatically classify or categorize similar objects in the environment (Gardner, 1985). There is further evidence that this tendency is pervasive and has been shown in children from the age of six months (Ramsey, Langlois, Hoss, Rubenstein, & Griffin, 2004). Most importantly, the act of categorization serves a vital function because humans possess a limited capacity cognitive system. This means we are incapable of simultaneously processing all the available information in a given social environment. The use of stereotypes is a naturally occurring psychological phenomenon that allows humans to save and arrange precious cognitive capacity (Macrae, Milne, & Bodenhausen, 1994). In sum, people categorize and stereotype to simplify the social environment and conserve available cognitive capacities.

Because humans are members of diverse social, physical and behavioral categories (e.g., race, gender, occupation, attractiveness, size), there are many stereotype categories. The principal categories humans draw on are gender, race, and age (Brewer, 1988; Fiske & Neuberg, 1990). Furthermore, it is not only people who belong to categories. The human brain categorizes objects and firms in much the same way (e.g., for-profit versus non-profit organizations; Aaker et al., 2010; Uekermann, Herrmann, Wentzel, & Landwehr, 2010).

Whether stereotypes are applied to a person, object or firm, placing an individual or object into a category creates meaning by triggering associated beliefs linked to this category. This is called an inference – a process of activating knowledge stored in memory that is associated with the category in question. When the knowledge includes a well-organized set of beliefs and expected behavior that culture has taught us over time, then the categorization process can lead to activation of a stereotype. Wheeler and Petty (2001) define stereotype activation as “the increased accessibility of the constellation of attributes that are believed to characterize members of a given social category” (p. 797). For example, cars which are made in Germany are believed to be expensive and attractive (Han & Qualls, 1985). Moreover, stereotype activation can occur relatively quickly and almost automatically (e.g., Dovidio, Evans, & Tyler, 1986). In fact, stereotypical characteristics are activated when a human is either consciously or unconsciously exposed to a stimuli related to a stereotyped group (Bargh, 1994; Blair & Banaji, 1996; Devine, 1989; Diksterhuis & van Knippenberg, 1996; Kawakami, Dion, & Dovidio, 1998). For example, being exposed for as little as 2,500 milliseconds (subliminally) to the Apple brand (in comparison to IBM) has been proven to activate the stereotype content of

creativity which subsequently made consumers behave more creatively (Fitzsimons, Chartrand, & Fitzsimons, 2008).

Beliefs associated with a category -- i.e., the *content* of stereotypes -- can be both positive (e.g., old people are wise) and negative (old people are senile; Levy, 1996). Stereotype content can also contain emotions associated with some groups. For example, pride and anger are emotions related to men; whereas sadness and happiness are stereotypically linked to women (see Kelly & Hutson-Comeaux, 1999). What is more, stereotype content differs across the multitude of different stereotypes. However, Fiske, Cuddy, Glick and Xu (2002) have proposed and tested the Stereotype Content Model (SCM) which states that almost all stereotypes are perceived on the same two fundamental dimensions of warmth and competence. For example, the stereotype for an old person is that s/he is warm yet incompetent; while the content of a stereotypical homeless person is that s/he is cold and incompetent. Interestingly the content of warmth and competence is not only limited to perception of humans, instead consumer's stereotype firms on the same dimensions of warmth and competence (Aaker et al., 2010). Consumers perceive for-profit organizations, compared to non-profit organizations, as more competent and less warm, and vice versa. Further, Kervyn, Fiske, & Malone (2012) developed the Brand as Intentional Agent Framework (BIAF) which proposes that consumers categorize brands on an intention dimension (which represents warmth) and ability dimension (which represents competence).

Humans do not only categorize and stereotype others (other-stereotyping – other people/objects/firms), research has found that humans also stereotype themselves (self-stereotyping) under certain conditions. Self-stereotyping is the result of self-categorization and is derived from social identity theory (Quinn &

Rosenthal, 2012; Tajfel & Turner, 1986; Turner, Hogg, Oakes, Reicher, & Wetherell, 1987). It occurs when someone perceives themselves as having the traits that are believed to be stereotypical of their group (Brewer, 1991; Quinn & Rosenthal, 2012). Turner et al. (1987) stated that, “self-categorization leads to a stereotypical self-perception and depersonalization, as well as adherence to and expression of in-group normative behavior” (p. 102).

In the past, marketing scholars incorporated elements of self- and other-stereotyping in their research. Both the social psychology and consumer behavior literature indicates that the mechanism behind stereotype activation and its consequences are very different between self- and other- stereotyping. Within this review we examine multiple consequences that account for self- versus other-stereotyping in consumer behavior. In doing so, we distinguish between three outcomes; a consumer’s indirect behavior (e.g. perception attitude and emotional reaction after being exposed to a stereotype), memory (e.g. encoding of information or recall of information) and automatic behavior (e.g. automatic stereotype consistent behavior). Figure 1 provides a conceptual framework for self- versus other-stereotyping, its activation and consequences applied within a marketing context.

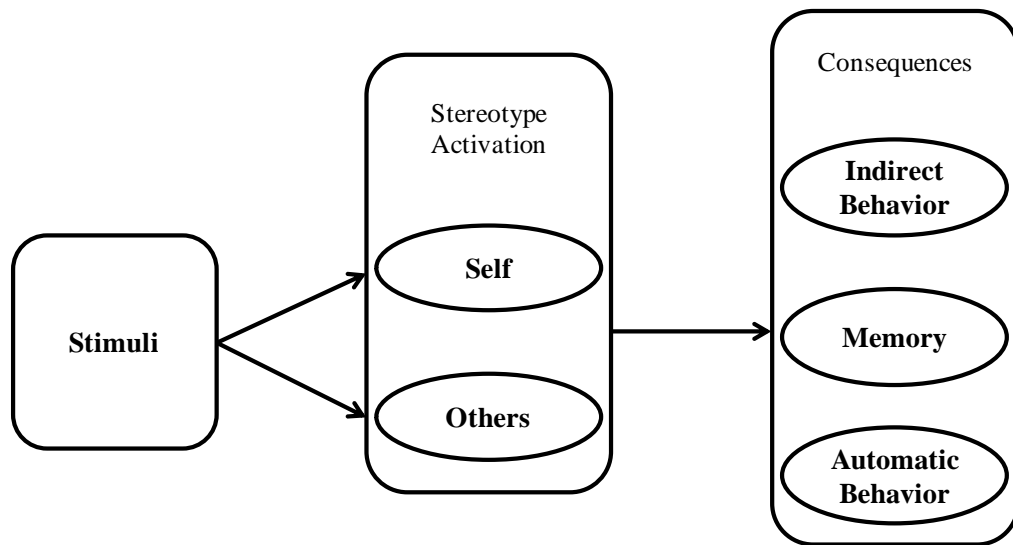


Figure 1. Conceptual Framework of Stereotypes in Marketing

2.3 Activation of Stereotypes

Mechanisms behind activation of self- versus other-stereotypes are diverse. This section outlines the activation process for both forms of stereotyping. Within each section, we first describe the activation process from a social psychology perspective before outlining applications within the field of marketing.

Other-Stereotyping

Once a human is exposed to a stimulus related to a stereotyped group, stereotypical characteristics can be activated (e.g., Macrae et al., 1994; Wheeler & Petty, 2001). A cue which is related to the stereotyped group can be sufficient to activate stereotypical content (e.g., Deaux & Lewis, 1984). For example, a typical masculine perfume can activate the male stereotype (Sczesny & Stahlberg, 2002). The degree to which stereotypes are activated is determined by numerous aspects such as:

- the learning history of the perceiver (Gawronski, Deutsch, Mbirikou, Seibt, & Strack, 2008; Weisbuch, Pauker, & Ambady, 2009),
- the prototypicality of the group member (Blair, Judd, Sadler, & Jenkins, 2002; Freeman & Ambady, 2009),
- the general attitudes toward the stereotyped group in question (Lepore & Brown, 1997; Wittenbrink, Judd, & Park, 1997),
- the processing goals of the perceiver (Macrae, Bodenhausen, Milne, Thorn, & Castelli, 1997),
- the mood/emotion of the perceiver (Bodenhausen, 1993), as well as
- the processing resources of the perceiver (Gilbert & Hixon, 1991).

Once a stereotype has been activated, mental representations/content then becomes accessible (increased accessibility of attributes). This includes the ability of the perceiver to assign certain traits to the stereotyped person/object/firm. However, an activated stereotype does not necessarily mean that the perceiver applies them. Instead, application of stereotypes can depend on the *availability of processing resources* whereby individuals apply them to a higher degree under conditions of low processing resources and high time pressure (Gilbert & Hixon, 1991; Macrae et al., 1994). A perceiver can control the influence of stereotype application, when he/she possesses *enough available cognitive capacity* and is *motivated* to suppress stereotype application (Neuberg & Fiske, 1987; Pendry & Macrae, 1996). Accordingly, individuals vary in their chronic motivation to respond without prejudice and, hence, in their tendency to apply stereotypes (Fazio, Jackson, Dunton, & Williams, 1995; Plant & Devine, 1998). There are several strategies to control the influence of activated stereotypes (for reviews, see Devine & Monteith, 1999; Monteith, Sherman, & Devine, 1998); for example, if

additional individuating information is present, a perceiver may form an impression based on this individuating information (e.g., Sherman, Stroessner, Conrey, & Azam, 2005).

Some authors within the marketing and consumer behavior literature are able to identify factors which influence the activation and application of stereotypes. For example, within the research streams of country stereotypes (country of origin), researchers could identify factors such as the *expertise* (Maheswaran, 1994), *motivation* (Gürhan-Canli & Maheswaran, 2000) and *emotions* (Maheswaran & Chen, 2006) of the consumer. Furthermore, Gorn, Jiang and Johar (2008) discovered that consumers correct for the influence of stereotypes when they possess sufficient cognitive resources and when situational evidence is present (e.g., server PR crisis).

Conclusion

While there is much research identifying factors which influence the activation and application of stereotypes within the social psychology domain, relatively little research has been done within the marketing and consumer behavior domain. It is known that cues which are related to the stereotyped group can be sufficient to activate stereotypical content. This knowledge has considerable potential for future researchers to investigate cues which are related to a stereotype group and their effect on forms of advertising such as print advertisements or television commercials (e.g., butterflies which are stereotypically associated with females). These cues can activate stereotype content and potentially influence consumer brand perception and behavior.

Furthermore, to ‘control’ (or inhibit) the activation and application process of stereotypes it is decisive for marketing practitioners to understand what those factors could be within a marketing and consumer behavior setting. For example, emotions are proven to influence the stereotype activation process. Hence, marketing academics could investigate variables (e.g., music, facial expression) which can affect emotion and stereotype activation.

Additionally, humans, objects and firms can belong to multiple categories (e.g., a salesperson can be female, attractive and tall). Each stereotype is associated with different beliefs. Hence, it would be crucial for a marketer or a salesperson to ensure that the positive (desired) stereotype is activated. Future research in the field of marketing needs to explore how and when a desired stereotype can become activated in a marketing context. Based on this outline the following research questions are proposed:

Research questions:

1. How much of the stereotype activation is able to be controlled by companies/salespeople? For example, to what extent can emotional advertising (e.g., funny, disgusting), store environment, or even the behavior of salespeople influence the activation process? Or, is it possible that exposure to sound (e.g., different genres of music) or smell (scent) has an influence on the stereotype activation process?
2. To what extent can background symbols, colors or other cues activate stereotypes in a marketing context? For example, could a symbol which is associated with females (e.g., picture of a butterfly) placed on a print advertisement or a product activate the stereotypical female content?

3. How and to what extent can marketers ensure that a desired spokesperson/salesperson stereotype is activated?

Self-Stereotyping

One aspect of self-stereotyping which is widely discussed in this context is the concept of stereotype threat. Stereotype threat has been defined in several ways (for a review see Shapiro & Neuberg, 2007). In this review, we adopt the definition from Crocker (1999) whereby stereotype threat refers to “the risk of being in light of negative stereotypes about one’s group” (p. 1). Stereotype threat is likely to befall in situations where negative stereotypes concerning someone’s group membership are perceived to apply (Crocker, Major, & Steele, 1998; Spencer, Steele, & Quinn, 1999). On the other hand, the social psychology literature refers to stereotype lift/boost, where positive self-stereotypical traits are activated (Wheeler & Petty, 2001). Walton and Cohen (2003) describe stereotype lift as a “...boost caused by the awareness that an out group is negatively stereotyped” (p. 456). In this review we primarily focus on self-stereotyping in the context of stereotype threat and stereotype lift.

Stereotype Threat

Some researchers have identified situations where stereotype threat is more likely to transpire. For example:

- an individual’s group identity is salient (e.g., Danaher & Crandall, 2008; Marx & Stapel, 2006),
- someone is (or feels to be) in a minority (e.g., Steele, & Gross, 2007),
- a stereotype is salient (e.g., Smith & White, 2002; Spencer et al., 1999),

- in a situation in which individuals believe that their abilities related to a negative stereotypical domain will be assessed (e.g., Beilock, Rydell, & McConnell, 2007; Schmader & Johns, 2003).

Scholars could also demonstrate that stereotype threat effects can be eliminated or reduced using numerous techniques. For example, by *reframing the task* (Quinn & Spencer, 2001), *de-emphasizing threatened social identities* (Stricker & Ward, 2004), *encouraging self-affirmation* (Schimel, Arndt, Banko, & Cook, 2004) or by *providing role models* (Huguet & Régner, 2007).

Within a marketing context less is known of self-stereotype activation; however, a recent study by Lee et al. (2011) demonstrates that *subtle math cues on an advertisement for a financial provider* or an advertisement featuring *a male cartoon figure* for a service provider (auto mechanics) was enough to evoke stereotype threat effects in women. What is more the stereotype threat effect was reduced in the presence of a *vanilla scent*. Moreover, racial stereotype threat effects are shown to occur within a service setting, for example, when black customers are in the minority and a service failure occurs (Baker, Meyer, & Johnson, 2008).

Stereotype Lift

When taken in comparison with the stereotype threat literature, stereotype lift is the result of activation of positive in-group stereotypes, in combination with negative out-group stereotypes (Marx & Stapel, 2006). For example, when an individual (e.g., man) who belongs to a group which is perceived as stereotypically good (e.g., men have good math skills), is compared to the group which is perceived as stereotypical negative (e.g., women are poor in math), they

(the man) subsequently increase their performance (e.g., in math) (e.g., Gonzales, Blanton, & Williams, 2002; Walton & Cohen, 2003). However, in many studies the effects of stereotype lift are not statistically significant (Walton & Cohen, 2003). Marx and Stapel (2006) explain the absence of stereotype lift effects by proposing that individual's need more of a "push" to activate the positive self-stereotype compared to the negative out-group stereotype. They point out that in order to activate stereotype lift some manipulations are more effective than others (Walton & Cohen, 2003; for a discussion on the differences in threat manipulations see Marx & Stapel, 2006). Within the marketing literature, there is no empirical evidence how and when stereotype lift is activated in a consumer context.

Conclusion

From this outline it is evident that a lot of work has been done in the field of social psychology in order to estimate self-stereotype activation (especially for stereotype threat). In contrast, stereotype threat activation in a consumer behavior setting has received very little attention, and stereotypes lift, none whatsoever. However, Lee et al. (2011) and Baker et al. (2008) provide evidence that self-stereotypes affect consumer behavior, perception and encoding of situations (which we discuss in more detail in the following section). Hence, it would be very important for marketers to be aware of situations in which stereotype threat can occur and how they can be reduced. In addition, even though there is no evidence of how stereotype lift influences consumer behavior/perception, there is potential that it could have desirable outputs. As a consequence, being aware of ways to activate stereotype lift could be advantageous for marketing practitioners. The social psychology literature provides a source of many ideas in what situation

stereotype threat or lift can be applied to market situations. The task for future research would be to identify and test conditions under which stereotype threat/lift can occur and also be reduced in market situations. In line with this outline we propose several research questions:

Research questions:

1. Under what conditions does stereotype threat activation occur in a market situation? For example, are there any situations where stereotype threat is activated in males, black or white; old or young?
2. How and to what extent can firms, service providers and salespeople reduce stereotype threat effects in a consumer setting? For example, can store environment (smells, sounds) or positive role models (e.g., female tax adviser to avoid stereotype threat effect in women) reduce stereotype threat effects?
3. Under what conditions does stereotype lift activation occur? How are marketers able to evoke these conditions in a consumer setting?
4. How and to what extent is it possible to activate stereotype lift in the stereotypically 'positive group' without activating stereotype threat in the stereotypically 'negative group' in naturally occurring market situations?

2.4 Consequences of Stereotypes

How consumers apply self- and other-stereotypes within a marketing context can be complex. This section integrates knowledge from social psychology with knowledge from consumer research to describe the consequences of self- and other-stereotyping within a marketing and consumer behavior context.

Other-Stereotyping

Automatic Behavior

The activation of stereotypes which are related to other people can automatically influence a person's behavior in a stereotypically consistent (or sometimes inconsistent) manner (Dijksterhuis & Bargh, 2001; for a review see Wheeler & Petty, 2001). Research shows that a range of automatic behaviors – such as memory performance, eating behavior, walking speed – can be triggered through stereotype. For example, young people walk more slowly after being primed with an elderly stereotype. Interestingly, people's automatic behavior due to stereotype activation occurs without an individual's intention or awareness (Dijksterhuis, Chartrand, & Aarts, 2007). The mechanism behind the influence of stereotypes onto automatic behavior has been explained by ideomotor theory (Wheeler & Petty, 2001). Here, stereotype activation leads to an activation of certain traits, goals and commitment (which can be positive or negative), which then leads to an activation of pertinent behavioral representations, which in turn, is followed by stereotype consistent behavior (Aarts et al., 2005; Dijksterhuis, Smith, van Baaren, & Wigboldus, 2005). For example, various studies in the social psychology literature have shown the effects of activated stereotypes on automatic stereotypical consistent behaviors such as an increase or decrease in *memory performance* (Levy, 1996), *negotiation performance* (Kray, Thompson, & Galinsky, 2001), *sporting performance* (Stone, Lynch, Sjomeling, & Darley, 1999) and *walking speed* (Hausdorff, Levy, & Wei, 1999). Furthermore, within the domain of consumer behavior, Campbell and Mohr (2011) were able to demonstrate that consumers exposed to an overweight stereotype subsequently consumed more cookies/candies.

Likewise some researchers have found that the automatic effects of stereotypes are not limited to behavior; instead, stereotype activation can influence a person's personal attitude consistent with the stereotypical attitude of the category in question. For example, Kawakami, Dovidio and Dijksterhuis (2003) demonstrated that participants describing characteristics of an old person subsequently expressed more conservative (stereotype consistent) attitudes.

Indirect Behavior (Perception, Attitude, Emotion)

Many scientists in the field of social psychology research confirm that stereotypes of a group can impact the *behavior* of a perceiver. Those behaviors are driven by perception (attitude) and/or emotions (Cuddy, Fiske, & Glick, 2007; Fiske, 1998). Cuddy et al. (2007) proposed the BIAS Map (Behavior from Intergroup Affect and Stereotypes), which suggests that the four combinations of low-high-warmth-competence (see also SCM, Fiske et al., 2002) elicit admiration, pity, envy or contentment (Cuddy et al., 2007), which can then shape perceiver behavior along the active-passive dimension and facilitative-harmful dimension. For example, Aaker et al. (2010) demonstrate that when an organization is perceived as high in competence as well as high in warmth, consumers feel more admiration which translates into higher purchase likelihood (active/facilitative).

Likewise, the existing marketing literature as also demonstrated that perception of the stereotyped object/person/firm can affect consumer behavior (e.g., purchasing intention) by altering attitude towards the product, attitude towards the salesperson, attitude towards the advertising, attitude towards the brand/company and by altering brand perception (e.g., Davies & Chun, 2012; Forehand & Deshpandé, 2001; Kahle & Homer, 1985; Stafford, Leigh, & Martin, 1995).

Memory

Moreover, the presence of stereotypes can affect several aspects of a consumer's memory. In particular, an activated stereotype can (1) influence the encoding of other information (e.g., interpretation of additional product information) and/or (2) influence information recall (e.g., product recall).

Encoding. It is well documented that once a stereotype becomes activated people rely on it when encoding certain situations as well as processing additional information. For example, imagine seeing a person at a playground observing children play. What would your assumptions be if this person is a woman, and what would you conclude if he is a man? This example demonstrates that humans draw different conclusions depending on which category the perceived person/object belongs to. This mechanism is a result of spontaneous encoding of a situation. Encoding of new stimuli comprises various cognitive processes that are involved when an external stimulus is transferred to an internal representation. It refers to the way in which we translate new stimuli into a digestible format that can be stored in our mind (Fiske & Taylor, 1991). Thereby, an activated stereotype can bias the interpretation of the behavior (or attributes) in accordance with the stereotype (Duncan, 1976). For example, in the presence of favorable country of origin information (positive country stereotype), novices rated additional ambiguous attribute information of a product more favorably (Maheswaran, 1994).

Information Recall. Stereotypes can also affect how we process information (e.g., additional product information). However, there is disagreement within the body of literature over the exact nature of their effect. One school of thought

views stereotypes as *cognitive economizers* (Bodenhausen, 1990), which suggests that when engaging in stereotyping humans do not need to process individual characteristics of others (as they can rely on accessible ready stored information), which in return saves cognitive resources and allows a subject to use extra mental ability to complete another task (e.g., recall of product information; Bodenhausen, 1990; Gilbert & Hixon, 1991; Macrae, Milne, & Bodenhausen, 1994). For example, participants in a social psychology experiment could recall more unrelated pieces of information when they were able to rely on stereotypes (Macrae et al., 1994). Consequently, when utilizing stereotypes, humans do not need to process single pieces of characteristics/information about an individual, instead they can rely on already stored information about the group the individual belongs to, which in turn saves cognitive capacity (Pratto & Bargh, 1991). Correspondingly, there are many additional studies which confirm that automatic use of stereotypes can save cognitive capacity (e.g., Bodenhausen & Lichtenstein, 1987; Pratto & Bargh, 1991).

In contrast, a second school of thought proposes that stereotypes work to *inhibit* information processing. Britton and Tesser (1982) propose that the use of stereotypes suppresses cognitive activities. They assume that stereotype activation restricts processing of information which induces a less analytical and more heuristic processing style. Further, Sujan, Bettman and Sujan (1986) suggest that because stereotype activation provides readily available judgments, humans rely on a more heuristic processing style.

Additionally, there is further evidence that memory performance can also be influenced by an emotional response which is evoked when a person is exposed to certain stereotypes. For example, Babin, Boles and Darden (1995) discovered that

a 'pushy' car salesman evokes a higher feeling of skepticism and helplessness which, in turn, lowers information recall. Comparatively, stereotypes which elicit emotions can also influence the memory performance of a consumer.

Conclusion

The manner in which consumers apply other-stereotypes within a marketing context can be diverse. Once a stereotype has been activated it can have a *direct automatic effect on consumer behavior*, in a way consistent (or sometimes inconsistent) with the content of the activated stereotype. Moreover, stereotypes can have an *indirect impact on a consumer's behavior*, by influencing perception, attitudes and emotion. Lastly, an activated stereotype can *influence memory* by guiding a consumer's encoding of additional information as well as affecting a consumer's ability to recall information.

The majority of research concerning the consequences of other-stereotypes in consumer behavior and marketing has focused on stereotypes and their effects on perception, attitude and indirect behavior, yet, no research has made an effort to integrate Cuddy et al's., (2007) BIAS Map to systematically estimate stereotypes in marketing and their influence on warmth/competence, emotional response and behavior intention. Furthermore, to our knowledge no research has investigated the influence of subtle cues which are related to a stereotype group (e.g., pink for female) and their effect on the perception of brands along stereotypical characteristics (e.g., warmth and competence). Future research needs to address these topics. Next, very little research focuses on the effects of other- stereotypes on automatic behavior. Future research needs to identify relevant stereotypes (to the field of consumer behavior /marketing) which activate automatic behavior.

Last, certain scholars have tested the influence of stereotypes on memory. For example, Babin et al. (1995) tested the contradictory views of stereotypes on recall of product attributes (stereotype as cognitive economizer or inhibitor) in the context of salespeople. The results were unable to conclusively determine whether consistent versus inconsistent stereotypes have a positive or negative influence on analytical processing. However, the authors showed that emotion has an influence on memory performance. To gain more clarity into the effect of stereotypes onto memory performance, future research is needed to further investigate the impact, and underlining mechanism of marketing relevant stereotypes on memory performance.

Research questions:

1. To what extent do consumers perceive market relevant stereotypes on the warmth and competence dimensions? According to the BIAS Map, how do these perceptions influence emotion, behavior and memory performance?
2. How and to what extent can cues (e.g., butterflies/female stereotype; dated clothing or spectacles/old stereotype) on advertising messages influence brand/firms perception (e.g., on the warmth and competence dimension)?
3. What for marketing and consumer behavior relevant stereotypes exist which can activate stereotypic consistent behavior?
4. How do marketing relevant consistent/inconsistent stereotypes (e.g., salesperson, spokesperson, and endorsement) influence memory performance (e.g., brand name recall, ad claim recall)? What are the underlying mechanisms?

Self-Stereotyping

Within the consumer behavior and marketing domain, less is known about how consumers' react when they believe that they are the target of a stereotype (i.e., stereotype threat/lift). This section therefore, describes consequences of self-stereotyping mainly from a social psychology perspective. The fact that so little is known within the marketing literature regarding the consequences of self-stereotyping suggests that many opportunities for future research exist.

Similar to other-stereotyping, self-stereotyping can lead to an automatic behavior effect consistent (or inconsistent) with stereotypical traits. Most research around self-stereotype threat/lift suggests that if a person feels threatened/or motivated by an own stereotype he/she behaves in a stereotype consistent way (for a review see Wheeler & Petty, 2001). For example, a typical female stereotype is that women are poor in math. When gender is emphasized females performed more poorly on math tests compared to males (the effect is absent when a gender cue is not present; e.g., Spencer et al., 1999). On the positive side, Kray et al. (2001) discovered that when men are primed with the stereotype 'that men are skilled in negotiation' they improved their negotiation, outcome (stereotype lift). That is, when an activated stereotype causes an improvement in performance, i.e., a performance lift, this is considered a stereotype lift.

Stereotype Threat

Most research in the arena of stereotype threat estimates the effect of stereotype threat on *task performance and/or achievements in test situations* (e.g., Cole, Matheson, & Anisman, 2007; Steele & Aronson, 1995). Stereotype threat is not only limited to performance; indeed it can spill over onto domains such as:

- reduced self-effectiveness in stereotype related domains (Aronson & Inzlicht, 2004),
- lower aspiration to pursue stereotype related careers (Davies, Spencer, Quinn, & Gerhardstein, 2002),
- enhances powerlessness and inhibition (Cook, Arrow, & Malle, 2011),
- feelings of dejection (Keller & Dauenheimer, 2003),
- avoidance, disengagement, or misidentification from the threatening situation (Davies et al., 2002; Major, Spencer, Schmader, Wolfe, & Crocker, 1998),
- aggression, eating, attention, and decision making (Inzlicht & Kang, 2010),
- reactance in a way that can increase performance output (Kray, Reb, Galinsky, & Thompson, 2004).

Some consumer research has also found spillover effects of stereotype threat within the consumer setting. Lee et al. (2011) demonstrated that women in a consumer setting who experience stereotype threat *lower their intention to purchase* from the threatening domain. Research has also demonstrated that stereotype threat affects black people within a service setting in a similar way (Baker et al., 2008). Baker et al. (2008) found that when black customers experience stereotype threat they *interpret service failure as discriminatory*, experience more *anger* and further require a *higher level of service recovery*.

Despite the robustness of stereotype threat effect, to date researchers cannot agree on the mechanism behind stereotype threat effects. Research proposes

different mechanisms as responsible for the phenomena (for a review see Schmader, Johns, & Forbes, 2008) which include:

- anxiety (Delgado & Prieto, 2008),
- negative cognition and dejection (Cadinu, Maass, Rosabianca, & Kiesner, 2005),
- lowered performance expectations (Kellow & Jones, 2008),
- physical arousal (Croizet et al., 2004),
- reduced effort (Stone, 2002),
- reduced self control (Inzlicht, McKay, & Aronson, 2006),
- reduced working memory capacity (Schmader & Johns, 2003).

Stereotype Lift

When taken in comparison with the stereotype threat literature, the literature dedicated to the topic of stereotype lift is relatively scarce and, to our knowledge, limited to performance output. Research indicates that if a positive self-stereotype is activated then *performance improves* (e.g., better math performance). The mechanism behind stereotype lift is identified as different compared to that of stereotype threat. Wheeler & Petty (2001) propose that the “activation of a positive self-stereotype might induce stereotype affirmation or a stereotype halo *that boosts confidence and task motivation (or reduces threat), thereby enhancing performance*” (p. 806).

Conclusion

There is little known about the potential consequences of self-stereotyping within a marketing context. However, the social psychology literature indicates potential applications and consequences of self-stereotyping in a consumer behavior and marketing context.

First, it is well documented in the self-stereotype literature that individuals engage in *automatic, stereotype consistent behavior*. This knowledge could be translated, tested and used in a consumer setting. For example, a male salesperson who positively self-stereotypes himself as a man with high negotiation skills might enhance his negotiation skills and subsequently improve his sales performance.

Second, there is evidence that stereotype threat can influence *memory*, specifically how a consumer encodes a given situation (Baker et al., 2008). Yet, it would be worthwhile studying how and to what extent physical arousal, anxiety, and/or working memory capacity, as a result of stereotype threat, affects memory performance such as product recall.

Third, there is plentiful evidence that stereotype threat can spill over to non-stereotypical domains. Lee et al. (2008), for example, found that consumers possess a lower purchasing intention under stereotype threat. However, it is still unclear how stereotype threat spills over to product perception, service provider perception, spokesperson perception, customer perception and product choice. For example, in a related research stream to stereotype threat, White & Argo (2009) found that when women's social identity is threatened, they demonstrate a weaker preference for gender related products (avoidance of identity linked products such

as the Bridget Jones Movie). The threat was manipulated by giving women a negative description regarding their gender group (e.g., women achieved low GPA, higher likelihood to drop out of program). It is important to note, that this effect was not due to a stereotype threat, however it gives an indication of how product choice could be influenced when exposed to a negative (gender) stereotype. Further it would be very interesting to investigate spillover effects of stereotype lift onto consumer behavior.

Together, this evidence indicates that there exist numerous applications (including automatic behavior, memory, attitude/indirect behavior) of self-stereotyping within a consumer research context which require further investigation. We propose the following research questions:

Research questions:

1. Under which circumstances can automatic self-stereotypical behavior have positive or negative consequences? What are the potential consequences?
2. How, and to what extent, does stereotype threat influence product choice (e.g., stereotype related products)?
3. How, and to what extent, does stereotype threat affect attitude towards the threatening domain (e.g., salesperson, service provider, brand)?
4. What are the potential long term consequences of stereotype threat (e.g., customer loyalty)?
5. How does stereotype threat affect memory performance such as advertising recall, product/brand recall and product information recall?

6. What are the potential consequences of stereotype lift on consumer behavior? Does stereotype lift affect attitude towards a salesperson, service provider and/or brand, positively or negatively?
7. Could stereotype threat and stereotype lift evoke reactance? Are there any situational or personal factors which could lead to reactance? What are possible marketing relevant consequences followed by reactance?
8. How and to what extent does stereotype threat/lift affect encoding of information (e.g., product information)?

2.5 Types of Stereotypes in Marketing

To date, several researchers in the field of marketing have tested mechanisms and consequences of diverse self- and other-stereotypes across several contexts in both marketing and consumer behavior. For example, some research has tested the influence of social stereotypes such as job role (e.g., salesperson), gender, age, race, attractiveness, weight and physical features (e.g., babyface). A second stream of research focuses on stereotyping of products based on country of origin stereotypes. More recently, a third stream of research extends the stereotype concept to firm stereotypes. Table 1 catalogues selective studies of self- and other-stereotyping and their consequences on indirect behavior, memory and automatic behavior within a marketing and consumer behavior context. As outlined in Table 1, it is evident that the published literature predominantly focuses on the effects of *other-stereotyping*, whereby *self-stereotyping* has received very little attention. Thereby, the majority of research focuses on influences on *indirect behavior (including perception, attitude and emotion)*, whereby effects on *memory and automatic behavior* has received little or no consideration. In the next section we describe relevant stereotypes and their

consequences within a marketing and consumer behavior context. Based on this outline we suggest numerous areas for future research.

Table 1: Self- and Other-Stereotype Activation in Marketing and their Consequences

Type of Stereotypes	Reference	Activation			Consequences	
		Self	Other	Indirect Behavior	Memory	Automatic Behavior
Sales-person	Lee et al. (2007)		x	x		
	Stafford et al. (1995)		x	x		
	Sujan et al. (1986)		x		x	
	Babin et al. (1995)		x		x	
Physical Attractiveness	Patzer (1983)		x	x		
	Sundaram & Webster (2000)		x	x		
	Reingen & Kernan (1993)		x	x		
	Kahle & Homer (1985)		x	x		
	Baker & Churchill (1977)		x	x		
	Caballero & Solomon (1984)		x	x		

Table Table 1 (continued)

Type of Stereotypes	Reference	Activation			Consequences	
		Self	Other	Indirect Behavior	Memory	Automatic Behavior
Physical Attractiveness	DeShields et al. (1996)		x	x		
	Till & Bussler (2000)		x	x		
	Till & Busler (1998)		x	x		
	Argo et al. (2008)		x	x		
Gender	Whipple & Courtney (1985)		x			
	Debevec & Iyer (1986)		x	x		
	Whipple & Courtney (1980)		x	x		
	Fischer et al. (1997)		x	x		
	Mohr & Henson (1996)		x	x		
	Matta & Folkes (2005)		x	x		
	Lee et al. (2011)	x			x	
Race	Forehand & Deshpandé (2001)		x	x		

Table 1 (continued)

Type of Stereotypes	Reference	Activation			Consequences	
		Self	Other	Indirect Behavior	Memory	Automatic Behavior
Race	Grier & Deshpande (2001)		x	x		
	Forehand et al. (2002)		x	x		
	Harrison-Walker (1995)		x	x		
	Baker et al. (2008)	x		x	x	
Age	Bristol (1996)		x	x		
	Thakor et al. (2008)		x	x		
	Day & Stafford (1997)		x	x		
	Davies & Chun (2012)		x	x		
Babyface	Gorn et al. (2008)		x	x		
Over-weight	Campbell & Mohr (2011)		x			x
Country	Hong & Wyer (1989)		x	x		
	Hong & Wyer (1990)		x	x		
	Bilkey & Nes (1982)			x	x	

Table 1 (continued)

Country	Reference	Activation			Consequences	
		Self	Other	Indirect Behavior	Memory	Automatic Behavior
	Gürhan-Canli & Maheswaran (2000)		x	x		
	Leclerc et al. (1994)		x	x		
	Maheswaran (1994)		x	x		
	Agrawal & Maheswaran (2005)		x	x		
	Maheswaran (1994)		x	x	x	
	Maheswaran & Chen (2006)		x	x		
	Douglas & Nonaka (1985)		x		x	
	Netemeyer et al. (1991)		x	x		
	Nijssen & Herk (2009)		x	x		
	Shimp & Sharma (1987)		x	x		
	Hamilton & Trolie (1986)		x	x		
	Kwak et al. (2006)		x	x		

Table 1 (continued)

Type of Stereotypes	Reference	Activation			Consequences	
		Self	Other	Indirect Behavior	Memory	Automatic Behavior
Country	Klein et al. (1998)		x	x		
	Nijssen & Douglas (2004)		x	x		
Firm	Aaker et al. (2010)		x	x		
	Homburg et al. (2011)		x	x		

Note: Consequences on Indirect Behavior includes studies which tested the effect of stereotypes onto perception, attitude and emotions without necessarily testing subsequently indirect behavior.

Salesperson Stereotype

The stereotypical salesperson is perceived as dressed in an expensive suit and displays personal traits of forcefulness, persistence, pushiness, being overpowering, fast-talking and of being a nuisance; but, on the positive side, the salesperson is perceived as having high levels of product knowledge (Lee, Sandfield, & Dhaliwal, 2007). Stafford et al. (1995) noted the difference between car salespeople who are perceived as negative (male, pushy, aggressive, money orientated, well dressed, and fast walking) and computer salespeople who are perceived as more positive (male, intelligent, knowledgeable, clean cut, wearing glasses and a suit, and use technical language). In their research they tested the effect of negative (car salesperson) and positive (computer salesperson) sales stereotype activation on purchase intention, and attitude toward the salesperson and the product. They found that car and computer salespersons are judged consistently with their stereotype when implicitly primed with the salesperson

category. However, when a consumer is explicitly primed with category consistent traits (e.g., car salesperson mentions that his stereotype is “being pushy”), ratings are relatively more positive (compared to the original stereotype judgment). In contrast ratings towards the computer salesperson are relatively more negative, when primed with category consistent traits.

A further stream of research investigates the influence of the salesperson stereotype on memory performance. Some early research had found evidence that stereotypes work to inhibit information processing. Sujan et al. (1986) were able to demonstrate that if consumers are exposed to ‘typical’ salespeople (salesperson’s opening statement matched schema -based expectation), they recall less product information compared with a consumer exposed to an ‘atypical salesperson’ (salesperson’s opening statement did not match schema-based expectation). Babin et al. (1995) further discovered that consumers who are exposed to a pushy salesman, relative to an atypical or typical salesperson, experience a higher feeling of skepticism and helplessness which influences memory performance (lowered product recall).

Conclusion

The body of literature which explores the salesperson stereotype is surprisingly limited. Thus, the lack of knowledge regarding the effect of salesperson stereotypes offers many opportunities for future research. First, Stafford et al. (1995) demonstrated how the effects of negative salesperson stereotypes could be reduced by mentioning the negative traits of a stereotypical salesperson. Future research might investigate advanced techniques salespeople can employ to avoid being negatively stereotyped. Next, Babin et al. (1995) indicate that consumers

who are exposed to a pushy salesperson experience more negative feelings which affect product recall negatively. Although conclusive, their research was solely limited to car salespeople and memory performance. Hence, future research could delve further into a consumer's emotional response, subsequent memory performance and behavior, when exposed to different types of salesperson stereotypes. Last, research largely ignores the effect of salesperson self-stereotyping. Further research is needed to investigate how and to what extent positive or negative self-stereotyping affects salesperson behavior and the ensuing consumer reaction/behavior.

Research questions:

1. What are possible factors which can moderate the negative effect of salesperson's stereotype activation? Could the context in which a consumer interacts with a salesperson (e.g., environment) influence activation and application of the salesperson stereotype?
2. What further sub-categories of salesperson exist (e.g., car versus computer salesperson; male versus female salesperson)? Are there differences in how consumers stereotype these sub-categories? What are potential consequences?
3. When and to what extent would a salesperson show stereotypically consistent behavior when they self-stereotype themselves? For example, under what conditions would the positive stereotype of having a high level of product knowledge, or the negative stereotype of being pushy and overpowering, be activated? What are the possible consequences? For example, would a negative self-stereotype lead the salesperson to

disengage with the customer? In contrast, would a positive self-stereotype enhance negotiation skills and subsequently enhance purchase likelihood?

Physical Attractiveness Stereotype

Extensive evidence within the field of social psychology suggests that human's stereotype on the basis of a person's physical attractiveness. Gillen (1981) discovered that people assign less desirable characteristics to people whom are low in physical attractiveness compared with those high in physical attractiveness. For example, attractive people are perceived as more sensitive, outgoing, sociable, kind, interesting, and poised as well as owning traits such as expertise and trustworthiness (Dion, Berscheid, & Walster, 1972).

Many researchers have demonstrated that physically attractive salespeople/communicators are perceived more favorably. Patzer (1983) identifies a relationship between the physical attractiveness of the spokesperson (presented on a printed advertising mock up) and the perceived trust, expertise and liking of the communicator. Moreover, physical attractiveness affects the positive emotion of customers, and improves customer perception of credibility, friendliness, competence, customer concern and politeness (Sundaram & Webster, 2000).

A wide body of research has observed the positive effect of attractive communicators/salespeople, such as assigning more favorable selling skills (Reingen & Kernan, 1993), more favorable attitudes toward products (Kahle & Homer, 1985), positive advertising and product attitude, as well as higher purchasing intention (Baker & Churchill, 1977; Caballero & Solomon, 1984; DeShields, Kara, & Kaynak, 1996). On the other hand, empirical research has identified situations where physical attractiveness is not helpful. For example,

attractive people are more successful when endorsing products which enhance users attractiveness, compared to products which do not enhance one's attractiveness (e.g., Till & Busler, 1998; Till & Bussler, 2000). Correspondingly, numerous other studies suggest that attractive models are in fact less persuasive. For example, a study by Bower (2001) demonstrates that attractive spokespeople are perceived as possessing lower expertise.

Conclusion

There is considerable evidence that the physical attractiveness of salespeople and spokespeople influences perception, persuasion and consumer behavior. However, little is known about the influence of attractive versus unattractive customers. A study by Argo, Dahl, and Morales (2008) is an exception. In their work, they found that consumers evaluate products more favorably when they have seen this product previously touched by a highly attractive person of the opposite sex. This work indicates that customer attractiveness has an influence on the behavior of other customers. However, it is still unclear how the attractiveness of a customer influences salesperson perception and how these perceptions influence a sales transaction. Furthermore, current research has not investigated self-stereotyping of customers and/or salespeople on the basis of attractiveness. This lack in the literature offers many opportunities for future research.

Research questions:

1. How and to what extent does the attractiveness of a customer affect perception and behavior of other customers and salespeople? What are potential consequences?

2. How and to what extent does a positive, attractive self-stereotype of a salesperson affect sales behavior? For example, is an attractive salesperson more convincing when he/she positively self-stereotypes?
3. Under what conditions would an unattractive consumer feel threatened by their self-stereotype? What are the possible consequences for a marketing practitioner? For example, would the customer disengage from the selling situation? How could marketers ensure that the unattractive stereotype will not be salient? Or, how could they reduce the effect of negative stereotype threat of an unattractive consumer?
4. Under what condition would an attractive customer feel stereotype lift effects? What are potential consequences?

Gender Stereotypes

Gender is a central dimension humans use to categorize others (Fiske & Neuberg, 1990); making gender stereotypes particularly powerful (Folkes & Matta, 2013). Within a marketing context most researchers estimate the effect of gender stereotypes in terms of match or mismatch (congruence/incongruence) of gender and gender-typed services/gender-typed products. Some research has demonstrated positive effects in the case of a match between gender type products and the gender of the endorsement (Whipple & Courtney, 1985); yet other research indicates that a mismatch between gender type product and endorsement has positive effects (Debevec & Iyer, 1986; Whipple & Courtney, 1980).

Within the service encounter, stereotypes have been found to demonstrate that a certain gender is better at delivering a given service (Fischer, Gainer, & Bristol, 1997). According to Fischer et al. (1997), consumers hold *server gender stereotypes*, whereby consumers hold expectations as to “what extent the sex of

the service provider will be and “should” be in certain service environments” (p. 363). Mohr and Henson (1996) were able to demonstrate that consumers react in a more negative manner to service failures by providers whose gender was incongruent (versus congruent) with the service’s gender type. Matta and Folkes (2005) tested the influence of the counter-gender stereotypical service provider on the evaluation of the firm/brand. They found that consumers expect a counter-stereotypical service provider to deliver worse results than a stereotypical service provider. However, when the counter-stereotypical individual delivers excellent service, the firm the individual is working for is perceived as superior to its competitors/other firms.

Another stream of research investigated the effects of self-stereotyping within a marketing context. For example, Davies et al. (2002) demonstrated that gender stereotypical television advertisements elicit stereotype threat in women (e.g., women are poor in math), which leads to a preference of verbal items over math items on a standardized test. In addition, they discovered that women who watched the same commercial signaled less interest in domains in which they were at risk to stereotype threat and showed more interest in domains where they were invulnerable to stereotype threat. In a consumer behavior context, Lee et al. (2011) demonstrated that disengagement (or avoidance) from the threatening domain can materialize in the form of reduced purchasing intention by women. In their study, they were able to activate stereotypes, such as women are poor in math or women know nothing about cars, via subtle primes. They then showed an advertisement for a service provider (e.g., financial advisor, car salesperson) to the participants, featuring either a male or female actor. Under stereotype-threat conditions, women (but not men) showed less purchase intentions when the

service providers were male than when they were female. However, when no stereotype cues were present, women showed no preference between the male and female service providers. Further, they found that the stereotype threat effect was caused by anxiety.

Conclusion

Existing research into gender stereotypes demonstrates that gender stereotypes influence consumer perception and subsequent behavior. However, the consequences of gender stereotypes on automatic behavior and memory performance are understudied. For example, the typical male is associated with anger while the typical female with happiness (Kelly & Hutson-Comeaux, 1999). It would be of interest to investigate how these perceptions influence consumers' own emotions in an automatic stereotypical consistent manner, in addition to how these emotions influence consumer behavior and memory performance. Next, recent studies demonstrate negative self-stereotype effects amongst women, yet, it is still unclear how negative self-stereotyping affects product choice, word-of-mouth and loyalty. Furthermore, conditions and consequences of stereotype threat among men still need to be investigated. Last, research has not investigated effects of self-stereotyping on the basis of gender. For example, the typical male is perceived as having high negotiation skills (Kray et al., 2001). Hence, it could be interesting to investigate the effects of positive self-stereotyping of male salespeople on negotiation performance and subsequent sales output.

Research questions:

1. To what extent can gender stereotypes evoke stereotype consistent emotion as a result of automatic consistent behavior? To what extent do these emotions affect consumers' memory performance?
2. How and when do negative gender self-stereotypes affect domains such as customer loyalty, product choice and word of mouth?
3. How, to what extent and when are men affected by stereotype threat? For example, are men at risk of experiencing stereotype threat in a gift giving situation (when men want to purchase stereotypical female products)?
4. When and to what extent can positive self-stereotypes (on the basis of gender) affect salespeople (i.e., males)? What are potential consequences?

Race Stereotypes

Race stereotypes have relevance in advertising as well as in service settings. For example, once a consumer's ethnicity is salient (e.g., being a minority), a consumer will respond more favorably to a 'same ethnicity' spokesperson and have a more positive attitude towards an advertisement (Forehand & Deshpandé, 2001) and the brand (Grier & Deshpande, 2001). For example, Asian (Caucasian) participants respond most positively (negatively) to an Asian spokesperson and Asian-targeted advertising when elements of an advertisement direct attention to the individuals' social identity and when they are minorities in the immediate social context (Forehand, Deshpandé, & Reed II, 2002).

Within the context of service providers, Harrison-Walker (1995) discovered that race stereotypes can affect how a consumer selects a service provider. They found that when service provider name is the only available information,

undergraduate students from an American university preferred a service provider with typical English names compared to foreign sounding names.

Race stereotypes can also impact interpretation of service failure when participants self-stereotype on the basis of their race. Baker et al. (2008) uncovered stereotype threat effects in a service encounter. In their research, they invited both black and white participants to read a scenario of a service failure, where they manipulated the race of service provider as well as the race of other customers, with an expectation to activate stereotype threat. They then asked the participants to indicate what they would expect in terms of service recovery (e.g., apology, refund). In the scenario of a white service provider combined with white customers, black participants interpreted service failure as discrimination and required more 'in-service recovery' than white participants. However, when the racial composition of the other customers was mixed, black and white participants showed no differences in perceptions or expectations. Presumably, the all-white composition condition primed stereotype threat and led to greater perceptions of race as a factor in the service failure and requested greater requirements for service recovery.

Conclusion

Race stereotypes are proven to have an influence on the evaluation of advertising and spokespeople as well as on consumer selection of a service provider. However, it is unclear how the race of a spokesperson affects brand perception, and secondly how cues such as culturally typical music in advertisements influence stereotyping and subsequent brand perception. Further research is therefore needed to identify possible effects of race (cues) on brand

perception. Furthermore, Baker et al. (2008) demonstrate that negative self-stereotyping has an influence on situation encoding, as well as the expectation towards the service provider. However, it is still unclear how negative self-stereotyping affects behavior such as customer loyalty, and/or memory performance of the stigmatized group. In addition, it would be valuable for managers to understand how racial stereotype threat can be avoided or reduced. Hence, future research must identify techniques to reduce customer racial stereotype threat. Lastly, to date no research has investigated the effect of racial stereotypes on/in a salesperson. Potential future empirical research could investigate how negative racial self-stereotyping affects behavior and the performance of a salesperson. We propose the following research questions:

Research questions:

1. How and to what extent do racial stereotypes affect perception of a brand? To what extent do cues which are related to a race stereotype (e.g., stereotypical music in advertising) affect brand perception?
2. How and to what extent do negative racial self-stereotypes affect behavior (e.g., disengagement of the threatening domain) and information processing?
3. How can negative self-stereotyping be avoided or reduced? For example, could a subdued store atmosphere (e.g., relaxing music) reduce negative self-stereotyping?
4. To what extent does stereotype threat affect customer loyalty? For example, does a customer need to experience stereotype threat several times before loyalty is affected?

5. How and to what extent does negative self-stereotyping of a salesperson affect sales performance?

Age Stereotypes

Despite the vast interest in age stereotypes in the field of social psychology, the literature dedicated to age stereotyping in a consumer behavior context is relatively scarce. Nevertheless, research demonstrates that older consumers perceive older spokespeople (compared to younger spokespeople) as more credible, which subsequently leads to a more positive attitude towards a brand (Bristol, 1996). On the other hand, young consumers' attitude toward the level of service provided can be negatively influenced when other older consumers are present (Thakor, Suri, & Saleh, 2008). For example, the patronage intention of young consumers for conspicuous services (e.g., service restaurants) is negatively influenced when exposed to older age cues, but only when consumers are accompanied by same age friends (Day & Stafford, 1997).

Some recent work has also shown that age stereotypes affect corporate brand perception on the competence dimension (Davies & Chun, 2012). Davies & Chun (2012) demonstrated that consumers perceive a corporate brand of a fashion retailer as more competent and less enterprising the older the salespeople in the retail setting were. Further, they found an overall negative effect of age on customer satisfaction.

Conclusion

Research to date has identified age stereotypes as relevant in evaluating brands and services, when exposed to different forms of advertising as well as in the presence of other customers. However, little is known regarding how age

stereotypes influence automatic behavior of customers. For example, does a customer exposed to an older person (other-stereotyping) or an older person with negative self-stereotypes decrease his/her memory performance (e.g., product recall) due to stereotype consistent behavior? Hence, future research must identify the extent to which people from different age groups experience stereotype threat/lift in a marketing context and the consequences. We propose the following research questions:

Research questions:

1. How and to what extent does self- and other-stereotyping affect product recall (memory performance) due to automatic stereotypical behavior?
What are possible moderators for this effect?
2. What are the conditions under which people from different age groups feel threatened by their self-stereotype? For example, does an older person feel threat within an electronics store due to the negative stereotype that older people are incompetent with modern electronics goods? What are the potential consequences?
3. How can negative old/young self-stereotypes be reduced or avoided? For example, what are possible techniques in which a marketer can evoke positive (e.g., wise), in preference to negative stereotypes (e.g., senile)?

Baby-face Stereotypes

Berry and McArthur (1985) summarized the characteristics of “babyishness” as having a head “too large” for the body, large eyes, large pupils, eyes positioned in the center of the vertical plane of the face, a large, protruding cranium, short,

narrow features, full cheeks, and short, thick extremities. Compared to mature looking people, people with baby-face features are perceived as physically weaker, more honest, kinder, naive, and warmer (Berry & Brownlow, 1989; Berry & McArthur, 1985; McArthur & Apatow, 1984). Brownlow (1992) discovered that when spokespeople are considered to be untrustworthy, baby-face spokespeople are more persuasive than mature-faced spokespeople.

Similarly, Gorn et al. (2008) have investigated the effect of 'baby-faceness' on judgment and the trustworthiness of a firm's CEO within a public relation crisis. Consistent with the babyface literature, they found that consumers perceive a babyface CEO as more honest, innocent and as having less intention to deceive compared with mature looking CEOs. Association of honesty and innocence with baby-faceness also affects judgment of trustworthiness, vigilance and perceived credibility, which in turn positively affects attitude towards a firm positively under a mild-severity PR crisis. However, consumers correct for this judgment when the severity of the crisis increased (e.g., a severe crisis) and when sufficient cognitive resources are available.

Conclusion

Babyface stereotypes are proven to influence consumer perception. Yet, research so far on babyface effects in marketing is limited to PR crises, hence, future research needs to investigate babyface effects across different contexts (e.g., perception of service failure, perception of salespeople). Furthermore, no research to date has investigated the influence of babyface stereotypes on memory performance (e.g., recoding of product information when baby faced person speaks with very deep voice/inconsistent to stereotype) as well as its effect on automatic behavior (e.g., are consumers more willing to donate for charity as a

result of stereotype consistent behavior of warmth or kindness?). This lack of research provides many opportunities for future research.

Research questions:

1. How do consumers interpret service failure from a person with babyface features compared to service people without babyface features? How do customers react in terms of service recovery?
2. How and to what extent does a stereotypical consistent versus inconsistent baby faced spokesperson/salesperson influence perception and memory performance of a consumer?
3. How and to what extent would a salesperson for a charitable firm be more successful when he/she has a baby-face compared to when he/she does not have a baby-face? What could be the underlining mechanisms? For example, would a customer engage in stereotypical consistent behavior of being warm and kind, which subsequently enhances goodwill and donation?

Overweight Stereotypes

In a recent study, Campbell and Mohr (2011) discovered that consumers exposed to an image of an overweight person (overweight stereotype) engaged in higher food consumption (candies/cookies). The authors argue that the picture of an overweight person activates knowledge that includes stereotypical goals, motivation or commitment to these goals. The activation of these stereotype goals then leads people to automatic acceptance of these goals alongside commitment to achieving these goals (Aarts et al., 2005; Custers, Maas, Wildenbeest, & Aarts, 2008). Campbell and Mohr (2011) demonstrated that activation of the overweight stereotype leads to an activation of low health goal commitment, which

consequently enhances stereotype-conducive behavior (eating bad food). However, when consumers witnessed the same overweight person eating or asked to rate the weight of the person, the link between behavior and membership in the stereotyped group was accessed, which led to a reduction of stereotype-conducive behavior. Furthermore, increased accessibility of the countervailing health goal (writing for 3 minutes about their health goals) also led to a reduction of stereotype-conducive behavior.

Conclusion

Campbell and Mohr's (2011) body of work is, to our knowledge, the only study which tested the effect of overweight stereotypes in consumer research, suggesting many opportunities for future research. For example, how do consumers react when served by an overweight person? Would a consumer engage in stereotypical automatic behavior and order more food? Additionally, further research is needed to investigate consequences of negative self-stereotyping of overweight people. For example, how does negative self-stereotyping affect the consumer behavior in a retail store?

Research questions:

1. How and to what extent do consumers engage in stereotypical automatic behavior (i.e. higher food consumption) in a restaurant when served by an overweight person? To what extent does the service environment influence the stereotyping process (e.g., does the presence of other customers inhibit the stereotyping process)?
2. How and to what extent do overweight people self-stereotype in a retail environment? What are the possible consequences? For example, how and

to what extent do overweight people feel threatened in fashion retail store?

What could a store manager do to reduce negative self-stereotype effects?

3. How and to what extent do overweight stereotypes influence attitude towards healthy versus unhealthy food?

Country Stereotypes

Research has shown that consumers stereotype products according to the country in which the product is produced and/or based on foreign sounding brand names which imply a specific country of origin (Leclerc, Schmitt., & Dube, 1994; Melnyk, Klein, & Völckner, 2012). Stereotyping of a product based on the country of manufacture or foreign branding is better known under the term “country-of-origin”. Consumers use country-of-origin information to infer beliefs about products that originate from certain countries (e.g., Hong & Wyer, 1989, 1990). Many scholars have demonstrated that once a country stereotype is activated, it can impact consumer product/brand evaluation such as evaluation of quality, taste, performance, design, aesthetics, prestige, and price, as well as influencing purchasing behavior (e.g., Bilkey & Nes, 1982; Gürhan-Canli & Maheswaran, 2000; Hong & Wyer, 1989; Leclerc et al., 1994; Maheswaran, 1994; for reviews see Maheswaran & Chen, 2009; Verlegh & Steenkamp, 1999). For example, French brand names have been proven to enhance US consumers’ attitude and taste perception of hedonic products (Leclerc et al., 1994). Likewise, in the past 30 years, researchers have shown an interest in understanding how country of origin stereotypes influence quality judgments of products and purchasing behavior (e.g., Agrawal & Maheswaran, 2005; Maheswaran, 1994). Many researchers agree that the effect of country stereotypes on product evaluation is *consumer dependent, context dependent, and likely to vary across*

situations. Based on the stereotyping concept, several researchers have examined various factors such as *expertise*, *motivation*, *emotions* and *culture* in the context of country of origin effects. For example, based on consumer ability, *experts* and *novices* vary in the way they process country stereotypical information. For example, novices rely on country information in their product evaluation, when attributes are either ambiguous or unambiguous. In contrast, experts are found to apply country information solely when attributes are ambiguous. When attributes are considered unambiguous and diagnostic, experts do not use country information in their evaluation of a product (Maheswaran, 1994). Other researchers have found that, when *motivation* to process available information is low or when the processing goal is to evaluate country information, country stereotypes have a larger influence on product evaluation (Gürhan-Canli & Maheswaran, 2000). Consistent with the stereotype literature, Maheswaran and Chen (2006) have shown incidental *emotions*, that consumers experience before they evaluate a product, influence the use of country information in their information processing. Their results showed that *angry* consumers are more likely to apply country stereotypes in product evaluations than *sad* consumers.

Further, Johansson, Douglas and Nonaka (1985) found that country information influences product evaluation by biasing (encoding) consumer's perception of other attributes. This bias is stronger when product knowledge is low. In a similar vein, Maheswaran (1994) found that the presence of country information influences consumer interpretation of ambiguous additional attribute information. They found that if a consumer is a novice or unfamiliar with a brand/product, then country of origin to biases the interpretation of attributes. For example, when country of origin is favorable (vs. unfavorable), strong and neutral

attributes are rated more positively. In contrast, a consumer who is an expert uses country of origin beliefs as a guide to selectively process attribute information.

Additionally, consumers in certain countries believe that it is morally and ethically wrong to purchase foreign products and better to purchase domestic ones (Netemeyer, Durvasula, & Lichtenstein, 1991; Nijssen & Herk, 2009; Shimp & Sharma, 1987). This phenomenon is coined '*consumer ethnocentrism*'. Consumer ethnocentrism is defined as "the beliefs held by [American] consumers about the appropriateness, indeed morality, of purchasing foreign-made products" (Shimp & Sharma, 1987, p. 280). The concept of consumer ethnocentrism derives from the psychological concept of in-group and out-group stereotyping, whereby people apply positive characteristics to members of the in-group and negative to members of the out-group (Hamilton & Trolie, 1986). Shimp and Sharma (1987) applied the consumer ethnocentrism concept to explain why domestic products are more favorably evaluated than foreign ones. In addition to negative attitudes toward products from a foreign country, ethnocentric consumers respond negatively to the advertising of foreign products (Kwak, Jaju, & Larsen, 2006). Furthermore, consumers high in ethnocentrism can develop uncertainty concerning the brands' future intentions, which reduces interest in establishing relationships with the brand (Nijssen & Herk, 2009). Moreover, ethnocentric consumers who have a negative attitude towards quality and advertising of a foreign product, are dissatisfied and do not trust, value, or bestow loyalty toward a foreign-service provider, and consequently, are less likely to purchase foreign products. In contrast, they rate domestic products very highly and find it important to purchase them (Kwak et al., 2006; Netemeyer et al., 1991; Nijssen & Herk, 2009; Shimp & Sharma, 1987).

Another stream of research investigates the effects of country stereotypes on a consumer's negative emotional response (Klein, Ettenson, & Morris, 1998). *Consumers' animosity* is defined as "anger due to previous or ongoing political, military, economic, or diplomatic events" (Klein, Ettenson, & Morris, 1998, p. 90). Animosity research has demonstrated that hostility negatively affects consumer purchasing behavior (preferences and choices) in the international marketplace (Klein, 2002; Nijssen & Douglas, 2004). The findings of many of these studies conclude that angry consumers do not purchase a product or service due to perceived quality; they simply do not want to buy a product, even if the product is perceived to be of a good quality (Russell & Russell, 2010).

Conclusion

Across the stereotype literature, country stereotypes have received a lot of attention. Research has identified several consequences such as quality perception, emotion, behavioral intention and encoding of additional information. However, the underlying processes of country of origin effects on judgment are not clear. Many researchers still do not integrate stereotype knowledge (from social psychology) into their research on country of origin effects. To better understand the underlying country of origin effects, research should take more advantage of stereotype knowledge within the field of social psychology. For example, consumer researchers could additionally identify further techniques to reduce negative country stereotypes. Furthermore, research could investigate how products of certain countries are perceived on the warmth and competence dimensions and how these perceptions affect emotion and behavioral tendencies. Last, the country stereotype literature to date has not investigated self-

stereotyping of manufacturers on the basis of their country of origin. This critical lack in the literature offers several opportunities for future research.

Research questions:

1. What techniques could marketers of negative country stereotype brands/products use to ensure that consumers do not stereotype their product on the basis of the country of origin? Or how could a negative country stereotype be changed?
2. How are products from certain countries perceived on the warmth and competence dimensions? Does the warmth and competence perception elicit the same emotional and behavioral tendencies as proposed by Cuddy et al.'s (2007) BIAS Map? How can marketers use this knowledge to their advantage? For example, could a marketer of a product which is lacking in warmth use additional cues to enhance warmth?
3. How and to what extent does a positive or negative country of origin affect the manufacturer/brand of the product (self-stereotyping)? Is it possible that a manufacturer experiences stereotype lift or stereotype threat effects?

Firm Stereotypes

Aaker et al. (2010) discovered that consumers hold stereotypic beliefs regarding organizations. They were able to demonstrate that consumers perceive organizations on the same fundamental dimensions of both warmth and competence (see Fiske et al., 2002 for more information on warmth and competence). Further, they found that for-profit organizations, compared with not-for profit organizations, are perceived as higher in competence and lower in warmth. Interestingly, a simple cue like the ending of a firm's domain name (.org

vs. .com) activated those same stereotypes. Further, they found that consumers are more willing to purchase a product from a for-profit organization due to a higher perception of competence. However, when a non-profit organization, which is perceived as higher in warmth, is boosted with competence (via additional competence primes), consumers report a feeling of admiration for the company which subsequently enhances willingness to purchase.

In a similar vein, Homburg et al. (2011) demonstrate that the salespeople of a travel agency can embrace what they term 'headquarter stereotypes'. The consequence of holding such a stereotype can result in a decrease in a salesperson's adherence to corporate strategy, a decrease in a salesperson's job performance (reduction in annual sales) as well as evoking negative customer perceptions of the salesperson who is deemed less customer-oriented. In addition, Homburg et al. (2011) also find that managerial action at the corporate management level, such as support of corporate management, can reduce negative headquarter stereotypes and their negative consequences.

Conclusion

The stereotyping of firms is an influential and relatively new research stream which offers many opportunities for future research. First, researchers must identify additional firm stereotypes which may have an influence on consumer or salesperson behavior. Next, future research could explore further consequences such as automatic stereotypically consistent behavior of customers or salespeople when exposed to a firm stereotype. In addition, it would be of interest to explore to what extent firms (and their employees) self-stereotype themselves. We propose the following research questions:

Research questions:

1. Are there any other (aside from organizational and headquarter stereotypes) relevant firm stereotypes within a marketing context? What are the potential consequences?
2. Is it possible that individuals in a consumer setting behave in a stereotype consistent way towards for-profit organizations versus not-for profits? For example, does a person exposed to a non-profit organization behave with more warmth and/or kindness? Could those behaviors translate into donation intentions/purchase intentions?
3. To what extent are organizations and headquarters aware of their own stereotypes? Further, how and to what extent do they self-stereotype? Are some organizational decisions/behaviors based on self-stereotyping?
4. Are employers/staff members affected by these organizational stereotypes? For example, do employees from for-profit organizations act with more competence and employees from non-profit organizations act with more warmth?

2.6 Conclusion and Final Remarks

For researchers and marketing practitioners, it is important to understand how both other-stereotypes and self-stereotypes can influence consumer perception, memory and behavior. In this review we have presented a generalist overview of stereotype knowledge as per findings in the field of social psychology, alongside their application within the marketing and consumer research literature.

Accordingly, we have highlighted opportunities for further research contributions.

This review shows evidence that the processes and consequences of self- and

other-stereotyping are increasingly diverse. It becomes clear that the construct of stereotyping others (people and objects) receives substantially more attention than self-stereotyping, yet there is still much more research needed within both forms of stereotyping.

Within other- stereotyping, scholars should focus on the effects of stereotyping and memory performance as well as on automatic behavior. Within self- stereotyping, there is vast potential on almost all critical aspects of the stereotyping process and its consequences such as automatic behavior, memory performance and indirect behavior (including perception and attitude). Researchers need to identify the circumstances when consumers or salespeople experience stereotype threat/lift and the potential results within a marketing context. Further, it is important to investigate marketing relevant factors which could moderate/reduce the influence of stereotype threat.

Additionally, researchers are able to show that consumers use stereotypes such as physical attractiveness, gender, occupation (salesperson), physical attributes (e.g., babyface) and/or country information in their categorization of others and products. Research has shown that these categorizations can have many outcomes (e.g., attitude, encoding of information). However, the literature to date is still insufficient in identifying the processes that underlie the effect of categorization on these consequences. Using stereotype knowledge from the social psychology literature provides valuable insights which can help to assess how categorization (e.g., country information, attractiveness of salesperson, etc.) might impact consumer responses to advertising, brands and salespeople.

Up to now the literature has identified country information as a basis for stereotyping of products. The question arises, do consumer stereotype products on the basis of other product related information? And what about a product's brand name, warranty information or price tags? Many researchers have demonstrated that consumers use price or warranty information as a signal for higher product/service quality as well as higher service quality (Boulding & Kirmani, 1993; Huber & McCann, 1982; Rao & Monroe, 1989). In addition, there is evidence that consumers have certain beliefs of products from established brands (Maheswaran, Mackie, & Chaiken, 1992), which are proven to influence product evaluation under some circumstances. For example, Maheswaran et al. (1992) discovered that when motivation was low, consumers relayed on brand name information in their product evaluations. Furthermore, brands are associated with personalities (Aaker, 1997) and are perceived on the warmth and competence dimensions (Kervyn et al., 2012). Fitzsimons et al. (2008) even found that consumers behave in an automatic stereotypical manner when subliminally exposed to brands. Therefore, future research into brand names, price, and warranty information should consider utilization of the extant knowledge within the social psychology literature on stereotypes for a better understanding of potential mechanisms and effects.

Lastly, the majority of existing literature examines stereotypes such as gender, race and physical attractiveness in their research. However, the marketing literature seems to ignore stereotypes of role function such as featuring professors, doctor and lawyers in advertisements. Role function stereotypes may have an impact on encoding of additional information as well as consumer memory performance. That is, do stereotypes associated with intelligence (e.g., professor,

doctor stereotype) presented on/in an advertisement influence stereotype consistent behavior of being smart/intelligent? Would those stereotypes subsequently affect memory performance and consequently brand recall, product recall and/or recall of product features? More research is needed to discover how and to what extent “role function stereotypes” affect consumer behavior.

Final remarks

In this review, we have presented a framework for stereotypes in marketing. We have used the knowledge from the field of social psychology and integrated it with knowledge from consumer behavior and marketing literature. Moreover, we have identified several gaps in the extant literature which need to be addressed in future research. From this review it should be clear that there is a need for more research within the domain of ‘stereotypes in marketing’. Finally, with this review we hope to provide a clearer understanding of the stereotype concept and stimulate future research in this area.

References

- Aaker, J. L. (1997). Dimensions of brand personality. *Journal of Marketing Research*, 34(3), 347–356.
- Aaker, J., Vohs, K. D., & Mogilner, C. (2010). Nonprofits are seen as warm and for-profits as competent: Firm stereotypes matter. *Journal of Consumer Research*, 37(2), 224–237.
- Aarts, H., Chartrand, T., Custers, R., Danner, U., Dik, G., Jefferis, V., & Cheng, C. (2005). Social stereotypes and automatic goal pursuit. *Social Cognition*, 23(6), 465–490.
- Agrawal, N., & Maheswaran, D. (2005). Motivated reasoning in outcome-bias effects. *Journal of Consumer Research*, 31(4).
- Argo, J. J., Dahl, D. W., & Morales, A. C. (2008). Positive consumer contamination: Responses to attractive others in a retail context. *Journal of Marketing Research*, 45(6), 690–701.
- Aronson, J., & Inzlicht, M. (2004). The ups and downs of attributional ambiguity: stereotype vulnerability and the academic self-knowledge of African American college students. *Psychological Science*, 15(12), 829–836.
- Ashmore, R. D., & Del Boca, F. K. (1981). Conceptual approaches to stereotypes and stereotyping. In D. L. Hamilton (Ed.), *Cognitive Processes in Stereotyping and Intergroup Behavior* (Erlbaum., pp. 1–35). Hillsdale, NJ.

- Babin, B. J., Boles, J. S., & Darden, W. R. (1995). Salesperson stereotypes, consumer emotions, and their impact on information processing. *Journal of the Academy of Marketing Science*, 23(2), 94–105.
- Baker, M. J., & Churchill, G. A. (1977). The impact of physically attractive models on advertising evaluations. *Journal of Marketing Research*, 14(4), 538–355.
- Baker, T. L., Meyer, T., & Johnson, J. D. (2008). Individual differences in perceptions of service failure and recovery: the role of race and discriminatory bias. *Journal of the Academy of Marketing Science*, 36(4), 552–564.
- Bargh, J. A. (1997). The automaticity of everyday life. In R. S. Wyer (Ed.), *The Automaticity of Everyday Life*. Lawrence Erlbaum.
- Bargh, J. A. (1994). The four horsemen of automaticity: Awareness, intention, efficiency, and control in social cognition. In R. S. Wyer, & T. K. Srull, (Eds.), *Handbook of Social Cognition*. Erlbaum.
- Bauer, R. A., & Greyser, S. A. (1968). *Advertising in America: The Consumer View*. Boston: Harvard University, Graduate School of Business Administration.
- Beilock, S. L., Rydell, R. J., & McConnell, A. R. (2007). Stereotype threat and working memory: mechanisms, alleviation, and spillover. *Journal of Experimental Psychology: General*, 136(2), 256–276.

- Berry, D. S., & Brownlow, S. (1989). Were the physiognomists right? Personality correlates of facial babyishness. *Personality and Social Psychology Bulletin*, *15*(2), 266–279.
- Berry, D. S., & McArthur, L. Z. (1985). Some components and consequences of a babyface. *Journal of Personality and Social Psychology*, *48*(2), 312–323.
- Bilkey, W. J., & Nes, E. (1982). Country-of-origin effects on product evaluations. *Journal of International Business Studies*, *13*(1), 89–100.
- Blair, I. V., & Banaji, M. R. (1996). Automatic and controlled processes in stereotype priming. *Journal of Personality and Social Psychology*, *70*(6), 1142–1163.
- Blair, I. V., Judd, C. M., Sadler, M. S., & Jenkins, C. (2002). The role of Afrocentric features in person perception: judging by features and categories. *Journal of Personality and Social Psychology*, *83*(1), 5–25.
- Bodenhausen, G. V. (1993). Emotion, arousal, and stereotypic judgments: A heuristic model of affect and stereotyping. In D. M. Mackie & D. L. Hamilton (Eds.), *Affect, Cognition, and Stereotyping: Interactive Processes in Group Perception* (pp. 13–37). San Diego, CA: Academic Press, Inc.
- Bodenhausen, G. V., & Lichtenstein, M. (1987). Social stereotypes and information-processing strategies: the impact of task complexity. *Journal of Personality and Social Psychology*, *52*(5), 871–880.
- Bodenhausen, G. V. (1990). Stereotypes as judgmental heuristics: Evidence of circadian variations in discrimination. *Psychological Science*, *1*(5), 319–322.

- Boulding, W., & Kirmani, A. (1993). A consumer-side experimental examination of signaling theory: Do consumers perceive warranties as signals of quality? *Journal of Consumer Research*, 20(1), 111–123.
- Bower, J. L. (2001). Not all M&As are alike – and that matters. *Harvard Business Review*, 79(3), 92–101.
- Brewer, M. B. (1988). A dual process model of impression formation. In R. S. Wyer & T. K. Srull (Eds.), *Advances in Social Cognition* (1st ed., pp. 1–36). Hillsdale, NJ: Erlbaum.
- Brewer, M. B. (1991). The social self: On being the same and different at the same time. *Personality and Social Psychology Bulletin*, 17(5), 475–482.
- Bristol, T. (1996). Persuading senior adults: The influence of endorser age on brand attitudes. *Journal of Current Issues and Research in Advertising*, 18, 59–67.
- Bristow, D. N., Schneider, K. C., & Schuler, D. K. (2002). The brand dependence scale: Measuring consumers' use of brand name to differentiate among product alternatives. *Journal of Product and Brand Management*, 11(6), 343–356.
- Britton, B. K., & Tesser, A. (1982). Effects of prior knowledge on use of cognitive capacity in three complex cognitive tasks. *Journal of Verbal Learning and Verbal Behavior*, 21(4), 421–436.
- Brownlow, S. (1992). Seeing is believing: Facial appearance, credibility, and attitude change. *Journal of Nonverbal Behavior*, 16(2), 101–115.

- Caballero, M. J., & Solomon, P. J. (1984). Effects of model attractiveness on sales response. *Journal of Advertising*, *13*(1), 17–23.
- Cadinu, M., Maass, A., Rosabianca, A., & Kiesner, J. (2005). Why do women underperform under stereotype threat? Evidence for the role of negative thinking. *Psychological science*, *16*(7), 572–578.
- Campbell, M. C., & Mohr, G. S. (2011). Seeing is eating: How and when activation of a negative stereotype increases stereotype-conducive behavior. *Journal of Consumer Research*, *38*(3), 431–444.
- Carrigan, M., & Szmigin, I. (2000). Does advertizing in the UK need older models? *Journal of Product and Brand Management*, *9*(2), 128–143.
- Cole, B., Matheson, K., & Anisman, H. (2007). The moderating role of ethnic identity and social support on relations between well-being and academic performance. *Journal of Applied Social Psychology*, *37*(3), 592–615.
- Cook, J. E., Arrow, H., & Malle, B. F. (2011). The effect of feeling stereotyped on social power and inhibition. *Personality & social psychology bulletin*, *37*(2), 165–180.
- Crocker, J. (1999). Editor's introduction to special issue on "Social Stigma: Perspectives From Experimental Social Psychology". *Journal of Experimental Social Psychology*, *35*, 1–3.
- Crocker, J., Major, B., & Steele, C. (1998). Social stigma. In D. Gilbert, S. Fiske, & G. Lindzey (Eds.), *The Handbook of Social Psychology* (4th ed., pp. 504–553). Boston: McGraw-Hill.

- Croizet, J.-C., Després, G., Gauzins, M.-E., Huguet, P., Leyens, J.-P., & Méot, A. (2004). Stereotype threat undermines intellectual performance by triggering a disruptive mental load. *Personality and Social Psychology Bulletin*, 30(6), 721–731.
- Cuddy, A. J. C., Fiske, S. T., & Glick, P. (2007). The BIAS map: Behaviors from intergroup affect and stereotypes. *Journal of Personality and Social Psychology*, 92(4), 631–648.
- Custers, R., Maas, M., Wildenbeest, M., & Aarts, H. (2008). Nonconscious goal pursuit and the surmounting of physical and social obstacles. *European Journal of Social Psychology*, 38(6), 1013–1022.
- Danaher, K., & Crandall, C. S. (2008). Stereotype threat in applied settings re-examined. *Journal of Applied Social Psychology*, 38(6), 1639–1655.
- Davies, G., & Chun, R. (2012). Employee as symbol: Stereotypical age effects on corporate brand associations. *European Journal of Marketing*, 46(5), 663–683.
- Davies, P. G., Spencer, S. J., Quinn, D. M., & Gerhardstein, R. (2002). Consuming images: How television commercials that elicit stereotype threat can restrain women academically and professionally. *Personality and Social Psychology Bulletin*, 28(12), 1615–1628.
- Day, E., & Stafford, M. (1997). Age-related cues in retail services advertising: Their effects on younger consumers. *Journal of Retailing*, 73(2), 211–233.

- Deaux, K., & Lewis, L. L. (1984). Structure of gender stereotypes: Interrelationships among components and gender label. *Journal of Personality and Social Psychology*, *46*(5), 991–1004.
- Debevec, K., & Iyer, E. (1986). The influence of spokespersons in altering a product's gender image: Implications for advertising effectiveness. *Journal of Advertising*, *15*(4), 1219.
- Delgado, A. R., & Prieto, G. (2008). Stereotype threat as validity threat: The anxiety–sex–threat interaction. *Intelligence*, *36*(6), 635–640.
- DeShields, O. W., Kara, A., & Kaynak, E. (1996). Source effects in purchase decisions: The impact of physical attractiveness and accent of salesperson. *International Journal of Research in Marketing*, *13*(1), 89–101.
- Devine, Patricia G. (1989). Stereotypes and prejudice: Their automatic and controlled components. *Journal of Personality and Social Psychology*, *56*(1), 5–18.
- Devine, P. G., & Monteith, M. J. (1999). Automaticity and control in stereotyping. In S. Chaiken & Y. Trope (Eds.), *Dual-Process Models and Themes in Social and Cognitive Psychology* (pp. 339–360). New York: Guilford Press.
- Dijksterhuis, A., Chartrand, T. L., & Aarts, H. (2007). Effects of priming and perception on social behavior and goal pursuit. In J.A. Bargh (Ed.), *Social Psychology and the Unconscious: The Automaticity of Higher Mental Processes* (pp. 51–132). Philadelphia: Psychology Press.

- Dijksterhuis, A., & Bargh, J. A. (2001). The perception-behavior expressive way: Automatic effects of social perception on social behavior. *Advances in Experimental Social Psychology*, 33, 1–40.
- Dijksterhuis, A., Smith, P. K., van Baaren, R. B., & Wigboldus, D. H. J. (2005). The unconscious consumer: effects of environment on consumer behavior. *Journal of Consumer Psychology*, 15(3), 193–202.
- Dijksterhuis, A., & van Knippenberg, A. (1996). Trait implications as a moderator of recall of stereotype-consistent and stereotype-inconsistent behaviors. *Personality and Social Psychology Bulletin*, 22(4), 425–432.
- Dion, K., Berscheid, E., & Walster, E. (1972). What is beautiful is good. *Journal of Personality and Social Psychology*, 24, 285–290.
- Dovidio, J. F., Evans, N., & Tyler, R. B. (1986). Racial stereotypes: The contents of their cognitive representations. *Journal of Experimental Social Psychology*, 22(1), 22–37.
- Duncan, R. B. (1976). The ambidextrous organization: Designing dual structures for innovation. In R. Kilman & L. Pondy (Eds.), *The Management of Organizational Design* (pp. 167–188). New York: North Holland.
- Fazio, R. H., Jackson, J. R., Dunton, B. C., & Williams, C. J. (1995). Variability in automatic activation as an unobtrusive measure of racial attitudes: a bona fide pipeline? *Journal of Personality and Social Psychology*, 69(6), 1013–1027.

- Fischer, E., Gainer, B., & Bristor, J. (1997). The sex of the service provider: Does it influence perceptions of service quality? *Journal of Retailing*, 73(3), 361–382.
- Fiske, S. T. (1998). Stereotyping, prejudice, and discrimination. In D. T. Gilbert, S. T. Fiske, & G. Lindzey (Eds.), *Handbook of Social Psychology* (4th ed., pp. 357–411). New York: New York.
- Fiske, S. T. (2000). Stereotyping, prejudice, and discrimination at the seam between the centuries: evolution, culture, mind, and brain. *European Journal of Social Psychology*, 30(3), 299–322.
- Fiske, S. T., Cuddy, A. J. C., Glick, P., & Xu, J. (2002). A model of (often mixed) stereotype content: Competence and warmth respectively follow from perceived status and competition. *Journal of Personality and Social Psychology*, 82(6), 878–902.
- Fiske, S. T., & Neuberg, S. L. (1990). A continuum of impression formation, from category-based to individuating processes: Influences of information and motivation on attention and interpretation. In M. P. Zanna (Ed.), *Advances in experimental social psychology* (pp. 1–74). New York: Academic Press.
- Fiske, S. T., & Taylor, S. E. (1991). *Social cognition* (2nd ed.). New York: McGraw-Hill.
- Fitzsimons, G. M., Chartrand, T. L., & Fitzsimons, G. J. (2008). Automatic effects of brand exposure on motivated behavior: How apple makes you “think different”. *Journal of Consumer Research*, 35(1), 21–35.

- Folkes, V. S., & Matta, S. (2013). When a product takes on characteristics of the person who created it: Sometimes it sounds sweeter. *Journal of Consumer Psychology, 23*(1), 19–35.
- Forehand, M. R., & Deshpandé, R. (2001). What we see makes us who we are: Priming ethnic self-awareness and advertising response. *Journal of Marketing Research, 38*(3), 336–348.
- Forehand, M. R., Deshpandé, R., & Reed II, A. (2002). Identity salience and the influence of differential activation of the social Self-schema on advertising response. *Journal of Applied Psychology, 87*(6), 1086–1099.
- Freeman, J. B., & Ambady, N. (2009). Motions of the hand expose the partial and parallel activation of stereotypes. *Psychological science, 20*(10), 1183–1188.
- Gardner, H. (1985). *The Mind's New Science: A history of the cognitive revolution*. New York: Basic Books.
- Gawronski, B., Deutsch, R., Mbirkou, S., Seibt, B., & Strack, F. (2008). When “Just Say No” is not enough: Affirmation versus negation training and the reduction of automatic stereotype activation. *Journal of Experimental Social Psychology, 44*(2), 370–377.
- Gilbert, D. T., & Hixon, J. G. (1991). The trouble of thinking: Activation and application of stereotypic beliefs. *Journal of Personality and Social Psychology, 60*(4), 509–517.
- Gillen, B. (1981). Physical Attractiveness: A Determinant of Two Types of Goodness. *Personality and Social Psychology Bulletin, 7*(2), 277–281.

- Gonzales, P. M., Blanton, H., & Williams, K. J. (2002). The effects of stereotype threat and double-minority status on the test performance of latino women. *Personality and Social Psychology Bulletin*, 28(5), 659–670.
- Gorn, G. J., Jiang, Y., & Johar, G. V. (2008). Babyfaces, trait inferences, and company evaluations in a public relations crisis. *Journal of Consumer Research*, 35(1), 36–49.
- Greenwald, A. G., & Leavitt, C. (1984). Audience involvement in advertising: Four levels. *Journal of Consumer Research*, 11(1), 581–592.
- Grier, S. A., & Deshpande, R. (2001). Social dimensions of consumer distinctiveness: The influence of social status on group identity and advertising persuasion. *Journal of Marketing Research*, 38(2), 216–224.
- Gürhan-Canli, Z., & Maheswaran, D. (2000). Determinants of country-of-origin evaluations. *Journal of Consumer Research*, 27(1), 96–108.
- Hamilton, D. L., & Trolie, T. K. (1986). Stereotypes and stereotyping: An overview of the cognitive approach. In J. Dovidio & S. Gaertner (Eds.), *Prejudice, Discrimination, and Racism* (pp. 127–163). Orlando: Academic Press.
- Han, C. M., & Qualls, W. J. (1985). Country-of-origin effects and their impact upon consumers' perception of quality. In J. N. Sheth & C. T. Tan (Eds.), *Historical Perspective in Consumer Research: National and International Perspectives* (pp. 162–167). Singapore: Association for Consumer Research.

- Harrison-Walker, L. (1995). The relative effects of national stereotype and advertising information on the selection of a service provider: an empirical study. *The Journal of Services Marketing*, 9(1), 47–60.
- Hausdorff, J. M., Levy, B. R., & Wei, J. Y. (1999). The power of ageism on physical function of older persons: reversibility of age-related gait changes. *Journal of the American Geriatrics Society*, 47(11), 1346–1349.
- Heath, R., & Nairn, A. (2005). Measuring affective advertising: Implications of low attention processing on recall. *Journal of Advertising Research*, 45(2), 269–281.
- Hilton, J. L., & von Hippel, W. (1996). Stereotypes. *Annual Review of Psychology*, 47, 237–272.
- Homburg, C., Wieseke, J., Lukas, B. A., & Mikolon, S. (2011). When salespeople develop negative headquarters stereotypes: Performance effects and managerial remedies. *Journal of the Academy of Marketing Science*, 39(5), 664–682.
- Hong, S.-T., & Wyer, Jr., R. S. (1989). Effects of country-of-origin and product-attribute information on product Evaluation: An information processing perspective. *Journal of Consumer Research*, 16(2), 175–187.
- Hong, S.-T., & Wyer, Jr., R. S. (1990). Determinants of product evaluation: Effects of the time interval between knowledge of a product's country of origin and information about its specific attributes. *Journal of Consumer Research*, 17(3), 277-288.

- Huber, J., & McCann, J. M. (1982). The Impact of inferential beliefs on product evaluations. *Journal of Marketing Research*, *19*, 324–333.
- Huguet, P., & Régner, I. (2007). Stereotype threat among schoolgirls in quasi-ordinary classroom circumstances. *Journal of Educational Psychology*, *99*(3), 545–560.
- Inzlicht, M., & Kang, S. K. (2010). Stereotype threat spillover: how coping with threats to social identity affects aggression, eating, decision making, and attention. *Journal of Personality and Social Psychology*, *99*(3), 467–481.
- Inzlicht, M., McKay, L., & Aronson, J. (2006). Stigma as ego depletion: How being the target of prejudice affects self-control. *Psychological Science*, *17*(3), 262–269.
- Johansson, J. K., Douglas, S. P., & Nonaka, I. (1985). Assessing the impact of country of origin on product evaluations: A new methodological perspective. *Journal of Marketing Research*, *22*(4), 388-396.
- Kahle, L. R., & Homer, P. M. (1985). Physical attractiveness of the celebrity endorser: A social adaptation perspective. *Journal of Consumer Research*, *11*(4), 954–961.
- Kawakami, K., Dion, K. L., & Dovidio, J. F. (1998). Racial prejudice and stereotype activation. *Personality and Social Psychology Bulletin*, *24*(4), 407–416.
- Kawakami, K., Dovidio, J. F., & Dijksterhuis, A. (2003). Effect of social category priming on personal attitudes. *Psychological science*, *14*(4), 315–319.

- Keller, J., & Dauenheimer, D. (2003). Stereotype threat in the classroom: dejection mediates the disrupting threat effect on women's math performance. *Personality and Social Psychology Bulletin*, 29(3), 371–381.
- Kellow, J. T., & Jones, B. D. (2008). The effects of stereotypes on the achievement gap: Reexamining the academic performance of african american high school students. *Journal of Black Psychology*, 34(1), 94–120.
- Kelly, J. R., & Hutson-Comeaux, S. L. (1999). Gender-emotion stereotypes are context specific. *Sex Roles*, 40(1/2), 107–122.
- Kervyn, N., Fiske, S. T., & Malone, C. (2012). Brands as intentional agents framework: How perceived intentions and ability can map brand perception. *Journal of Consumer Psychology*, 22(2), 166–176.
- Klein, J. G. (2002). Us versus them, or us versus everyone? Delineating consumer aversion to foreign goods. *Journal Of International Business Studies*, 33(2), 345–363.
- Klein, J. G., Ettenson, R., & Morris, M. D. (1998). The animosity of model of foreign product purchase: An empirical test in the people's republic of china. *Journal of Marketing*, 62(1), 89–100.
- Kray, L. J., Reb, J., Galinsky, A., & Thompson, L. (2004). Stereotype reactance at the bargaining table: The effect of stereotype activation and power on claiming and creating value. *Personality and Social Psychology Bulletin*, 30, 399–411.

- Kray, L. J., Thompson, L., & Galinsky, A. (2001). Battle of the sexes: Gender stereotype confirmation and reactance in negotiations. *Journal of Personality and Social Psychology*, 80(6), 942–958.
- Krugman, H. E. (1965). The impact of television advertising: Learning without involvement. *Public Opinion Quarterly*, 29(3), 349–356.
- Kwak, H., Jaju, A., & Larsen, T. (2006). Consumer ethnocentrism offline and online: The mediating role of marketing efforts and personality traits in the United States, South Korea, and India. *Journal of Academy of Marketing Science*, 34(3), 367–385.
- Leclerc, F., Schmitt., B. H., & Dube, L. (1994). Foreign branding and its effects on product perceptions and attitudes. *Journal of Marketing Research*, 31(2), 263–270.
- Lee, K., Kim, H., & Vohs, K. D. (2011). Stereotype threat in the marketplace: Consumer anxiety and purchase intentions. *Journal of Consumer Research*, 38(2), 343–357.
- Lee, N., Sandfield, A., & Dhaliwal, B. (2007). An empirical study of salesperson stereotypes amongst UK students and their implications for recruitment. *Journal of Marketing Management*, 23(7-8), 723–744.
- Lepore, L., & Brown, R. (1997). Category and stereotype activation: Is prejudice inevitable? *Journal of Personality and Social Psychology*, 72(2), 275–287.
- Levy, B. (1996). Improving memory in old age through implicit self stereotyping. *Journal of Personality and Social Psychology*, 71(6), 1092–1107.

- Lippmann, W. (1922). *Public Opinion*. New York: The Free Press.
- Macrae, C. N., Bodenhausen, G. V., Milne, A. B., Thorn, T. M. J., & Castelli, L. (1997). On the activation of social stereotypes: The moderating role of processing objectives. *Journal of Experimental Social Psychology*, 33(5), 471–489.
- Macrae, C. N., Milne, A. B., & Bodenhausen, G. V. (1994). Stereotypes as energy-saving devices: A peek inside the cognitive toolbox. *Journal of Personality and Social Psychology*, 66(1), 37–47.
- Maheswaran, D. (1994). Country of origin as stereotypes: The effects of consumer expertise and attribute information on product evaluations. *Journal of Consumer Research*, 21(2), 354–365.
- Maheswaran, D., & Chen, C. (2006). Nation equity: Incidental emotions in country-of-origin effects. *Journal of Consumer Research*, 33(3), 370–376.
- Maheswaran, D., & Chen, C. (2009). Nation equity: Country of origin effects in the global marketplace. In M. Kotabe & C. Helson (Eds.), *Handbook of International Business*. Sage Publications.
- Maheswaran, D., Mackie, D. M., & Chaiken, S. (1992). Brand name as a heuristic cue: The effects of task importance and expectancy confirmation on consumer judgments. *Journal of Consumer Psychology*, 1(4), 317–336.
- Major, B., Spencer, S., Schmader, T., Wolfe, C., & Crocker, J. (1998). Coping with negative stereotypes about intellectual performance: The role of psychological disengagement. *Personality and Social Psychology Bulletin*, 24(1), 34–50.

- Marx, D. M., & Stapel, D. A. (2006). Distinguishing stereotype threat from priming effects: On the role of the social self and threat-based concerns. *Journal of Personality and Social Psychology, 91*(2), 243–254.
- Marx, D. M., & Stapel, D. A. (2006). Understanding stereotype lift: On the role of the social self. *Social Cognition, 24*(6), 776–792.
- Matta, S., & Folkes, V. S. (2005). Inferences about the Brand from Counterstereotypical Service Providers. *Journal of Consumer Research, 32*(2), 196–206.
- McArthur, L. Z., & Apatow, K. (1984). Impressions of baby-faced adults. *Social Cognition, 2*(4), 315–342.
- Media trends track: Network TV activity by length of commercial. (2010). Retrieved July 8, 2010, from http://www.tvb.org/rcentral/mediatrendstrack/tvbasics/26_Net_TV_Activity
- Melnyk, V., Klein, K., & Völckner, F. (2012). The double-edged sword of foreign brand names for companies from emerging countries. *Journal of Marketing, 76*(6), 21–37.
- Mohr, L., & Henson, S. (1996). Impact of employee gender and job congruency on customer satisfaction. *Journal of Consumer Psychology, 5*(2), 161–167.
- Monteith, M. J., Sherman, J., & Devine, P. G. (1998). Suppression as a stereotype control strategy. *Personality and Social Psychology Review, 2*(1), 63–82.

- Murphy, M. C. Steele, C. M., & Gross, J. J. (2007). Signaling threat: How situational cues affect women in math, science, and engineering settings. *Psychological Science, 18*(10), 879–885.
- Netemeyer, R. G., Durvasula, S., & Lichtenstein, D. R. (1991). A cross-national assessment of the reliability and validity of the CETSCALE. *Journal of Marketing Research, 28*(3), 320–327.
- Neuberg, S. L., & Fiske, S. T. (1987). Motivational influences on impression formation: Outcome dependency, accuracy-driven attention, and individuating processes. *Journal of Personality and Social Psychology, 53*(3), 431–444.
- Nijssen, E. J., & Douglas, S. P. (2004). Examining the animosity model in a country with a high level of foreign trade. *International Journal of Research in Marketing, 21*(1), 23–38.
- Nijssen, E. J., & Herk, H. van. (2009). Conjoining international marketing and relationship marketing: Exploring consumers' cross-border service relationships. *Journal of International Marketing, 17*(1), 91–115.
- Patzer, G. L. (1983). Source credibility as a function of communicator physical attractiveness. *Journal of Business Research, 11*(2), 229–241.
- Pendry, L. F., & Macrae, C. N. (1996). What the disinterested perceiver overlooks: Goal-directed social categorization. *Personality and Social Psychology Bulletin, 3*, 250–257.

- Pieters, R., Warlop, L., & Wedel, M. (2002). Breaking through the clutter: Benefits of advertisement originality and familiarity for brand attention and memory. *Management Science*, 48(6), 765–781.
- Pieters, R., & Wedel, M. (2004). Attention capture and transfer in advertising: Brand, pictorial and text size effects. *Journal of Marketing Research*, 68(2), 36–50.
- Plant, E. A., & Devine, P. G. (1998). Internal and external sources of motivation to respond without prejudice. *Journal of Personality and Social Psychology*, 75(3), 811– 832.
- Pratto, F., & Bargh, J. A. (1991). Stereotyping based on individuating information: Trait and global components of sex stereotypes under attention overload. *Journal of Experimental Social Psychology*, 27(1), 26–47.
- Quinn, K. A., & Rosenthal, H. E. S. (2012). Categorizing others and self: How social memory structures guide social perception and behavior. *Learning and Motivation*, 43(4), 247–258.
- Quinn, D. M., & Spencer, S. J. (2001). The interference of stereotype threat with women's generation of mathematical problem-solving strategies. *Journal of Social Issues*, 57(1), 55–71.
- Ramsey, J. L., Langlois, J. H., Hoss, R. A., Rubenstein, A. J., & Griffin, A. (2004). Origins of a stereotype: Categorization of facial attractiveness by 6-month-old infants. *Developmental Science*, 7(2), 201–211.

- Rao, A., & Kent Monroe. (1989). The effect of price, brand name, and store name on buyers' perception of product quality: An integrative review. *Journal of Marketing Research*, 26(3), 351–357.
- Reingen, P. H., & Kernan, J. B. (1993). Social perception and interpersonal influence: Some consequences of the physical attractiveness stereotype in a personal selling setting. *Journal of Consumer Psychology*, 2(1), 25–38.
- Russell, C. A., & Russell, D. W. (2010). Guilty by stereotypic association: Country animosity and brand prejudice and discrimination. *Marketing Letters*, 21(4), 413–425.
- Schimmel, J., Arndt, J., Banko, K., & Cook, A. (2004). Not all self-affirmations were created equal: The cognitive and social benefits of affirming the intrinsic (vs. extrinsic) self. *Social Cognition*, 22(1), 75–99.
- Schmader, T., & Johns, M. (2003). Converging evidence that stereotype threat reduces working memory capacity. *Journal of Personality and Social Psychology*, 85(3), 440–452.
- Schmader, T., Johns, M., & Forbes, C. (2008). An integrated process model of stereotype threat effects on performance. *Psychological Review*, 115(2), 336–356.
- Sczesny, S., & Stahlberg, D. (2002). The influence of gender-stereotyped perfumes on leadership attribution. *European Journal of Social Psychology*, 32(6), 815–828.
- Shapiro, J. R., & Neuberg, S. L. (2007). From stereotype threat to stereotype threats: Implications of a multi-threat framework for causes, moderators,

- mediators, consequences, and interventions. *Personality and Social Psychology Review*, 11(2), 107–130.
- Sherman, J. W., Stroessner, S. J., Conrey, F. R., & Azam, O. A. (2005). Prejudice and stereotype maintenance processes: Attention, attribution, and individuation. *Journal of Personality and Social Psychology*, 89(4), 607–622.
- Shimp, T. A., & Sharma, S. (1987). Consumer ethnocentrism: Construction and validation of the CETSCALE. *Journal of Marketing Research*, 24(3), 280–289.
- Smith, J. L., & White, P. H. (2002). An examination of implicitly activated, explicitly activated, and nullified stereotypes on mathematical performance: It's not just a woman's issue. *Sex Roles*, 47(3/4), 179–191.
- Spencer, S. J., Steele, C. M., & Quinn, D. M. (1999). Stereotype threat and women's math performance. *Journal of Experimental Social Psychology*, 35(1), 4–28.
- Stafford, T. F., Leigh, T. W., & Martin, L. L. (1995). Assimilation and Contrast Priming Effects in the Initial Consumer Sales Call. *Psychology and Marketing*, 12(4), 321–347.
- Stangor, C., & Lange, J. E. (1994). Mental representations of social groups: Advances in understanding stereotypes and stereotyping. *Advances in Experimental Social Psychology* (Vol. 26, pp. 357–416). Academic Press.

- Steele, C. M., & Aronson, J. (1995). Stereotype threat and the intellectual test performance of African-Americans. *Journal of Personality and Social Psychology*, 69(5), 797–811.
- Stone, J. (2002). Battling doubt by avoiding practice: The Effect of stereotype threat on self-handicapping in white athletes. *Personality and Social Psychology Bulletin*, 28(12), 1667–1678.
- Stone, J., Lynch, C. I., Sjomeling, M., & Darley, J. M. (1999). Stereotype threat effects on Black and White athletic performance. *Journal of Personality and Social Psychology*, 77(6), 1213–1227.
- Stricker, L. J., & Ward, W. C. (2004). Stereotype threat, inquiring about test takers' ethnicity and gender, and standardized test performance. *Journal of Applied Social Psychology*, 34(4), 665–693.
- Sujan, M., Bettman, J. R., & Sujan, H. (1986). Effects of consumer expectations on information processing in selling encounters. *Journal of Marketing Research*, 23(4), 346–353.
- Sundaram, D. S., & Webster, C. (2000). The role of nonverbal communication in service encounters. *Journal of Services Marketing*, 14(5), 378–391.
- Tajfel, H. (1981). *Human groups and social categories* (pp. 127–142). Cambridge: Cambridge University Press.
- Tajfel, H., & Turner, J. C. (1986). An integrative theory of intergroup conflict. In S. Worchel & W. Austin (Eds.), *Psychology of Intergroup Relations* (pp. 2–24). Chicago: Nelson-Hall.

- Taylor, S. E., Fiske, S. T., Etcoff, N. L., & Ruderman, A. J. (1978). Categorical and contextual bases of person memory and stereotyping. *Journal of Personality and Social Psychology*, 36(7), 778–793.
- Thakor, M. V., Suri, R., & Saleh., K. (2008). The effects of service context and co-consumer age on service-related attitudes. *Journal of Retailing*, 84(2), 137–149.
- Till, B. D., & Busler, M. (1998). Matching products with endorsers: Attractiveness versus expertise. *Journal of Consumer Marketing*, 15(6), 576–584.
- Till, B., & Bussler, M. (2000). The match-up hypothesis: Physical attractiveness , expertise , and the role of fit on brand attitude, purchase intention and brand beliefs. *Journal of Advertising*, 29(3), 1–13.
- Turner, J. C., Hogg, M. A., Oakes, P. J., Reicher, S. D., & Wetherell, M. S. (1987). *Rediscovering the social group* (pp. 77–121). Oxford: Basil Blackwell.
- Uekermann, F., Herrmann, A., Wentzel, D., & Landwehr, J. R. (2010). The influence of stimulus ambiguity on category and attitude formation. *Review of Managerial Science*, 4(1), 33–52.
- Verlegh, P. W. J., & Steenkamp, J.-B. E. M. (1999). A review and meta-analysis of country-of-origin research. *Journal of Economic Psychology*, 20, 521–546.
- Walton, G. M., & Cohen, G. L. (2003). Stereotype lift. *Journal of Experimental Social Psychology*, 39, 456–467.

- Weisbuch, M., Pauker, K., & Ambady, N. (2009). The subtle transmission of race bias via televised nonverbal behavior. *Science*, *326*(5960), 1711–4.
- Wheeler, S. C., & Petty, R. E. (2001). The effects of stereotype activation on behavior: A review of possible mechanisms. *Psychological Bulletin*, *127*(6), 797–826.
- Whipple, T. W., & Courtney, A. E. (1980). How to portray women in TV commercials. *Journal of Advertising Research*, *20*(2), 53–60.
- Whipple, T. W., & Courtney, A. E. (1985). Female role portrayals in advertising and communication effectiveness: a review. *Journal of Advertising*, *14*(3), 4–8.
- White, K., & Argo, J. J. (2009). Social identity threat and consumer preferences. *Journal of Consumer Psychology*, *19*(3), 313–325.
- Wittenbrink, B., Judd, C. M., & Park, B. (1997). Evidence for racial prejudice at the implicit level and its relationship with questionnaire measures. *Journal of Personality and Social Psychology*, *72*(2), 262–274.

Chapter 3: Brand Perception: Influence of Gender Cues on Dimensions of Warmth and Competence

Role and Contribution of Co-Authors

Alexandra Hess, Valentyna Melnyk and Carolyn Costley

I (Alexandra Hess) am chiefly responsible for the conception and design of this work, conducting the experiments, analyzing and interpreting the data, as well as the writing of the manuscript. Valentyna Melnyk supervised each step of this process. In particular, Valentyna Melnyk advised on developing the research question, advised on the questionnaire design and advised on the data analysis process and implications. Valentyna Melnyk commented and edited on an earlier version of the manuscript. Carolyn Costley advised on developing the research question, gave advise on the questionnaire designed and edited the final paper. Valentyna Melnyk and Carolyn Costley advised on developing the research question.

Abstract

Consumers often judge brands and companies using heuristics such as the warmth and competence dimensions. Our study demonstrates that subtle feminine (vs. masculine) primes incorporated into a product's description increases perceived brand warmth which translates to a higher purchasing likelihood. Interestingly, this effect is especially profound for masculine products.

3.1 Introduction

Today's challenge for advertisers is to increase positive brand perception and influence consumers with increasingly low attention spans. Advertisers must find ways to convey the right brand image in a short time and with the restricted mental resources of the consumer. One potential solution is to utilize stereotypes because people activate stereotypes in less than milliseconds, almost automatically (Bargh 1997). Hence, activating stereotype knowledge may influence desired brand perceptions automatically and effectively.

Most stereotypes fall between two robust fundamental dimensions: warmth and competence (Fiske, Cuddy, Glick, and Xu 2002; Fiske et al. 2007). Aaker, Vohs and Mogilner (2010) examined these dimensions and found that people perceive non-profit organizations as warmer than for-profit, but as less competent. Furthermore, perceived competence, rather than warmth influences purchasing behavior.

Aaker et al.'s (2010) research shows that the warmth and competence dimensions influence marketplace decision making. Our study therefore aims to find ways to increase warmth/competence of a brand via subtle cues. Towards this we investigate whether utilizing gender stereotypes in the product description influences the warmth/competence perception of a brand. Further, we investigate how the perception of warmth/competence influences purchasing behavior depending on a product's gender (Fugate and Phillips, 2010). Specifically, we seek conditions where warmth influences purchasing behavior.

3.2 Theoretical Background

The stereotypical woman is viewed as warm, whereas men as competent (Asbrock, 2010; Eagly and Mladinic 1994; Eagly, Mladinic, and Otto 1994). What's more, we activate gender stereotypical knowledge on the basis of cues associated to gender stereotypes (e.g., occupation, physical appearance etc.; Banaji and Hardin 1996; Deaux and Lewis 1984). Consequently, those cues could take the form of colors and symbols which are associated with a gender (Fagot et al. 1997; Leinbach, Hort, and Fagot 1997) and which we believe are triggers for activating gender stereotype knowledge. Therefore, we assume that gender cues incorporated with product descriptions influence brand perceptions along the warmth and competence dimensions. In addition, consumers automatically assign a gender to most products (e.g., hair spray is feminine whereas coffee is masculine; Fugate and Phillips, 2010). Hence, in our first study, we estimate the effect of (in)congruence between the perceived gender of the product category and the gender of the subtle cues in the product's description on the product's purchase likelihood.

3.3 Methodology

We first test the effect of gender primes on purchasing intention for masculine versus feminine typed products. Second, we investigate the role of warmth and competence as the mediator for gender prime and purchasing likelihood.

In an online experiment, 204 participants (110 female) were randomly assigned to one of the six conditions of the 2 (masculine vs. feminine product) x 3 (masculine vs. feminine vs. no prime) between-subjects design throughout 3 different product categories within-subject. The gender-typed products were

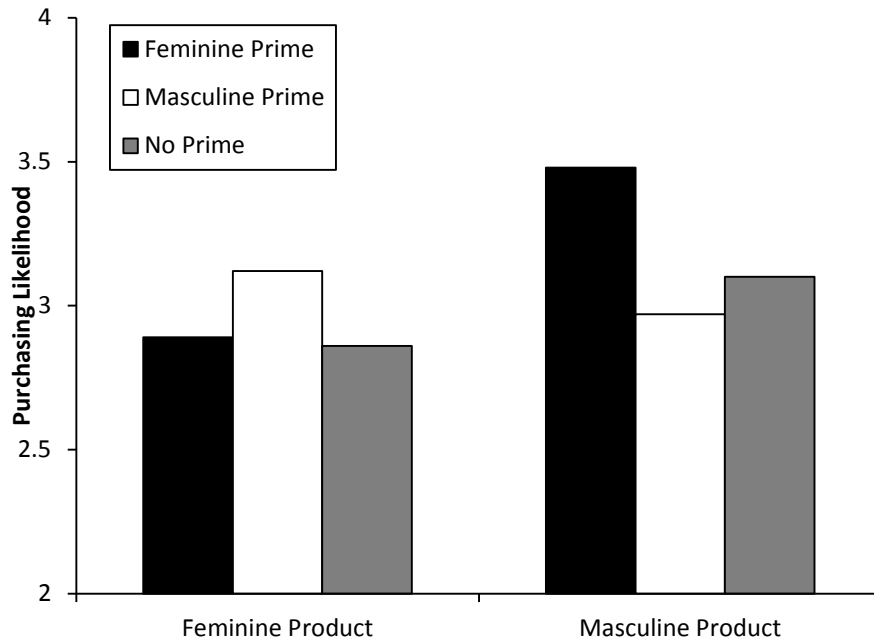
chosen on the basis of a pre-test. The gender primes were symbols and colors which are previously identified as male-typed or as female-typed (Fagot et al. 1997; Leinbach et al. 1997).

Participants evaluated advertisements via seven 7-point scales: purchasing likelihood as well as warmth, kindness, and generosity which comprises the warmth index (Cronbach's $\alpha = .85$) and competence, effectiveness and efficiency which comprises the competence index (Cronbach's $\alpha = .90$; Aaker et al. 2010; Grandey et al., 2005; Judd et al., 2005).

We conducted a 2 (masculine vs. feminine product) x 2 (masculine vs. feminine prime) between-subjects ANOVA with purchase likelihood as the dependent variable throughout all product categories. The main effects of product gender and gender prime were insignificant (both $ps > .10$). However, we found a significant positive interaction effect between product gender and gender prime ($F(1,407) = 5.513, p < .02$), suggesting that gender primes moderate the effect of gender-typed products (see Figure 1).

FIGURE 1

PURCHASING LIKELIHOOD OF GENDER-TYPED PRODUCTS, PRIMED WITH FEMININE CUES, MASCULINE CUES OR NO PRIME



The follow-up planned comparisons reveal for the masculine products that feminine primes lead to a higher purchase likelihood than masculine primes ($t(605) = 2.326, p = .02$). For the feminine products, masculine primes were not significantly higher compared to feminine primes ($t(605) = -1.041, p > .05$). Thus, the results indicate that feminine primes increase purchase likelihood significantly when combined with a masculine product.

To test the role of perceived warmth and competence of a brand we conducted two separate mediation analyses between gender primes and purchasing likelihood (Zhao, Lynch Jr., and Chen, 2010). The result indicates that warmth mediates the effect of gender primes on purchase likelihood. Namely, the indirect effect from the conducted bootstrap analysis is negative and significant ($a \times b = -.1415$), with a 95% confidence interval excluding zero (-0.2819 to -0.0104). In the

indirect path, the masculine prime decreases warmth by $a = -0.2499$, and holding constant the prime, each unit increase in warmth increases purchasing likelihood by $b = 0.5663$. We conducted the same analysis with competence as the mediator and found it to be insignificant with a 95% confidence interval including zero (-0.2549 to 0.0285). Therefore, the results suggest that feminine primes enhance purchase likelihood via increased warmth of the product. Interestingly, we do not find the same effect for masculine primes.

To understand the underlying process of warmth and competence more thoroughly, we are currently conducting further studies, where we manipulate the baseline (warmth/competence) of a brand as well as gender cues.

3.4 Discussion and Implications

Our results indicate that feminine primes enhance perceived warmth which increases purchase likelihood for masculine products. Interestingly, perceived warmth serves as a mediator between prime and purchasing likelihood, yet competence does not.

With our study we directly address Aaker et al.'s (2010) call to investigate conditions under which perceived warmth drives purchasing likelihood. Further, we demonstrate that feminine symbols and colors can trigger feminine gender stereotype knowledge which can be utilized to influence brand perception and consumer behavior.

From a practical viewpoint, our results provide important implications for companies and their marketplace decisions. Thus, companies that sell masculine

products are able to utilize female advertising cues to increase their brands perception of warmth, which in turn, translates to a higher purchasing likelihood.

References

- Aaker, Jennifer., Kathleen D. Vohs, and Cassie Mogilner (2010), "Nonprofits are Seen as Warm and For-Profits as Competent: Firm Stereotypes Matter," *Journal of Consumer Research*, 37 (August), 224-237.
- Asbrock, F. (2010). Stereotypes of social groups in Germany in terms of warmth and competence. *Social Psychology*, 41(2), 76.
- Banaji, Mahzarin R. and Curtis Hardin (1996), "Automatic Stereotyping," *Psychological Science*, 7 (May), 136-141.
- Bargh, John A. (1997), "The Automaticity of Everyday Life," in *Advances in Social Cognition*, Vol. 10, ed. Robert S. Wyer, Jr., Mahwah, NJ: Erlbaum, 1-61.
- Deaux, Kay and Laurie L. Lewis (1984), "Structure of Gender Stereotypes: Interrelationship among Components and Gender Label," *Journal of Personality and Social Psychology*, 46 (May), 991-1004.
- Eagly, Alice. H. and Antonio Mladinic (1994), "Are People Prejudiced Against Women? Some Answers from Research on Attitudes, Gender Stereotypes, and Judgments of Competence" in *European Review of Social Psychology*, Vol. 5 ed. Wolfgang Stroebe and Miles Hewstone, New York: Wiley, 1-35.
- Eagly, Alice. H., Antonio Mladinic, and Stacey Otto (1994), "Cognitive and Affective Bases of Attitudes toward Social Groups and Social Policies," *Journal of Experimental Social Psychology*, 30 (March), 113-137.

- Fagot, Beverly I., Mary D. Leinbach, Barbara E. Hort, and Jennifer Strayer (1997), "Qualities Underlying the Definitions of Gender," *Sex Roles*, 37 (July), 1-17.
- Fiske, Susan T., Amy J. C. Cuddy, and Peter Glick (2007), "Universal Dimensions of Social Cognition: Warmth and Competence," *Trends in Cognitive Sciences*, 11 (February), 77-83.
- Fiske, Susan T., Amy J. C. Cuddy, Peter Glick, and Jun Xu (2002), "A Model of (often Mixed) Stereotype Content: Competence and Warmth Respectively Follow from Perceived Status and Competition," *Journal of Personality and Social Psychology*, 82 (June), 878-902.
- Fugate, Douglas. L. and Joanna Phillips (2010), "Product Gender Perceptions and Antecedents of Product Gender Congruence," *Journal of Consumer Marketing*, 27 (3), 251-261.
- Grandey, Alicia, Glenda Fisk, Anna Mattila, Karen Jansen, and Lori Sideman (2005), "Is 'Service with a Smile' Enough? Authenticity of Positive Displays During Service Encounters," *Organizational Behavior and Human Decision Processes*, 96 (January), 38-55.
- Judd, Charles M., Hawkins, Laurie James-Hawkins, Vincent Yzerbyt, and Yoshihisa Kashima, (2005), "Fundamental Dimensions of Social Judgment: Understanding the Relations between Judgments of Competence and Warmth," *Journal of Personality and Social Psychology*, 89 (December), 899-913.

Leinbach, Mary Driver, Barbara E. Hort, and Beverly I. Fagot (1997), "Bears are for Boys: Metaphorical Associations in Young Children's Gender Stereotypes," *Cognitive Development*, 12 (March), 107-130.

Zhao, Xinshu., John G. Lynch Jr., and Qimei Chen (2010), "Reconsidering Baron and Kenny: Myths and Truths about Mediation Analysis," *Journal of Consumer Research*, 37 (August), 197-206.

Chapter 4: Warmth and Competence: How and When Implicit Gender Cues Enhance Brand Perception

Role and Contribution of Co-Authors

Alexandra Hess, Valentyna Melnyk and Carolyn Costley

I (Alexandra Hess) am chiefly responsible for the conception and design of this work, conducting the experiments, analyzing and interpreting the data, as well as the writing of the manuscript. Valentyna Melnyk supervised each step of this process. In particular, Valentyna Melnyk gave conceptual advice on this work, helped with the questionnaire design as well as on the data analysis process and implications. Valentyna Melnyk commented on all versions of the manuscript. Carolyn Costley advised on stimulus material and questionnaire design. Carolyn Costley advised on a later version of the manuscript, helped with manuscript clarity and cohesiveness as well as edited the final paper.

Abstract

In this research, we investigate the effect of implicit gender cues on brand warmth and competence perceptions. Further, we examine how consumers react to implicit gender cues when exposed to additional warmth/competence cues. We propose a conceptual framework that takes multiple warmth and competence cues into account. The conceptual framework is then used to assess the effects of implicit gender, warmth and competence cues on consumer perception of brands and purchasing intention. Consistent with the conceptual framework, across 3 studies we find that implicit feminine gender cues enhance perceived brand

warmth and purchase intention when paired with a high competence cue yet backfire when paired with a low competence cue. On the other hand, implicit masculine gender cues enhance perceived brand competence and purchase intention when paired with low competence cues yet decrease purchasing likelihood when combined with high competence cues.

4.1 Introduction

Various environmental cues affect consumer brand perceptions. To the extent possible, marketers manage cues to evoke desired brand perceptions. One tactic is to use brand name, packaging, or product to cue gender-related associations. For example, the international charitable organization Pink Ribbon chose pink as their brand color to evoke traditional feminine gender roles such as being beautiful, being good, caring for other people and being cooperative (Gayle 2010). In the same way, IBM's masculine blue logo signals strength, power and solidarity (Logoblog 2012). Nevertheless, prior research demonstrates that gender cues can sometimes backfire. For instance, use of a pink ribbon in a breast cancer campaign led to reductions in donations, increased consumer difficulty when processing advertising and reduced advertisement recall (Puntoni, Sweldens, and Tavassoli 2011). These uncertainties highlight how crucial it is for marketers to understand consumers' reactions to implicit gender cues.

Academic literature in social psychology has established that the presence of gender cues can automatically activate gender stereotype knowledge (Banaji and Hardin 1996). For example, a cue which is related to the typical female (e.g., long hair or feminine perfume) activates the stereotypical feminine content of warmth; on the other hand, a cue which is related to the typical male (e.g., short hair or

masculine perfume) can trigger content of competence (Asbrock, 2010; Eagly and Mladinic 1994; Eagly, Mladinic, and Otto 1994). Recent literature suggests that consumers also perceive brands on warmth and competence dimensions (Aaker, Vohs, and Mogilner 2010; Aaker, Garbinsky, and Vohs 2012; Kervyn, Fiske, and Malone 2012). Furthermore, perceptions of a brand's warmth and competence independently increase purchasing intention (Kervyn et al. 2012). This suggests that implicit gender cues incorporated into a firm's marketing efforts, including advertising or product packaging (e.g., colors such as pink or blue), may activate perceptions of warmth and/or competence and subsequently influence overall brand perception and purchasing intention.

Despite a growing interest in the effects of implicit cues on consumer judgments and behavior (Bargh 2002), consumer scholars have, to date, failed to attend to pertinent questions. Scholars have not investigated the effects of implicit gender cues on consumers' brand perceptions or purchase intentions. Esteemed authors have stressed the value of simultaneously accounting for multiple cues (e.g., Aaker et al. 2010). Yet, no one has made a systematic effort to develop a theoretical model to account for the effects of multiple warmth and competence cues on brand perceptions and purchase intentions.

Our goal was to develop and test a theoretical framework for cue interactions. We developed the framework by integrating assimilation and contrast effects (e.g., Carpenter and Nakamoto 1980; Gill 2008; Ziamou and Ratneshwar 2003) into a cue diagnosticity framework (Purohit and Srivastav 2002). We then conducted three experiments to test the framework. The tests demonstrated that implicit gender cues (as warmth and competence cues) have asymmetric effects on purchase intentions in the presence of high versus low contextual competence

cues. Our contribution is two-fold. First, our theoretical model fulfills the call to identify conditions under which activating warmth versus competence enhances purchasing intention (Aaker et al. 2010). We develop and test a theoretical framework of interaction between multiple warmth and competence cues from the consumer environment. Second, we demonstrate that implicit gender cues increase warmth or competence asymmetrically, depending on the presence of competence cues. Thereby, we extend knowledge regarding gender stereotypes from interpersonal social settings to brand perception (Banaji and Hardin 1996; Deaux and Lewis 1984).

Finally, researchers across academic disciplines emphasize the importance of conceptual replications (Lynch et al. 2012; Nosek, Spies, and Motyl 2012; Schmidt 2009). We achieved conceptual replication by testing our predictions across three different contexts and manipulations. We manipulated implicit gender cues in three different ways: colors, animal symbols and shapes.

The rest of this article proceeds as follows. First, we review literature on warmth and competence in brand perceptions. Then we present our theoretical framework. A review of gender stereotypes and implicit gender cues leads to our hypotheses. After that, we report on the three experiments. We conclude by discussing the theoretical and managerial implications of our findings, limitations and avenues for further research.

4.2 Theoretical Background

WARMTH AND COMPETENCE IN BRAND PERCEPTION

The anthropomorphism of brands, companies and products is gaining increasing attention in the marketing literature (Aggarwal and McGill 2012).

Anthropomorphism is the attribution of humanlike characteristics to non-human agents (Epley, Waytz, and Cacioppo 2007; Waytz et al. 2010). Marketers and consumers tend to imagine products and brands having gender and personality (Fugate and Phillips 2010; Grohmann 2009; Milner and Fodness 1996).

Anthropomorphism pervades the brand literature as scholars theorize about brand personality (Aaker 1997) and consumers forming relationships with brands (e.g., Fournier 1998).

Anthropomorphism is particularly prevalent in recent research on human traits associated with brands and firms. Research identifies warmth and competence as the two fundamental dimensions of (human) social perceptions applicable to brands (Aaker et al. 2010; Aaker et al. 2012; Fournier and Alvarez 2012; Kervyn et al. 2012; Keller 2012). It is not surprising that warmth and competence are fundamental dimensions of brand perceptions. These dimensions account for 82% of the variance in people's perceptions of everyday social behavior of other people (Wojciszke, Bazinska, and Jaworski 1998). People evaluate others, interpret behavior and form impressions in a 'split-second' based on their apparent warmth and competence (Ybarra, Chan, and Park 2001). Although scholars continue to debate definitions and the exact content of the concepts (e.g., Aaker 1997; Grandey, Fisk, Mattila, Jansen, and Sideman 2005; Judd et al. 2005), they agree that warmth reflects traits related to perceived intent, including

friendliness, helpfulness, sincerity, trustworthiness and morality which is closely related to communion (Cuddy, Fiske and Glick, 2008). They also agree that competence includes traits related to ability, including intelligence, skill, creativity and efficacy which is closely related to agency (Cuddy, Fiske and Glick, 2008, for a review see Fiske, Cuddy, and Glick 2007).

Recent evidence suggests consumers perceive brands and firms along the same dimensions of warmth and competence as they do humans (Aaker et al. 2010; Kervyn et al. 2012). Aaker et al. (2010) found that consumers stereotype organizations on the same dimensions. In particular, consumers perceived for-profit organizations as more competent than non-profit organizations and non-profits as warmer than for-profits.

Finally, Kervyn et al (2012) demonstrated that consumers categorize brands based on perceived ability (competence) and intentions (warmth). They found that both dimensions independently increase purchase intentions and loyalty. Hence, in order to improve purchasing behavior, marketers should enhance consumers' perceptions of the brand's competence and/or warmth. One possible way to enhance warmth and competence is by way of implicit cues. There are many cues in a consumer's environment that can elicit warmth or competence (e.g., Aaker et al. 2010; Kervyn et al. 2012). Aaker et al. (2010) found that the ".org" versus ".com" at the end of a domain name triggered warmth and competence, respectively. In addition, established brand names can signal both competence and warmth (Kervyn et al. 2012). For example, USPS and Amtrak score high in warmth whereas Mercedes, Porsche and Rolex score high in competence (Kervyn et al. 2012). It seems that consumers typically come across a variety of warmth and competence cues.

The effectiveness of cues can be enhanced or decreased by the presence of another cue (Enger 1987). Because consumers are surrounded by numerous cues signaling warmth or competence, it is crucial for marketers to understand how these cues interact with each other. In this research we investigate the effects of warmth and competence cues on brand perceptions and purchasing intention when paired with another competence/warmth cue. We begin by proposing a theoretical model for the co-existence of multiple cues.

THEORETICAL MODEL FOR CUE INTERACTION

Cue Diagnosticity Framework

Consumers combine available cues from their environment to categorize and evaluate a brand (Feldman and Lynch 1988; Skowronski and Carlston 1987, 1989). The extent to which a specific cue influences evaluations varies with its diagnosticity (Feldman and Lynch 1988; Slovic and Lichtenstein 1971). Diagnosticity refers to perceived relevance, usefulness and sufficiency of information for making a decision (Feldman and Lynch, 1988).

When consumers are exposed to multiple cues they use the more diagnostic cue in their judgment (Purohit and Srivastava, 2001). In their cue diagnostic framework, Purohit and Srivastava (2001) suggest that the diagnosticity of cues, and thus its use, depends on the presence-valence of other cues. They differentiate cues into two types: high scope cues and low scope cues (see also Gidron, Koehler, and Tversky 1993). High scope cues are more stable and diagnostic compared with low scope cues, which are transient in nature and less diagnostic. The diagnosticity of a high scope cue depends less on the presence-valence of other cues. In contrast, the diagnosticity of low scope cues varies depending on

the presence-valence of high scope cues in the environment: a low scope cue becomes relatively more diagnostic when paired with a positive high scope cue, opposed to a negative high scope cue, which makes the low scope cue less diagnostic (Purohit and Srivastava 2001). The following section discusses whether cues that activate warmth and competence are equally diagnostic and if one of the cues can be classified as higher or lower scope.

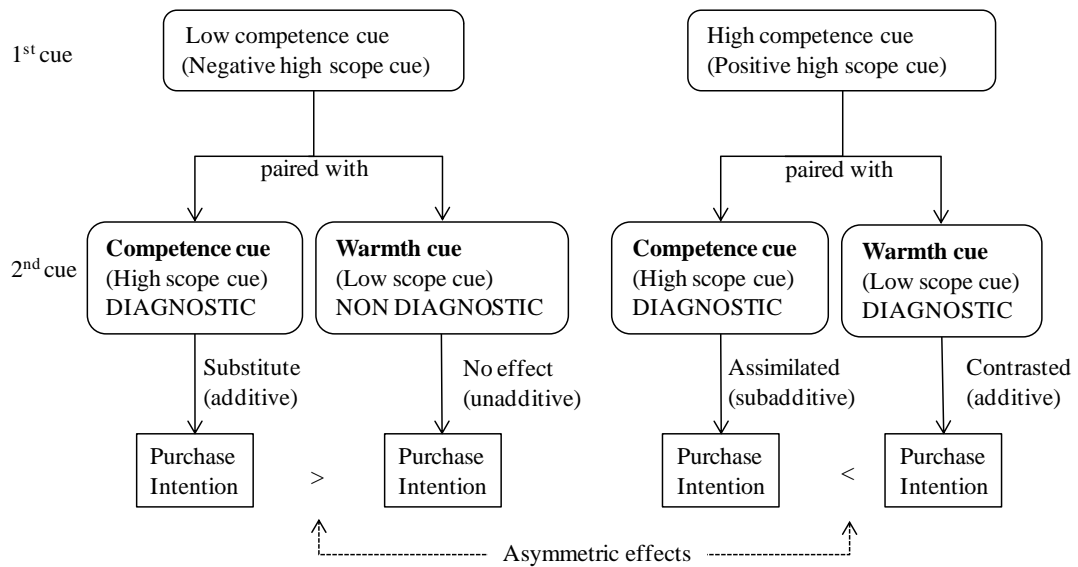
Primacy of Competence in Brand Perception

Social perception literature suggests that the diagnosticity of warmth and competence for evaluating human behavior varies depending on the context (e.g., Abele and Wojciszke 2007; Cuddy, Glick and Beninger 2011; Richetin et al. 2012; Wojciszke and Abele 2008). Warmth is more important in social interactions, while competence is more central in corporate settings (e.g., client-lawyer or patient-doctor; Cuddy et al. 2011; Richetin et al. 2012; Wojciszke and Abele 2008). This relationship is repeated in a marketing context by evidence that perceived organization competence predicts a consumer's behavior better than perceived warmth (Aaker et al. 2010).

Together, social perception and business perception evidence suggests that competence weighs heavily in consumers' brand evaluations and is likely to be considered more diagnostic than warmth. Consequently, competence cues represent high scope cues, whereas warmth cues represent low scope cues. According to the cue diagnosticity framework (Purohit and Srivastava 2001), a warmth cue would not be diagnostic when paired with a low competence cue, yet would become diagnostic when paired with a high competence cue. On the other

hand, a competence cue paired with either a high or a low competence cue should always be diagnostic (see Figure 1).

FIGURE 1: THEORETICAL MODEL FOR THE EVALUATION OF BRANDS VIA MULTIPLE WARMTH AND COMPETENCE CUES



Effects of Warmth and Competence Cues when paired with a Low Competence Cue

Figure 1 illustrates that a warmth cue (second cue) paired with a low competence cue (first cue) is not diagnostic. Hence a warmth cue itself does not increase perceptions of brand warmth. It is unadditive. In contrast, a competence cue (second cue) paired with a low competence cue (first cue) is diagnostic. It would be used in consumer judgments, as the competence cue is able to substitute the low competence cue. Consequently, the competence cue adds competence to the overall brand perception; it is additive. The enhanced perception of brand competence increases purchasing intention (Kervyn et al. 2012) (see Figure 1).

Effects of Warmth and Competence Cues when paired with a High Competence Cue

While a low competence cue anchors the left side of Figure 1, a high competence cue anchors the right side. This side shows that both a competence cue (second cue) and a warmth cue (second cue) paired with a high competence cue (first cue) are diagnostic (Purohit and Srivastava 2001). In this scenario we predict that consumers compare the second cue to the first cue (e.g., warmth/competence cue will be compared to the high competence cue) which leads to assimilation or contrast of the second cue. Consequently, we estimate the influence of the warmth and competence cues on overall brand perception as an assimilation towards, or as a contrast away from, the high competence cue.

Assimilation versus contrast of new stimuli is a psychological phenomenon (Herr, Sherman, and Fazio 1983; Schwarz and Bless 1992) established as robust across various contexts. By comparing an assessed stimulus to the context, humans make judgments of both people and objects. Specifically, when a new stimulus (e.g., second cue/warmth cue) appears to be different from the context (e.g., first cue/high competence cue), it will be contrasted away from the context. In contrast, when a new stimulus (e.g. second cue/competence cue) is perceived to be similar to the context (e.g. first cue/high competence cue), it will be assimilated in the direction of the context (Herr et al. 1983).

Because of the similarity of a competence cue paired with a high competence cue, we expect that the added competence cue will be assimilated into the high competence cue. However, a warmth cue added to a high competence cue will be

perceived as different, resulting in the warmth cue being contrasted away (see Figure 1).

The consequence of the assimilation versus contrast procedure will affect how consumers add the utility of the second cue to the overall brand perception. In the case of congruency between the two competence cues, there is a diminishing marginal utility. According to the law of diminishing marginal utility (Hicks 1939; Nowlis and Simonson 1996), the more information a consumer receives, the less useful any additional information becomes. In the current context, when a competence second cue is added to a high competence first cue, it is assimilated and the brand perception along the competence dimension will be subject to diminishing returns because of similar competence cues (the incremental amount of the added competence decreases as the prior competence of the base increases). Consequently, the competence cue is sub-adding competence to the overall brand perception (subadditive).

In the case of incongruence between cues (high competence first cue and warmth second cue), the warmth cue (which is diagnostic according to the cue diagnostic framework) will be positively contrasted with the high competence cue and perceived as gain in warmth. Accordingly, the warmth cue adds warmth to the overall brand perception (additive) which leads to a higher purchasing intention (Kervyn et al. 2012).

In sum, we expect an asymmetrical effect on purchase likelihood for warmth and competence cues paired with high versus low competence cues. Figure 1 outlines the proposed theoretical model. The next section discusses what type of

cue can serve as a warmth and competence cue and accordingly enhance the warmth and/or competence of a brand.

IMPLICIT GENDER CUES

Scattered findings from previous research indicate that it is possible to enhance a firm's perceived competence within an experimental setting. This can be done either directly or implicitly. For example, providing additional information about the firm (e.g., recommendation by a respectable news outlet; see also Berger, Draganska, and Simonson 2007) directly enhances competence. An example of implicit competence priming would be to expose a consumer to the concept of money (e.g., a simple exposure to a money reminder (money symbols) on a computer screen before seeing the actual advertisement can activate the competence concept; see also Vohs, Mead, and Goode 2006; Aaker et al. 2010). In this article we look at how competence can be enhanced via implicit cues incorporated into an advertisement.

It is more difficult to increase perceptions of warmth than perceptions of competence (Tausch, Kenworthy, and Hewstone 2007). This is because competence is viewed as not easily "faked", while warmth is seen as easily "faked" (Reeder et al. 2002). An example can be seen in positive warm behavior being interpreted as "trying to get something" (Cuddy et al. 2011). Consequently, the nature of the warmth impression makes it very difficult to artificially cultivate as consumers may be resistant to persuasive attempts. One possible way to increase a brand's perceived warmth and/or competence by implicit cues is by using gender stereotypes. The next section discusses the reasons gender stereotypes effectively increase perceived warmth and competence.

Implicit Gender Cues as Warmth and Competence Cue

Both warmth and competence underpin the content of gender stereotypes. The stereotypical woman is seen as being kind, sympathetic, concerned about others, warm hearted, communal, expressive and warm (Asbrock, 2010; Broverman, Vogel, Broverman, Clarkson, and Rosenkrantz 1972; Eagly and Mladinic 1994; Eagly et al. 1994; Eagly and Steffen 1984; Rudman 1998; Spence and Helmreich 1978). In contrast, the stereotypical man is viewed as possessing achievement orientated traits, like being forceful, decisive, independent, rational, agentic, instrumental and competent (Asbrock, 2010; Broverman et al. 1972; Eagly and Mladinic 1994; Eagly and Steffen 1984; Eagly et al. 1994; Rudman 1998; Spence and Helmreich 1978). Together, typical masculine traits relate to agency, ambition, and power and typical feminine traits relate to nurturing, empathy and concern for others (Spence and Buckner 2000; Twenge 1997). These constellations of traits have been labeled variously as an agentic or competence dimension for masculine traits and as communal or warmth dimension for feminine traits (see Rudman and Glick, 2008, for a review). Additionally, gender, next to race, is the central dimension humans use to categorize others (Fiske, Lin, and Neuberg 1999; Fiske and Neuberg 1990; van Knippenberg, van Twuyver, and Pepels 1994). The frequent use of the sex category makes this category highly accessible (Brewer 1988; Fiske and Neuberg 1990). In addition, people activate gender stereotypes in less than milliseconds (Bargh 1997) and without any conscious deliberation or intention (Bargh and Chartrand 1999; Devine 1989; Hassin, Uleman, and Bargh 2005).

It is not only biological gender that activates gender stereotype knowledge. Things that are related to gender stereotypes, such as traits, roles, occupations, and

physical appearance (Deaux and Lewis 1984), can automatically activate gender stereotypes. Furthermore, simple information regarding gender or feature cues (e.g., words like nurse or mechanic) can lead to automatic activation of gender stereotype knowledge (Banaji and Hardin 1996; Blair and Banaji 1996, Macrae and Martin 2007). Hence, any cue that is related to a gender stereotype (implicit gender cues) could activate gender stereotype knowledge of warmth and competence.

Implicit gender cues could take many forms in an advertising context. Along with stereotypical gender traits, research shows that people associate gender with specific symbols and colors (Fagot et al. 1997; Leinbach et al. 1997). For example, people associate butterflies, cats, flowers and hearts with females. Typical male associated items include bears, dogs and squares (Fagot et al. 1997; Leinbach et al. 1997).

Implicit gender cues are not limited to symbols. Colors can also cue gender. In particular, pink is considered a typical feminine color and blue is a typical masculine color (Fagot et al. 1997; Leinbach et al. 1997). Besides their potential to cue gender, there is evidence that implicit gender cues, such as the colors pink and blue, can cue warmth and competence. Research established that people connect pink with nurturing, warmth and softness (Clark and Costall 2007; Fraser and Banks 2004; Mahnke 1996). Pink is related to the brand personality of sincerity (Labrecque and Milne 2011). People associate blue with communication, efficiency, intelligence, duty and logic (Fraser and Banks 2004; Mahnke 1996; Wright 1988), and with the brand personality of competence (Labrecque and Milner 2011). Hence, these symbols and colors could function as implicit gender

cues, which, when incorporated in advertising, would cue warmth and competence.

We expect that things related to gender, such as symbols and colors, can cue warmth or competence. When incorporated in a print ad these implicit gender cues serve as warmth and competence cues and should enhance perceptions of a brand's warmth and competence. Specifically, an implicit feminine cue may enhance warmth and an implicit masculine cue may enhance competence.

People's perceptions of a brand's competence and warmth are expected to independently enhance purchasing likelihood (Kervyn et al. 2012). In keeping with our conceptual framework (see Figure 1), we expect the effect of implicit gender cues on warmth and competence perceptions is moderated by the presence of high versus low competence cues (presence-valence of high scope cue). That is, we expect that an implicit feminine cue (warmth cue) paired with a high competence cue (positive high scope cue) becomes diagnostic; an implicit masculine cue (competence cue) remains diagnostic. In the case of incongruence between an implicit feminine cue (warmth cue) and a high competence cue (positive high scope cue), the feminine cue (warmth cue) will be positively contrasted and therefore increase the warmth of a brand and the subsequent purchasing likelihood. However, in the case of congruence between an implicit masculine gender cue and a high competence cue (positive high scope cue), the implicit masculine cue (competence) will be assimilated into the high contextual competence cue and thus will be subject to diminishing marginal utility. Hence the masculine cue will not enhance perceived competence of the brand. More formally:

H1: In the presence of high competence cues, implicit feminine cues (compared to implicit masculine cues) increase purchasing likelihood

H2: In the presence of high competence cues, the effect of implicit feminine cues on purchasing likelihood is mediated by warmth of the brand

In the presence of a low competence cue (negative high scope cue), an implicit feminine cue (warmth cue) is not diagnostic. Hence, the brand will not gain any perceived warmth. On the other hand, an implicit masculine cue (competence cue), which is diagnostic (as a high scope cue), will substitute for the low competence cue. Consequently, the brand will increase on the warmth dimension and subsequently enhance purchasing likelihood.

H3: In the presence of low competence cues, implicit masculine cues (compared to implicit feminine cues) increase purchasing likelihood

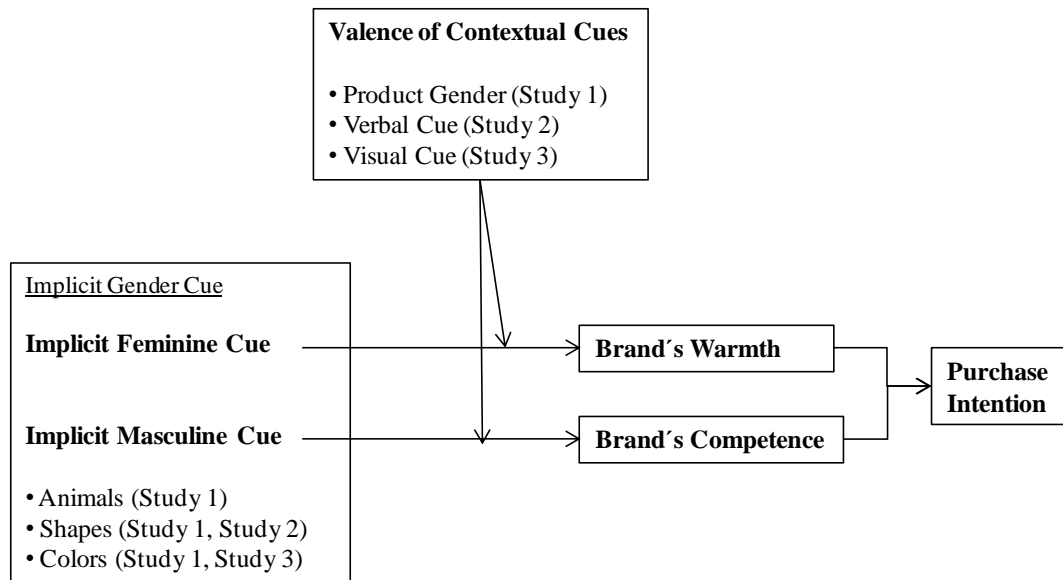
H4: In the presence of low competence cues, the effect of implicit masculine cues on purchasing likelihood is mediated by competence of the brand

OVERVIEW OF EMPIRICAL MODEL AND EXPERIMENTS

This research proposes that implicit gender cues, as a function of the valence of competence cue, drives consumers inference about the brands warmth and competence perception, which in turn influences purchasing intention. Across 3

experiments we operationalized the valence of competence cues using contextual cues (see Figure 2 for Conceptual Framework)

FIGURE 2: CONCEPTUAL FRAMEWORK



We test our theoretical framework and hypotheses regarding the benefits and drawbacks of implicit gender cues for warmth and competence in three studies. Study 1 provided initial support for the hypothesis that feminine cues enhance warmth when paired with a high competence cue, which leads to a higher purchasing likelihood (hypothesis 1 and 2). We operationalized implicit gender cues using animals, shapes and colors. We manipulated the valence of a contextual competence cue via the presence of a gender type product. Study 2 provided further evidence that the effect of implicit gender cues on brand perception and purchasing likelihood is moderated by the presence of contextual competence cues. In study 2, we operationalized the implicit gender cue using shapes in the background and the valence of contextual competence via verbal cues. That is, hypotheses 1 to 4 were supported when consumers obtain information about the brand from a high versus low credibility newspaper

(contextual cue). Finally, study 3 confirmed hypotheses 1 to 4 by operationalizing the gender cue via a colored stripe on the bottle, and the valence of contextual competence via visual cues. Namely, when the spokesperson of the brand was dressed in a formal lab coat or casually dressed (contextual cue). Study 3 used visual cues to manipulate the valence of competence and to examine the practical implications of the findings (i.e., using visual cues, without relying on actual information to harness the advantages of implicit gender cues). Additionally, study 3 used a different set of implicit gender cues compared to study 2 to examine the generalizability of the findings. Appendix 5 provides a table which summarizes all three studies in terms of how each construct was manipulated.

4.3 Study 1: Implicit Gender Cues and Gender-Typed Products

The goal of study 1 was to test the effect of the influence of implicit gender cues in the presence of contextual competence cues. Because consumers automatically and unconsciously assign a gender to most products (e.g., hair spray is considered to be feminine whereas coffee is perceived as masculine; Fugate and Phillips 2010), we operationalized the valence of contextual competence cues via gender type products. We expected masculine products to be high contextual competence cues and feminine products to be low contextual competence cues.

Consistent with hypotheses 1 and 2, we expected implicit feminine cues (compared to implicit masculine cues) to increase warmth and subsequent purchasing likelihood for masculine products (as high contextual competence cue). In contrast, in line with hypothesis 3 and 4, we expect that implicit masculine cues (compared to feminine cues) increase competence and subsequent purchasing likelihood for feminine products (as low contextual competence cue).

Pre-test

Masculine versus feminine products. To identify masculine and feminine products from a similar product category, we asked 43 participants (51.2 % female) to indicate how masculine / feminine they perceived the product to be. We identified masculine versus feminine products for the following 3 product categories: beverages, electronic goods and hair products. In each product category the masculine product was rated significantly more masculine than the corresponding feminine equivalent on a 7-point-scale (-3 =extremely masculine; 3 = extremely feminine). The results of the t-tests revealed that respondents perceived a chocolate drink to be more feminine (less masculine) than coffee ($M_{\text{chocolate}} = .77$; $SD = 1.11$ $M_{\text{coffee}} = -.09$; $SD = .95$, $t(42) = 4.11$, $p = .00$), hair spray more feminine (less masculine) than hair wax ($M_{\text{spray}} = 1.07$; $SD = 1.58$ $M_{\text{wax}} = -1.021$; $SD = 1.01$, $t(42) = -7.689$, $p < .001$) and a mobile phone more feminine (less masculine) than a camcorder ($M_{\text{mobil}} = -.14$; $SD = 1.01$; $M_{\text{camcorder}} = -1.02$; $SD = 1.08$; $t(42) = 5.737$, $p < .001$). In addition, we identified sport shoes and antiperspirant shower gel, which we used in study 2 and as the gender neutral products. Some t-test revealed that that sport shoes ($M_{\text{sport_shoes}} = -.33$; $SD = 1.25$, $t(42) = -1.71$, $p > .05$) and antiperspirant shower gel ($M_{\text{antiperspirant_sgel}} = -.26$; $SD = 1.45$; $t(42) = -1.15$, $p > .05$) did not differ significantly from the midpoint of 0.

Method

Study design and sample. Study 1 uses a 2 (contextual competence cue: high versus low) x 3 (implicit gender cue: masculine cue vs. feminine cue vs. no cue) between-subjects design with 3 product categories (electronics, beverages and hair products) within-subject. In order to manipulate the valence of the contextual

competence cues we used feminine and masculine typed products. The gender typed products were chosen based on the pre-test.

To enhance faith in the accuracy of the results and to ensure that the results were not subject to random occurrences (Lynch et al. 2012; Nosek et al. 2012; Schmidt 2009), we paid special attention to stimulus replication. Specifically, we used multiple gender cues: 1) colors for the beverage category (blue for masculine vs. pink for feminine); 2) animal symbols for the electronic category (bear for masculine vs. butterfly for feminine); and 3) geometric symbols for the hair product category (squares for masculine vs. circles for feminine).

Implicit gender cues were symbols and colors which were previously identified as male-typed or as female-typed (Fagot et al. 1997; Leinbach et al. 1997). The choice of the gender cues is also supported by Moss's (2009) work showing that round shapes, bright colors such as pink and organic elements (e.g. plant life, flowers) are associated with female design elements; compared with straight lines, colors such as navy blue as well as more aggressive elements which are associated with male designs. Based on this evidence we choose pink, circles (round shape) and a butterfly (organic elements) as implicit feminine cues and navy like blue, square (straight lines) and an aggressive looking bear as implicit masculine cue. Moreover, we used fictitious brand names that have been shown to be gender neutral (Yorkston and de Mello 2005). To control for a potential price effect, the price in each product category was held constant across all conditions (e.g., the price of the coffee and the chocolate drink were the same).







We used online snowball sampling to collect data. Online experiments offer a good alternative to lab experiments because they can reach consumer samples and

decrease response style bias (Deutskens et al. 2004; Fischer, Völckner, and Sattler 2011, Melnyk, Klein, and Völckner 2012). The sample consisted of 204 (110 female) respondents randomly assigned to the 6 experimental conditions.

Procedure and measures. Respondents received an online link and an invitation to participate in the online experiment. They were presented 3 advertisements each followed by a set of questions. Each ad showed the product, its brand name, assorted product information, and the product's price. The stimuli for the feminine product of each category are shown in figure 3 (the stripe in the masculine (feminine) cue condition is blue (pink)); the stimuli for the masculine product condition were identical with the exception that the feminine product (e.g., Chocolate Drink) was replaced with the respective masculine product (Coffee). In the control group, participants were shown the ad without any implicit gender cues incorporated into the packaging or the background.

After viewing each advertisement, participants indicated their likelihood to purchase the product shown in the ad on a 7-point scale (1=not at all likely; 7=very likely). In addition they indicated to what extent they believed "XXX-Brand is....?" warm, kind, generous (warmth index; Cronbach's $\alpha = .853$), competent, effective, efficient (competent index, Cronbach's $\alpha = .908$; Aaker et al. 2010; Grandey et al. 2005; Judd et al. 2005) on a 7-point scale (1= not at all; 7= very much).

FIGURE 3: STIMULI FOR STUDY 1 (FOR FEMININE PRODUCTS-
WITHOUT CONTROL GROUP)

	Masculine Cue	Feminine cue
Electronic	<p>VAL Mobile Phone</p> <p><i>Products for the future... VAL makes it possible</i></p> <ul style="list-style-type: none"> • NEW DESIGN • 2YR WARRANTY • MONEY BACK GUARANTEE  <p>\$277.95 <small>msrp</small></p>	<p>VAL Mobile Phone</p> <p><i>Products for the future... VAL makes it possible</i></p> <ul style="list-style-type: none"> • NEW DESIGN • 2YR WARRANTY • MONEY BACK GUARANTEE  <p>\$277.95 <small>msrp</small></p>
Hair Product	<p>Zat Hair Spray</p>  <p>Experience the Zat way of life</p> <p>Available at your local pharmacy and supermarket</p> <p>R.R.P \$6.99</p>	<p>Zat Hair Spray</p>  <p>Experience the Zat way of life</p> <p>Available at your local pharmacy and supermarket</p> <p>R.R.P \$6.99</p>
Beverage	<p>Halix Chocolate Drink</p>  <p><i>Take the Halix taste-test today</i></p> <p>only \$9.59 <small>at all good retailers nationwide</small></p>	<p>Halix Chocolate Drink</p>  <p><i>Take the Halix taste-test today</i></p> <p>only \$9.59 <small>at all good retailers nationwide</small></p>
	Note: stripe on packaging is blue	Note: stripe on packaging is pink

To control for potential alternative explanations for purchasing likelihood, we measured interest in the product category. Participants indicated their general interest in the product on a 101-point sliding scale, 0 = “not at all interested”; 100 = “very much interested”). There were no significant differences between masculine and feminine products ($p > .10$).

Manipulation Checks

Gender type product. For each product, respondents indicated how masculine / feminine they perceived the product to be. In each product category (beverage, hair products, electronic products), the masculine product was rated significantly more masculine than the corresponding feminine equivalent on a 7-point-scale (1=definitely feminine; 7=definitely masculine). The results of the t-tests revealed that respondents perceived a chocolate drink to be more feminine (less masculine) than coffee ($M_{\text{chocolate}} = 2.94$; $M_{\text{coffee}} = 4.19$, $t(203) = -12.468$, $p < .001$), hair spray more feminine (less masculine) than hair wax ($M_{\text{spray}} = 1.88$; $M_{\text{wax}} = 4.02$, $t(203) = -14.738$, $p < .001$) and a mobile phone more feminine (less masculine) than a camcorder ($M_{\text{mobile}} = 4.09$ $M_{\text{camcorder}} = 4.73$, $t(203) = -8.753$, $p < .001$).

Results and Discussion

We conducted a 2 (masculine vs. feminine product) \times 2 (implicit masculine vs. implicit feminine cue) full factorial analysis of variance (ANOVA) with purchase likelihood as the dependent variable across product categories. We found a significant positive interaction between product gender and implicit gender cue ($F(1,407) = 5.513$, $p < .02$). Follow-up contrasts revealed that for the masculine product, the presence of implicit feminine cues led to a higher purchase likelihood than the presence of implicit masculine cues ($M_{\text{fem_cue}} = 3.48$, $SD = 1.64$ vs.

$M_{\text{mas_cue}} = 2.97$, $SD = 1.50$; $t(604) = 2.326$, $p = .02$), in support of hypothesis 1. In the presence of a contextual high competence cue (masculine product), implicit feminine cues increased purchasing likelihood compared to implicit masculine cues. For feminine products, the effect of masculine cues were not significantly higher compared to the effects of feminine cues ($M_{\text{fem_cue}} = 2.89$, $SD = 1.58$ vs. $M_{\text{mas_cue}} = 3.12$, $SD = 1.67$; $t(605) = -1.041$, $p = .298$). This means that hypotheses 3 and 4 were not supported when a feminine product was the contextual low competence cue. We thought that a possible explanation for the absence of the effect of masculine cues for brands of feminine products is that feminine products are not necessarily perceived as low in competence. To assess this possibility, we conducted a follow up study (see appendix 1 for details) and found that feminine products are perceived as neither low nor high in competence.

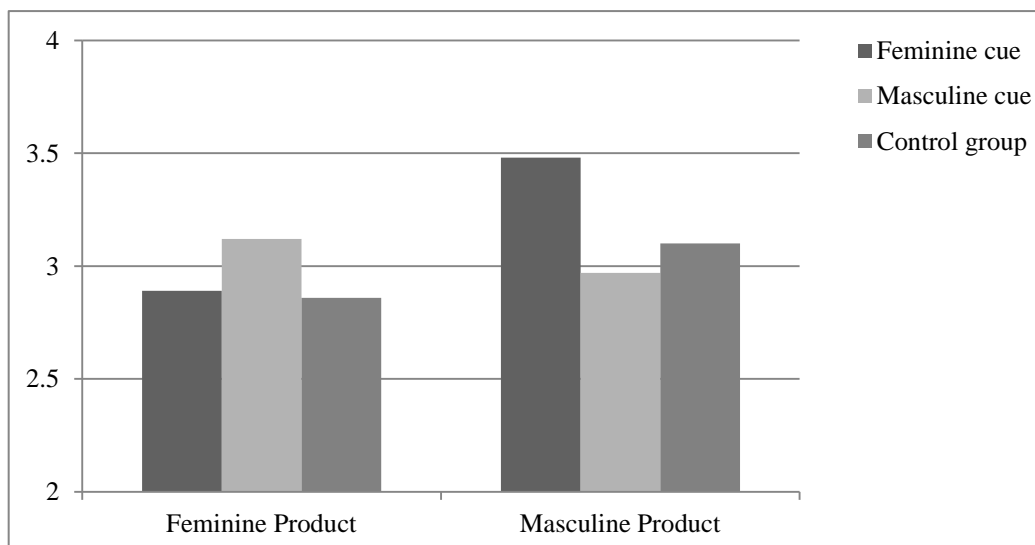
The main effects of product gender and implicit gender cues were insignificant (both p 's $> .10$), indicating that, overall, respondents were as likely to purchase feminine as masculine products and that the cue on its own did not have a significant main effect on purchase likelihood.

Mediation analysis with warmth as mediator. To test whether warmth and competence are the underlying reasons for the effect of implicit gender cues on purchasing likelihood, we conducted two separate mediation analyses between implicit gender cues and purchasing likelihood. The result of the mediation analysis (Preacher and Hayes 2008; Zhao, Lynch, and Chen 2010) indicates that the effect of the implicit feminine gender cues on purchase likelihood is mediated by warmth, in support of hypothesis 2. Namely, the indirect effect from the conducted bootstrap analysis is negative and significant ($a \times b = -.1415$), with a 95% confidence interval excluding zero (-0.2819 to -0.0104). In the indirect path, the

masculine cue decreased warmth by $a = -0.2499$, and holding constant the cue, a unit increasing in warmth increases purchasing likelihood by $b = 0.5663$. The direct (c-prime path) effect of the implicit gender cue on purchasing likelihood was not significant ($b = -.0984, p > .10$), indicating indirect-only mediation (Zhao et al. 2010). Thus, hypothesis 2 is supported. In the presence of a high competence cue (masculine product), the effect of implicit feminine cues on purchasing likelihood is mediated by warmth.

Mediation analysis with competence as mediator. We conducted the same analysis for competence as the mediator and found it to be insignificant with a 95% confidence interval including 0 (-0.2549 to 0.0285). Consequently, the effect of higher purchasing likelihood for masculine products (high competence cue) with a pink stripe (feminine cue) is not mediated by perceived competence. Together, the results suggest that feminine cues, compared to masculine cues, enhance purchasing likelihood of masculine products due to a higher perception of warmth (see Figure 4).

FIGURE 7: PURCHASE LIKELIHOOD OF GENDER TYPED PRODUCTS IN THE PRESENCE OF IMPLICIT GENDER CUES (STUDY 1)



In line with our prediction that implicit feminine cues (compared to implicit masculine cues) enhance warmth and subsequent purchasing intention in the presence of a high competence cue (hypothesis 1 and 2), the results of the study indicate that implicit feminine cues do indeed increase warmth which leads to a higher purchasing likelihood for brands of masculine products. However the absence of an effect of implicit masculine cues for feminine products can be explained by feminine products not being a contextual low competence cue, which we confirmed in our follow up study (see appendix 1) Hence in the subsequent study, we chose to directly manipulate the contextual competence cues to further test hypotheses 1 to 4.

4.4 Study 2: Shapes and Verbal Cues

Unlike study 1, in study 2 we directly manipulate the valence of contextual competence cues by providing direct information about the respective brand (contextual verbal cues). We also add a separate contextual warmth cue (explicit warmth cue). We manipulate implicit gender cues via shapes in the background; namely, we include an implicit gender cue (i.e., circles versus squares) with the background of a print advertisement. The objective of study 2 is to test whether verbal contextual warmth and competence cues moderate the effect of an implicit gender cue on a brands warmth/competence perception and subsequently purchase likelihood. In line with hypothesis 1 and 2, we expect that an implicit feminine cue (circles), compared to an implicit masculine cue (squares), enhances warmth and subsequent purchasing likelihood in the presence of a contextual verbal high competence cue (i.e., high credible endorsement). In contrast, consistent with hypothesis 3 and 4, we predict that implicit masculine cues (squares), compared to implicit feminine cues (circles), enhance competence and subsequent purchasing

likelihood in the presence of a contextual verbal low competence cue (i.e., low credible endorsement).

Method

Study design and sample. Study 2 used a 2 (contextual verbal competence cue: high versus low) \times 2 (contextual verbal warmth cue: high versus low) \times 3 (implicit gender cue: masculine versus feminine versus no cue) between-subjects design. We used sport shoes as a gender neutral product, which we chose based on our pre-test results. We collected data using an online consumer panel in New Zealand, which was outsourced and conducted by a professional firm specializing in online market research. Online panels offer a good alternative to lab experiments because they can reach representative consumer samples and decrease response style bias (Melnyk et al. 2012; Fischer et al. 2011). The total sample consisted of 390 (192 female) respondents randomly assigned to the 12 experimental conditions (see appendix 2 for details regarding representativeness of sample).





Procedure and measures. Potential participants received an invitation to take part in an online survey. Participants were shown a fictitious advertisement that showed a gender neutral product, its brand name, its price, and a short description. To ensure that product was perceived as gender neutral, we emphasized in the product description that this product is a unisex product. To control for a potential price effect, the price was held constant across all conditions. In order to manipulate brand warmth, we indicated that with each purchase the brand donates either 10 dollars (high warmth) or 0.01 cent (low warmth) to the Salvation Army. Competence was manipulated by adapting Aaker et al.'s (2010) methods, via

including a statement on the print advertisement that suggests the product was either recommended by a high credible source (high competence) or by a low credible source (low competence). As a low credible source we chose a monthly free newsletter (Coffee News) which is distributed to restaurants, cafés and bars containing one page of entertainment news and multiple advertisers. As a high credible source we chose a nationwide publication (Consumer Magazine), a monthly magazine which reviews consumer products and is highly accepted as an independent expert source. The stimuli for the high warmth conditions are shown in Figure 5; the stimuli for the low warmth conditions were identical except “10 dollars” was replaced with “0.01 cent”.

After the advertisement was shown, we asked respondents to report their first impression of the brand on a 10-point scale (“1” = very negative/ bad; “10” = very positive / good). Next, we measured purchasing likelihood on a 7-point scale (1 = “definitely no”; 7 = “definitely yes”), which served as the dependent variable in our analysis. Next, participants rated, on a 7-point scale, their perception of the brand’s warmth (warm, kind, and generous; $\alpha = .923$) and competence (competent, effective, and efficient, $\alpha = .969$).

Finally, we controlled for product category interest as an alternative driver for consumer purchasing likelihood. At the conclusion of the questionnaire we asked participants: “In general how interested are you in sport shoes? (1-point scale, “0” = not at all interested, “10” = very much interested)

FIGURE 5: STIMULI FOR STUDY 2 (FOR HIGH WARMTH CONDITION – WITHOUT CONTROL GROUP)

	Masculine Cue	Feminine cue
High Competence	<p>VAL Sport Shoes</p>  <p>Unisex Sport Shoes featuring special stretching panels that expand and contract with each step. RRP 100 NZD</p> <p>consumer magazine Recommends VAL Sport Shoes</p> <p>VAL Sport Shoes donates 10 dollars from this purchase to the Salvation Army during the month of April</p>	<p>VAL Sport Shoes</p>  <p>Unisex Sport Shoes featuring special stretching panels that expand and contract with each step. RRP 100 NZD</p> <p>consumer magazine Recommends VAL Sport Shoes</p> <p>VAL Sport Shoes donates 10 dollars from this purchase to the Salvation Army during the month of April</p>
Low Competence	<p>VAL Sport Shoes</p>  <p>Unisex Sport Shoes featuring special stretching panels that expand and contract with each step. RRP 100 NZD</p> <p>Coffee News Recommends VAL Sport Shoes</p> <p>VAL Sport Shoes donates 10 dollars from this purchase to the Salvation Army during the month of April</p>	<p>VAL Sport Shoes</p>  <p>Unisex Sport Shoes featuring special stretching panels that expand and contract with each step. RRP 100 NZD</p> <p>Coffee News Recommends VAL Sport Shoes</p> <p>VAL Sport Shoes donates 10 dollars from this purchase to the Salvation Army during the month of April</p>

Manipulation Checks

Warmth. To test whether participants could recall the correct monetary amount of donation, we asked respondents in an open ended question to write down the amount the brand is donating to the Salvation Army per sale. Results of the independent sample t-test revealed that participants indicated a significantly lower amount in the low warmth condition compared to the high warmth condition ($M_{low} = .50, SD = 1.98$ vs. $M_{high} = 9.73, SD = 1.84, t(360) = -45.853, p < .001$). Next we asked participants to indicate on an 11-point scale how warm, kind and generous

($\alpha = .965$) they perceive a brand which donates the amount shown in the stimuli (0 = “not at all”; 10 = “very much”). They judged a brand which donates 10 dollars as significantly warmer than a brand which donates 0.01 cent ($M_{10\text{dollar}} = 6.01$; $SD = 2.53$ vs. $M_{0.01\text{cent}} = 2.27$; $SD = 2.64$; $t(371) = -14.196$, $p < .001$)

Competence. We tested the perceived competence/credibility of the endorser (Consumer Magazine vs. Coffee News) which recommends the sport shoes in a similar manner as Aaker et al. (2010). Participants answered on an 11-point scale from 1 (not at all) to 10 (very much) “How credible do you perceive the endorser of the product to be?” and “How competent do you perceive the endorser of the product to be?” ($\alpha = .920$). Results of the independent sample t-test revealed that participants perceive the Consumer Magazine (high competence) as significantly more competent/credible as Coffee News (low competence) ($M_{CM} = 5.95$, $SD = 2.36$ vs. $M_{CN} = 5.04$, $SD = 2.15$, $t(372) = -3.881$, $p < .001$).

Results and Discussion

Purchasing likelihood. We estimated a 2 (implicit gender cue background: circle (feminine) versus square (masculine)) \times 2 (contextual verbal competence cue: Consumer Magazine (high) versus Coffee News (low)) \times 2 (contextual verbal warmth cue: donation of .01 (low) cent versus 10 dollars (high)) full-factorial analysis of variance ANOVA with purchase likelihood as the dependent variable and interest in product category as covariate. As expected, we found a significant interaction between competence and implicit gender cues ($F(1, 241) = 10.244$, $p = .002$). Follow up contrasts show that when circles are used in the background of print advertisements (implicit feminine cue), participants in the high competence condition were more likely to purchase the product than participants viewing

squares in the background (implicit masculine cue) ($M_{\text{fem_cue}} = 3.94$ vs. $M_{\text{mas_cue}} = 3.45$; $F(1, 241) = 4.295$, $p < .04$), in support of hypothesis 1. Hence, in the present of a high competence cue (Consumer Magazine/high credible source), implicit feminine cues (circles in background) increase purchasing likelihood. However, in the low competence conditions, participants are more likely to purchase the product when the squares (implicit masculine cue) are in the background compared with the circles (implicit feminine cue) ($M_{\text{fem_cue}} = 3.25$ vs. $M_{\text{mas_cue}} = 3.81$; $F(1, 241) = 5.957$, $p < .02$), in support of hypothesis 3. Thus, in the presence of a contextual verbal low competence cue (Coffee News/low credible cue), an implicit masculine cue (squares in background) enhances purchasing likelihood.

Similar to study 1, we did not find any further main or interaction effects for any of the variables ($p > .05$). This suggests that, on their own, the contextual verbal competence cue and the implicit gender cue do not enhance purchasing likelihood, nor does the contextual verbal warmth cue in isolation, or in combination with the implicit gender cue and competence cue.

To discover whether the effects of implicit feminine gender cues on purchasing likelihood in the presence of contextual verbal high competence cues are indeed mediated by the brand's warmth (hypothesis 2) and whether the effect of implicit masculine cues in the presence of low competence cues is mediated by the brand's competence (hypothesis 3), separate mediation analyses were conducted amongst participants in both the high and low competence conditions.

Mediation analysis with warmth as mediator amongst participants in the high competence condition. For the high competence conditions we expect the following mediation: feminine cue \rightarrow warmth of brand \rightarrow purchasing likelihood.

As the mediation variable we use the warmth index for brand perception. When applying bootstrapping procedures (Preacher and Hayes 2008; Zhao et al. 2010), we found a positive and significant ($p < .001$) effect of warmth on purchase likelihood. The indirect effect of the implicit feminine cues on purchase likelihood was positive and significant ($a*b = .2262$), with the 95% confidence interval excluding zero (.0390 to .5010). The direct (c-prime path) effect of the implicit feminine cue on purchase likelihood was not significant ($B = .2655, p > .05$), thus indicating indirect-only mediation (Zhao et al. 2010).

Mediation analysis with competence as mediator amongst participants in the high competence condition. Amongst the same participants we ran the same bootstrap analysis for competence as mediator and found that the mean indirect effect was not significant, with a 95% confident interval including zero (-.0054 to .4312). Hence, in the presence of a contextual verbal competence cue, warmth but not competence mediates the effect of implicit feminine cues and purchasing likelihood, supporting hypothesis 2.

Mediation analysis with competence as mediator amongst participants in the low competence condition. For the low competence conditions we expect the following mediation: implicit masculine cue → competence of brand → purchasing likelihood. As the mediation variable we use the competence index for brand perception. Applying the bootstrapping procedures (Preacher and Hayes 2008; Zhao et al. 2010), we found a positive and significant ($p < .001$) effect of competence on purchase likelihood. The indirect effect of the masculine cues on purchase likelihood was positive and significant ($a*b = .1724$), with the 95% confidence interval excluding zero (.0186 to .4166). The direct (c-prime path)

effect of the masculine cue on purchase likelihood was not significant ($B = .3945$, $p > .05$), thus indicating indirect-only mediation (Zhao, Lynch, and Chen 2010).

Mediation analysis with warmth as mediator amongst participants in the low competence condition. The bootstrap analysis for warmth as mediator amongst the same participants (low competence condition) revealed that the mean indirect effect was not significant, with a 95% confidence interval including zero (-.0380 to .2884). Hence, in the presence of a contextual verbal high competence cue, competence but not warmth mediates the effect of implicit gender cues on purchasing likelihood, supporting hypothesis 4. Together, these results suggest that in the presence of a contextual verbal high competence cue (e.g., credible endorsement), consumers are more likely to purchase from the respective brand when it is paired with an implicit feminine cue (e.g., circles) due to an increase in the brand's warmth perception. In contrast, in the presence of a low competence cue, masculine cues enhance a brand's competence perception which translates into a higher purchasing likelihood.

First impression. To gain additional insights into the presence of multiple cues, we asked respondents to report their first impression of the brand on a 10 -point scale ("1" = very negative/ bad; "10" = very positive / good). It is of interest to witness implicit gender cues as function of a contextual verbal competence cues and how this affects the impression of the brand following the same pattern as purchasing intention.

We estimated a 3 (implicit gender cue: circles in background vs. squares in background vs. control group) \times 2 (competence cue: Consumer Magazine vs. Coffee News) \times 2 (warmth cue: donation of .01 cent vs. 10 dollars) full-factorial

analysis of variance ANOVA with first impression as the dependent variable and interest in product category as covariate. We found a significant main effect of the contextual verbal warmth cue ($F(1, 241) = 4.961, p < .03$). Consumers in the high warmth condition have a significantly more positive impression of the brand ($M_{\text{high warmth}} = 4.66$) than consumers in the low warmth condition ($M_{\text{low warmth}} = 4.36$). We did not find any main or interaction effects of the contextual verbal competence cue, implicit gender cue and contextual verbal warmth cue on first impression of the brand ($p > .05$).

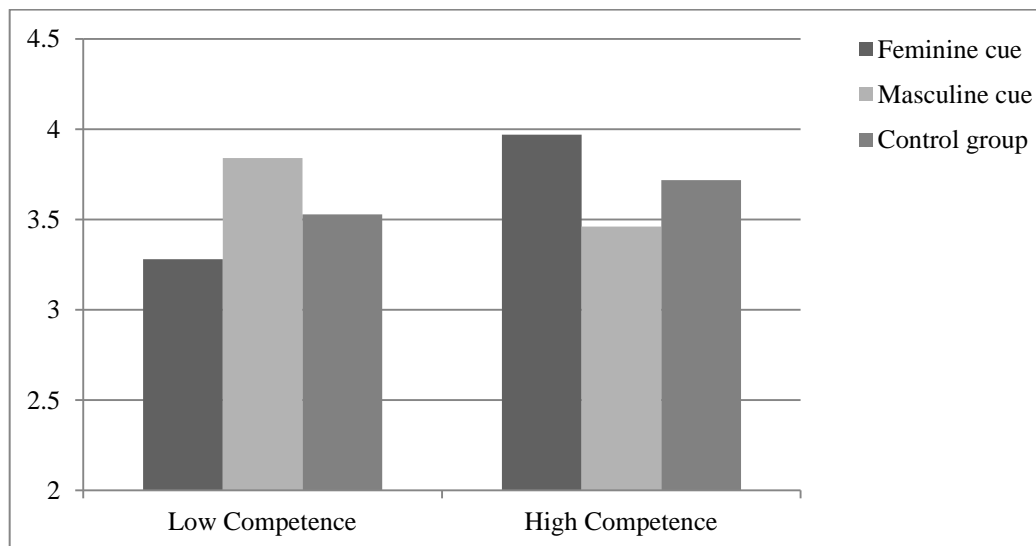
To gain additional insights into the effect of the warmth cue on first impressions, we conducted a mediation analysis with warmth of the brand as mediator. We conducted a bootstrap analysis (Preacher and Hayes 2008, Zhao et al. 2010) for warmth as mediator and found that the mean indirect effect was not significant, with a 95% confidence interval including zero (-.0275 to .1699). Hence, the positive effect of the contextual verbal warmth cue on the first impression of the brand is not mediated by the warmth of the brand.

These results are interesting with respect to our previous analysis where we tested the effect of a contextual warmth cue-donation, contextual competence cue-credibility source and implicit gender cue-background shapes on purchasing likelihood. In this analysis neither the manipulation of the contextual verbal warmth cue-donation amount, nor the interaction with the contextual verbal competence cue-credibility source has an effect on purchasing likelihood. In contrast, the contextual verbal warmth cue-high donation amount has a positive effect on the first impression of a brand. This is not surprising, as warmth reflects judgment of positive or negative impressions (Fiske et al. 2007). However, more remarkable is the discovery that this effect is not mediated by perceived warmth

of the brand. This suggests that when directly providing information about a brand (contextual verbal cue), which is related to warm behavior (e.g. donation of a high amount), the contextual verbal warm cue (high donation amount) affects the impression of a brand positively, but, similar to the subsequent purchase intention, not the warmth perception of a brand.

This indicates that impression of a brand can be influenced by contextual verbal warmth cues (e.g., charity initiatives). However, in order to enhance purchase intentions, the warmth perception of a brand must be enhanced. This can be achieved by pairing high contextual competence cues with implicit feminine cues.

FIGURE 6: MEANS FOR PURCHASING LIKELIHOOD OF BRAND WITH IMPLICIT GENDER CUES, ENDORSED BY HIGH VERSUS LOW CREDIBLE SOURCE (STUDY 2)



We have established that in the presence of a contextual verbal low competence cue (low credible endorsement), implicit masculine cues in the background of a print ad (compared with implicit feminine cues) increase

competence and subsequently enhance purchasing likelihood (hypothesis 3 and 4). In contrast, in the presence of contextual verbal high competence cues (high credible endorsement), implicit feminine cues increase purchasing likelihood due to a higher warmth perception of the brand (hypothesis 1 and 2; see Figure 6). Additionally, we find that the contextual verbal warmth cue (charity initiative/ high donation), paired with the contextual verbal competence cue, does not increase purchasing likelihood. However, the contextual verbal warmth cue on its own has a positive effect on the first brand impression (yet not on a brand's warmth perception).

Together, warmth behavior/initiatives lead(s) to a positive impression, but not to an increase in a brand's warmth perception nor does it increase purchasing intention. One possible explanation is that those contextual verbal warmth cues might be enough to enhance brand impression, but too explicit which elicits suspicion (that it could be „fake” warmth), resulting in no change to brand perception and subsequent purchase intention. In contrast, an implicit feminine gender cue enhances warmth (in the presence of a contextual verbal high competence cue). This indicates that implicit cues (e.g., implicit feminine cues) are more effective in enhancing a brand's warmth perception (because consumers are unaware and therefore unable to resist the persuasive attempts) and subsequent purchasing intention than contextual verbal cues.

In study 2 we manipulated the valence of a contextual competence cue by directly providing brand information (verbal competence cue/ high credible endorsement). Under naturally occurring marketplace conditions, marketers have restricted influence as to who recommends their product/brand. This is especially important for marketers of new brands which do not signal a competence level

with their name (no verbal competence cue), hence must surround a consumer with favorable contextual competence cues in their marketing efforts in order to effectively utilize implicit gender cues. Therefore the question arises, what type of contextual competence cues can marketers use in a marketplace context to effectively utilize implicit gender cues to enhance brand perception and subsequently purchasing intention? For example, can marketers include contextual visual competence cues without relying on actual information about the brand?

Thus, instead of operationalizing the contextual competence cue by providing information about the brand (study 2), in study 3 we examine these managerial implications of our conceptual framework (hypothesis 1 to 4), by demonstrating that the valence of contextual cues can be manipulated via visual cues.

4.5 Study 3: Color and Visual Cues

Unlike study 2, in study 3 we address a vital managerial implication, namely, how companies can alter the positive effect of implicit gender cues within their marketing efforts. We achieve this by operationalizing the valence of contextual cues with a managerially relevant variable by incorporating contextual visual cues into advertising.

Prior research showed that just wearing a formal lab coat increases credibility (Burger 2009) and competence (see also Aaker et al. 2010). Hence, a spokesperson's clothing (e.g., lab coat) is likely to serve as a contextual competence cue. Therefore, we manipulate the valence of the competence cue by presenting a spokesperson either in a formal lab coat or in a casual t-shirt. Similar

to study 2, we also included a contextual visual warmth cue (i.e., spokesperson's facial expression).

An additional goal of this study is to gain confidence with the accuracy of the empirical model by replicating the conceptual framework with a different product, a different implicit gender cue and a different set of contextual warmth and competence cues (visual cues) (Lynch et al. 2012; Nosek et al. 2012; Schmidt 2009). Further, in study 2 we found an effect for contextual warmth cue on impression of the brand. In study 3 we seek to further investigate its potential effects on brand impression. We focus specifically on investigating spillover or 'halo' effects of contextual warmth cues, contextual competence cues and implicit gender cues on four of Aaker's (1997) brand personalities (we discarded the dimension of Aaker's brand personality, competence, as it is redundant to the dimension of competence). For example, implicit gender cues may spill over onto ruggedness, sophistication, sincerity and/or excitement. In addition we asked participants to indicate their product quality perception. Hereby it is of interest to see if manipulation of competence influences the quality perception (as the concept of competence is closely related to ability) and/or if warmth cues have a similar affect on quality perception.

Method

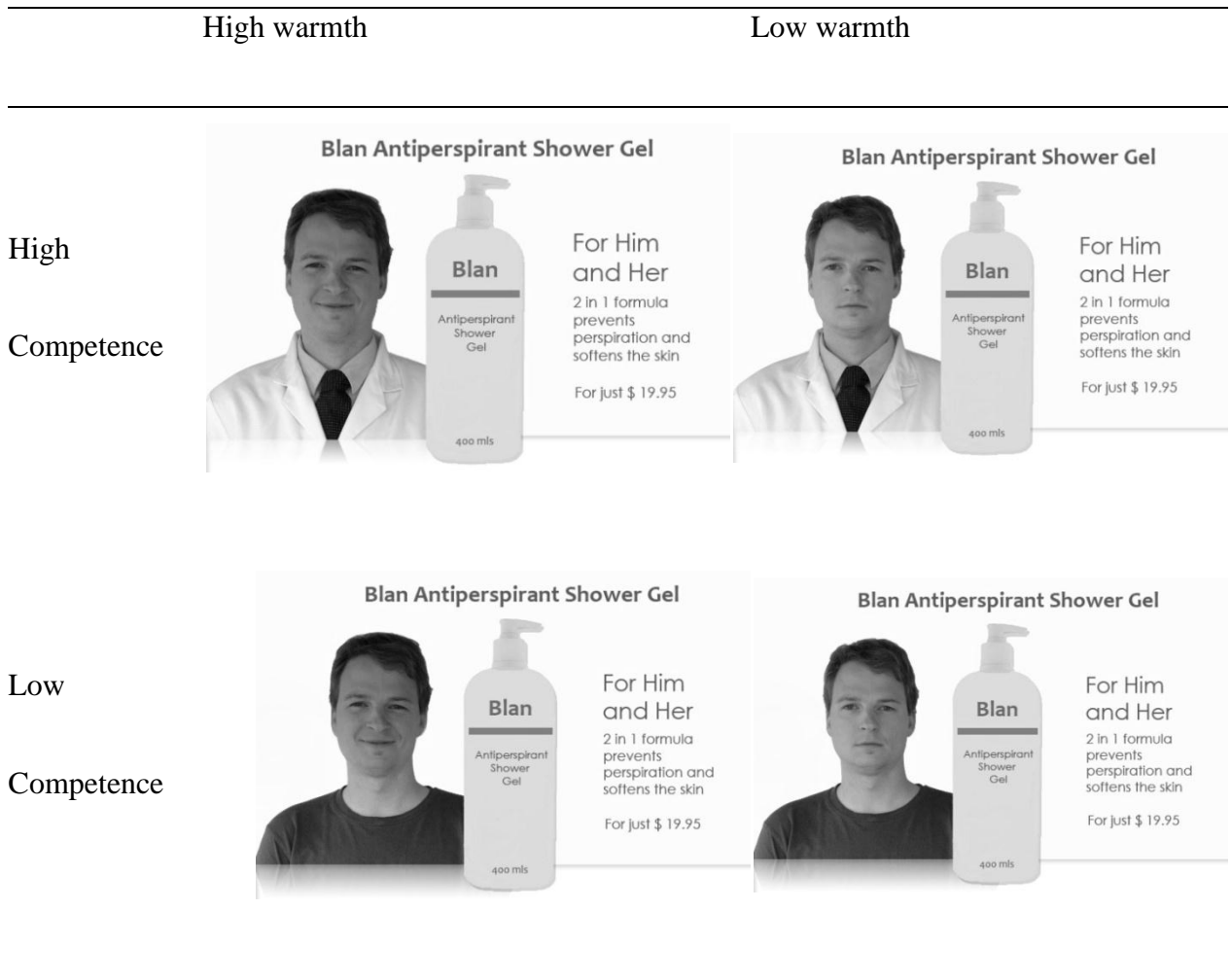
Study design and sample. Study 3 followed a similar method as study 2 with the following exceptions. We used a different product (antiperspirant shower gel as a gender neutral product) and a different set of implicit gender cues (pink as feminine cue and blue as masculine cue). Furthermore, this time the gender cue is designed into the product packaging. Experiment 3 uses a 2 (contextual visual

competence cue: high versus low) \times 2 (contextual visual warmth cue: high versus neutral cue) \times 3 (implicit gender cue: masculine versus feminine versus no cue) between-subjects design.

Procedure and measures. The same market research company as in study 2 collected data from a new representative New Zealand consumer sample. The sample consisted of 407 (195 female) respondents randomly assigned to the 12 experimental conditions (see appendix 3 for details about representativeness of sample). The data collection procedure was identical to study 2. After respondents were invited to participate, they were presented with a fictitious advertisement showing the product, its price, and attribute information. Based on the work of Infanger, Bosak, and Sczesny (2012), as well as from our pre-test we chose antiperspirant shower gel as a gender neutral product. Additionally, to ensure the product is perceived as gender neutral, we emphasized gender neutrality in the product description. Respondents read the following description: ‘For him and her. 2 in 1 formula prevents perspiration and softens the skin’ (see Figure 7; stripe on the bottle is blue). The implicit gender cues were manipulated using a colored stripe on the product packaging. We use pink as an implicit feminine cue and blue as an implicit masculine cue (Fagot et al. 1997; Leinbach et al. 1997). In the control group we leave the bottle without a colored stripe. In order to manipulate the valence of the competence cue the advertising features a spokesperson either in a formal lab coat or in a casual t-shirt. The valence of the warmth cue is manipulated via the facial expression of the spokesperson. Recent research indicated that humans automatically categorize faces or facial expression in terms of their perceived trustworthiness (Engell, Haxby, and Todorov 2007). Moreover, the concept of trustworthiness is closely related to warmth (e.g., Ames, Fiske, and

Todorov 2011). Thereby, we use a spokesperson's smile (vs. serious looking) as a contextual visual cue for warmth (see Figure 6 for the manipulation of the contextual visual warmth cue and competence cue).

FIGURE 7: STIMULI FOR STUDY 3 (FOR MASCULINE CUE CONDITION – WITHOUT CONTROL GROUP)



Note: Stripe on bottle in the masculine condition is blue, feminine is pink and no stripe in control group.

After participants had viewed the stimulus material we measured purchase likelihood. We asked “Would you buy this product if you happened to see it in the store?” (1 = definitely no, 7 = definitely yes). We then asked participants to indicate their expectations regarding the product’s level of quality on a 7-point scale (1 = “very bad”; 7 = “very good”). Next, on a 7-point scale, participants rated their perception of the brand’s competence (competence, effectiveness, and efficiency, $\alpha = .957$) and warmth (warmth, kindness, and generosity; $\alpha = .947$). In addition we measured four of Aaker’s brand personalities (1997) on an 11-point scale (0 = not at all, 10 = very much). Respondents were asked to indicate to what extent they believe the brand is honest, cheerful, domestic, genuine (Sincerity; $\alpha = .876$), up-to-date, daring, imaginative, spirited (Excitement, $\alpha = .916$), charming, glamorous, pretentious, romantic (Sophistication, $\alpha = .857$), and tough, outdoorsy, strong, and rugged (Ruggedness, $\alpha = .942$).

Manipulation Checks

Warmth. At the conclusion of the questionnaire, we presented the picture of the spokesperson to participants and tested the degree to which respondents perceived the spokesperson to be warm, kind and generous (warm index; $\alpha = .951$; Aaker et al. 2010; Grandey et al. 2005; Judd et al. 2005) on an 11-point scale (0= not at all; 10= very much). Participants judged the smiling spokesperson as significantly warmer than the serious looking one ($M_{\text{smiling}} = 3.97$; $SD = 2.44$ vs. $M_{\text{serious}} = 2.79$; $SD = 2.30$; $t(403) = -1.17$, $p < .001$)

Competence. On the same 11-point scale we asked participants to indicate to what extent they believe that the person in this picture is.....? competent, effective, efficient (competent index, $\alpha = .949$; Aaker et al. 2010; Grandey et al.

2005; Judd et al. 2005) Participants judged the spokesperson in a formal lab coat as significantly more competent than the spokesperson in casual clothing ($M_{\text{labcoat}} = 4.14$; $SD = 2.59$ vs. $M_{\text{casual}} = 3.07$; $SD = 2.51$; $t(403) = -4.21$, $p < .001$)

Results and Discussion

Purchasing Likelihood. We estimated a 2 (implicit gender cue: pink (feminine) versus blue (masculine) stripe on product) \times 2 (contextual visual competence cue: formal lab coat vs. casual t-shirt) \times 2 (contextual visual warmth cue: smile vs. serious looking) full-factorial analysis of variance ANOVA with purchase likelihood as the dependent variable. We predicted an asymmetry effect of purchasing intention for implicit gender cues when paired with a contextual high (formal lab coat) versus a low (casual t-shirt) competence cue (hypothesis 1 and 3). As expected, we found a significant interaction effect between contextual competence cue and implicit gender cue ($F(1, 262) = 10.739$, $p = .001$). To interpret this significant interaction effect, we conducted planned comparisons to contrast the implicit masculine cue and implicit feminine cue condition first amongst participants presenting with the spokesperson in the formal lab coat (contextual high competence cue) and then amongst participants presented with the spokesperson in a casual t-shirt (contextual low competence cue). In support of hypothesis 1, the follow-up planned comparisons revealed, for the high competence condition, that implicit feminine cues lead to a higher purchase likelihood than implicit masculine cues ($M_{\text{fem_cue}} = 3.51$, $SD = 1.58$ vs. $M_{\text{mas_cue}} = 2.78$, $SD = 1.60$; $t(401) = -2.026$, $p < 0.05$). Hence in the presence of the contextual high competence cue (spokesperson in formal lab coat), the implicit feminine cue (pink stripe) compared to the implicit masculine cue (blue stripe) increases purchasing likelihood. In the low competence condition, purchasing likelihood

was significant higher in the presence of the implicit masculine cues compared to implicit feminine cues ($M_{mas_cue} = 3.24$, $SD = 1.67$ vs. $M_{fem_cue} = 2.7$, $SD = 1.45$; $t(401) = 2.668$, $p < 0.05$), supporting hypothesis 3. Thus, in the presence of a contextual low competence cue (spokesperson in t-shirt), the effect of implicit gender cues reverses: The implicit masculine cue (blue stripe) enhances purchasing likelihood compared to the implicit feminine cue (pink stripe).

Consistent with study 2, we did not find any main or interaction effects of competence, implicit gender cue and warmth on purchasing likelihood ($p > .10$). This suggests that the contextual visual competence cue and the implicit gender cue on their own do not enhance purchasing likelihood, nor does the contextual visual warmth cue on its own or in combination with the implicit gender cue or the competence cue. The absence of an effect of the contextual visual warmth cue fortifies our suspicion from study 2, that in order to enhance purchasing likelihood perceived warmth needs to be enhanced via implicit cues (in contrast to contextual cues) without consumers being aware of the influence.

Next we conducted separate mediation analysis, to test hypothesis 2 and 3. That is, in the presence of a high competence cue (spokesperson in formal lab coat), the effect of the implicit feminine cue (pink stripe) on purchasing likelihood is mediated by warmth (hypothesis 2). In the presence of a low competence cue (spokesperson in casual t-shirt), the effect of an implicit masculine cue (blue stripe) is mediated by competence (hypothesis 4).

Mediation analysis with warmth as mediator amongst participants in the high competence condition. We conducted two separate mediation analyses: one amongst participants in the high competence conditions and one amongst

participants in the low competence conditions. For high competence conditions we expect the following mediation: feminine cue → warmth of brand → purchasing likelihood. As the mediation variable we used the warmth index for brand perception. We applied the bootstrapping procedures (Preacher and Hayes 2008; Zhao et al. 2010) and found a positive and significant ($p < .001$) effect of warmth on purchase likelihood. The indirect effect of the feminine cues on purchase likelihood was positive and significant ($a*b = .2808$), with the 95% confidence interval excluding zero (.0072 to .5887). The direct (c-prime path) effect of the feminine cue on purchase likelihood was not significant ($B = .4380$, $p > .05$), thus indicating indirect-only mediation (Zhao, Lynch, and Chen 2010). Hence, hypothesis 2 is supported.

Mediation analysis with competence as mediator amongst participants in the high competence condition. Amongst the same participants we conducted the same analysis for competence as mediator and found it to be insignificant, with a 95% confidence interval including zero (-.0749 to .5299). Hence, in the presence of a high competence cue (spokesperson in formal lab coat), the effect of an implicit feminine cue on purchasing likelihood is mediated by warmth but not by competence.

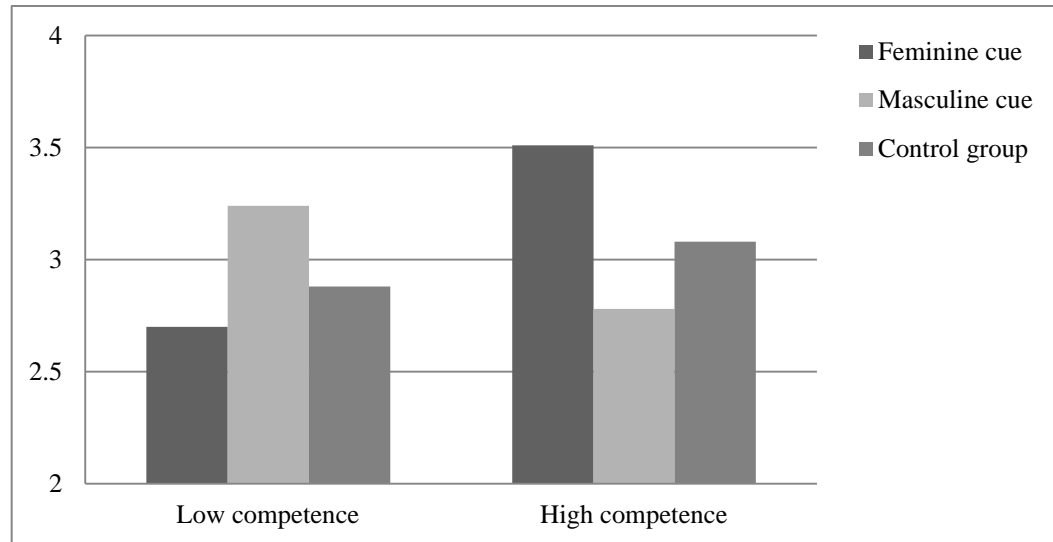
Mediation analysis with competence as mediator amongst participants in the low competence condition. For the low competence conditions we expect the following mediation: masculine cue → competence of brand → purchasing likelihood. As the mediation variable we used the competence index for brand perception. The results of the mediation analysis (Preacher and Hayes 2008; Zhao et al. 2010) indicate that the effect of the implicit masculine cue on purchasing likelihood is mediated by competence. Namely, the indirect effect from the

conducted bootstrap analysis is positive and significant ($a*b = .3771$), with the 95% confidence interval excluding zero (.1183 to .7012). The direct (c-prime path) effect of the masculine cue on purchase likelihood was not significant ($B = .1570$, $p > .5$), thus indicating indirect-only mediation (Zhao et al. 2010). This supports hypothesis 4.

Mediation analysis with competence as mediator amongst participants in the low competence condition. The same bootstrap analysis for warmth as mediator under the same conditions proved that the mean indirect effect was not significant, with a 95% confidence interval including zero (-.0279 to .5852). Hence, in the presence of a low competence cue, the effect of an implicit masculine cue on purchasing likelihood is mediated by competence yet not by warmth.

Together, the results suggest that implicit feminine cues (pink stripe) compared with implicit masculine cues (blue stripe) enhance purchasing likelihood when paired with a contextual visual high competence cue (spokesperson in formal lab coat) due to an increase in the brands competence perception. In contrast, implicit masculine cues (blue stripe) compared with implicit feminine cues (pink stripe) enhance a brand's warmth perception and subsequent purchase likelihood in the presence of a contextual visual low competence cue (spokesperson in casual t-shirt) (see Figure 7).

FIGURE 7: PURCHASE LIKELIHOOD OF A BRAND ASSOCIATED WITH IMPLICIT GENDER CUES IN THE PRESENCE OF A SPOKESPERSON IN A LAB COAT OR T-SHIRT (STUDY 3)



Expected quality. To gather additional knowledge on how these gender cues can effect additional factors such as expected quality, we conducted a 2 (implicit gender cue: pink (feminine) versus blue (masculine) stripe on product) \times 2 (competence cue: formal lab coat vs. casual t-shirt) \times 2 (warmth cue: smile vs. serious looking) full-factorial analysis of variance with expected quality as the dependent variable. We found a significant interaction effect between contextual competence cue and implicit gender cue ($F(1, 262) = 9.610, p = .002$). The contrast showed that in the presence of a contextual visual low competence cue (spokesperson in casual t-shirt), participants exposed to the implicit masculine cue (blue stripe) perceived the quality of the brand as significantly better compared to participants exposed to the implicit feminine cue ($M_{\text{masculine}} = 4.52, SD = 1.126$ vs. $M_{\text{feminine}} = 4.04, SD = 1.204; t(401) = -2.177, p < 0.05$). In the presence of the contextual visual high competence cue (spokesperson in formal lab coat), participants rated the perceived quality higher when exposed to the implicit

feminine cues compared to the implicit masculine cues ($M_{\text{feminine}} = 4.76$, $SD = 1.410$ vs. $M_{\text{masculine}} = 4.31$, $SD = 1.258$; $t(401) = 2.166$, $p < 0.05$). Hence, we find a similar pattern as for purchasing likelihood. Namely, we find an asymmetry effect for implicit gender cues in the presence of contextual visual competence cues (high vs. low).

Brand Personality Dimensions. To estimate any spillover from implicit gender, warmth and competence cues on unrelated brand perceptions of sincerity, ruggedness, excitement and sophistication (brand personality, Aaker 1997), we conducted four 2 (contextual visual competence cue: high versus low) \times 2 (contextual visual warmth cue: high versus low) \times 2 (implicit gender cue: masculine versus feminine) full-factorial analysis of variance ANOVA for each brand personality as the dependent variable. For the sake of parsimony, we report only statistically significant results for the dimensions below (for full ANOVA see appendix 4).

For *sincerity* we discovered a significant interaction between competence level and gender cue ($F(1, 262) = 9.844$, $p = .002$). To interpret this significant interaction effect, we conducted planned comparisons to contrast the high and the low competence condition for the masculine and feminine cue condition. The follow-up planned comparisons revealed that the feminine cue has a significant higher value in the high competence condition compared to the low competence condition. ($M_{\text{high_comp}} = 3.65$, $SD = 2.46$ vs. $M_{\text{low_comp}} = 4.46$, $SD = 2.06$; $t(401) = 3.02$, $p = 0.003$). The masculine cue did not differ significantly between the low and high competence conditions ($M_{\text{high_comp}} = 3.05$, $SD = 2.18$ vs. $M_{\text{low_comp}} = 3.55$, $SD = 2.2$; $t(401) = 1.451$, $p > 0.1$). Hence, feminine cues enhance sincerity when

paired with a high competence cue. These results present in a logical direction, because sincerity is closely aligned to the warmth dimension (Aaker et al., 2010).

We did not find any significant main or interaction effects for *excitement* of the warmth, competence and gender cues ($p > .05$)

For *ruggedness* we found a 3 way interaction for competence, warmth and gender cues ($F(1, 251) = 6.213, p = .013$). Namely, throughout the low warmth condition, perception of ruggedness is significant higher in the masculine cues condition compared with the feminine cue condition within the low competence condition ($M_{\text{masculine}} = 2.81, SD = 2.58$; vs. $M_{\text{feminine}} = 1.64, SD = 1.76$; $t(395) = -2.092, p = 0.037$). This is comparable to respondents in the high competence conditions, where perception of ruggedness is significant higher in the feminine cue condition compared to the masculine cue ($M_{\text{feminine}} = 3.08, SD = 2.75$; vs. $M_{\text{masculine}} = 1.84, SD = 1.94$; $t(385) = 2.229, p = 0.026$).

For *sophistication* we found a main effect of competence ($F(1, 262) = 3.906, p = .049$). Namely, respondents in the high competence condition rated the brand higher on sophistication than respondents in the low competence condition ($M_{\text{low_comp}} = 1.95, SD = 1.91$ vs. $M_{\text{high_comp}} = 2.44, SD = 1.9$). This suggests that competence cues enhance impressions of brand sophistication.

In sum, using a relevant manipulation of competence cue for marketers, a different set of gender cues, and a different product category, study 3 replicated the pattern (in respect to hypotheses 1-4) of data obtained in study 2. Namely, a pink stripe on the product enhances warmth and purchasing likelihood when the product is presented by a spokesperson in a formal lab coat (hypothesis 1 and 2). In contrast, the blue stripe enhances competence and purchasing intention only

when the product is presented by a spokesperson in casual clothing (hypothesis 3 and 4).

These findings suggest that marketers are able to harness the effectiveness of implicit gender cues by adding contextual competence cues, such as a spokesperson in a formal lab coat (via visual cues incorporated into an advertising). Additionally, similar to study 2, this study proves that contextual visual warmth cues paired with a visual contextual competence cue cannot be used in order to enhance purchasing likelihood. In contrast, feminine gender cues (which serve as implicit gender cues) paired with a high competence cue, are effective in enhancing the warmth of a brand. These results highlight the power and importance of implicit gender cues as a tool to enhance positive brand perception as well as purchasing likelihood. Moreover, we found the same interaction effect between gender cues and competence cues for expected quality. Finally, we found spillover effects of our manipulation onto Aaker's (1997) Brand Personalities. Notably, we found interaction effects of implicit gender cues and competence cues for sincerity. This proves the similarity between sincerity and dimensions of warmth.

4.7 General Discussion

Summary

Companies worldwide utilize gender type cues such as colors and symbols to convey a certain brand image and to enhance consumer purchasing intention. Thus, understanding how and when gender cues are successful or, more important harmful, is of crucial importance for managers.

This work demonstrates that implicit gender cues incorporated into a print advertisement can influence the perception of a brand via the warmth and competence dimensions and subsequent consumer purchase intention depending on other competence cues available in the environment. Across three different gender cues and across multiple contextual manipulations, we have discovered a consistent pattern with an asymmetric effect of implicit gender cues for contextual high and low competence cues. Our results are based on two simple principles (1) competence is more important than warmth, and (2) once competence is established, it is better to establish warmth rather than adding competence (i.e. there is a ceiling effect with respect to competence cues). The results of study 1 showed that feminine cues increase warmth which drives purchasing likelihood for brands of masculine products. We did not find an effect of masculine cues for brands of feminine products. We attribute the absence of an effect on the operationalization of the low competence cue (feminine product), as feminine products are not necessarily associated with low competence (nor with high competence). A follow up study could confirm this (see Appendix 1). The result of study 2 established that in the presence of a contextual high competence cue, implicit feminine cues compared with implicit masculine cues increase warmth of a brand which translates into a higher purchasing likelihood of the product. Further, in the presence of a contextual low competence cue, implicit masculine cues (compared with implicit feminine cues) increase competence which subsequently drives purchasing likelihood. In addition, study 2 showed that a contextual verbal warmth manipulation influences the first impression of a brand but not perceived warmth of a brand or purchasing likelihood.

With respect to the perceived valence of a contextual competence cue, study 3 confirms the pattern of study 2 (effect of gender cues on warmth and competence and subsequent purchasing likelihood). Additionally, study 3 suggests that contextual competence cues can be operationalized via a visual cue incorporated into an advertisement. It further extends the knowledge of the influence of implicit gender cues and competence cues by demonstrating that implicit gender cues have the same asymmetrical effect in the presence of a contextual visual competence cue for expected quality. Both, study 2 and 3 were able to reveal that adding a contextual verbal or visual warmth cue to a contextual competence cue does not affect purchasing likelihood. These results are consistent with extant evidences that perceived warmth is more difficult to gain than perceived competence (Reeder, Pryor, and Wojciszke 1992; Tausch et al. 2007; Ybarra and Stephan 1999), because humans believe that warmth can be more easily falsified than competence (Cuddly et al. 2011). Hence a donation by a brand to a charity or the smiling face of a spokesperson can be considered as “fake” warmth and subsequently have no effect on purchasing intention, even when paired with a high competence cue. In contrast consumers are unaware of the influence of implicit gender cues and are subsequently unable to resist the persuasive attempt. These results underline the importance of implicit feminine cues in order to enhance warmth.

This research makes several contributions to extant literature. First, we enhance research on warmth/competence perceptions in a consumer setting (Aaker et al. 2010; Aaker et al. 2012; Fournier and Alvarez 2012; Keller 2012; Kervyn et al. 2012). Further, we explore conditions in which implicit warmth and competence cues (implicit gender cues) affect brand perception and subsequent consumer

purchasing intentions. We investigate how consumers react to the interaction between multiple warmth and competence cues, by developing and testing a theoretical framework, which integrates assimilation and contrast (e.g., Carpenter and Nakamoto 1980; Gill 2008; Ziamou and Ratneshwar 2003) into a cue diagnosticity framework (Purohit and Srivastav 2001).

Second, our research provides consistent and robust evidence that implicit gender cues increase warmth or competence (asymmetrically dependent on the presence of competence cues). The social psychology literature previously demonstrated that cues which are related to a gender can activate the content of gender stereotypes (Banaji and Hardin 1996; Deaux and Lewis 1984). With this research we extend this phenomena from an interpersonal social setting to a consumer setting, namely to brand perception.

Finally, this research fulfills the call to investigate how companies which signal high competence can cultivate a perception of warmth (Aaker et al. 2004; Aaker et al. 2010). With this research, we could not simply demonstrate that implicit feminine cues can enhance perception of warmth; we further establish that contextual warmth cues are unable to cultivate warmth in a brand.

Managerial Implications

Our findings have several managerial implications. So far, companies follow the more intuitive approach of using feminine cues for products targeted towards women and masculine cues for products targeted toward men. Our results “falsify” this intuitive managerial heuristic. Instead, marketers of masculine products should consider integrating feminine cues such as circles, butterflies or the color pink instead of masculine cues in their print ads. Furthermore, marketers need to

be aware of their brand perception (as the brand name can serve as a competence cue) to make better layout decisions for their brands (print ads). Marketers of brand names which signal high competence such as Campbell's, Johnson & Johnson, Hershey's and Coca Cola (Kervyn et al. 2012) should incorporate implicit feminine cues versus implicit masculine cues in their advertising campaigns in order to increase purchasing intent. Coca Cola, for example, has moved in such a direction. In one of their campaigns, launched in 2008, Coca Cola's ads featured feminine cues and colors such as hearts, butterflies, birds and pink backgrounds. On the other hand, marketers of brands such as Veteran's Hospital, USPS and Amtrak, which are low in perceived competence (Kervyn et al. 2012), would benefit from using masculine cues in their advertising efforts.

Lastly, in this research we demonstrate that contextual warmth cues such as Corporate Social Responsibility Information initiatives do not translate into a higher perception of warmth and purchasing intention yet implicit feminine cues do (paired with a high competence cue). This is highly relevant for marketers in order to create a favorable brand image and to enhance purchasing intention. For example, marketers should combine high competence cues and implicit feminine cues in their advertising. Namely, a cue such as a spokesperson in a lab coat in combination with feminine cues would benefit their brand perception and subsequently enhance consumer purchasing intention.

Limitations and Future Research

Further, these studies come with limitations that offer opportunities for future research. In this research, we solely focused on purchasing intention. Even though self reported purchasing intention is an important indicator of once actual

behavior and attitudes, and intention relates positively to purchasing behaviors (e.g., Ajzen and Fishbein 1980), purchasing intention does not always transform into actual (purchasing) behavior (Chandon, Morwitz and Reinartz 2005)

Additional research is needed to estimate actual purchasing behavior.

Next, we found an influence of gender related cues on a brand's warmth and competence perceptions and subsequent purchasing intention. However, many other group stereotypes exist which are associated with warmth and competence. The question arises, do cues which are related to other group stereotypes (e.g., age) have similar effects as implicit gender cues? Future research might explore whether different cues (which are related to a stereotypical group) would have a similar effect on brand perception and consumer behavior.

Also, we have conducted our studies in a Western country. Recently, Cuddy et al. (2010) found that the content of gender stereotypes varies between cultures with different core cultural values. Differing core values across cultures may result in different consumer patterns/behaviors in the respective countries when exposed to implicit gender cues. More research is needed to investigate cross cultural differences in brand perception and purchasing intention when exposed to gender cues.

Further, we found effects of implicit gender cues such as symbols and colors. However, gender cues are not simply limited to symbols and colors on a product/in an ad. What about product design and packaging decisions (i.e. shape of the packaging)? For example, should motor oil (i.e., male typed) or Coca Cola (highly competent brand) be packaged in round, curved bottles (i.e., implicit feminine cue). Additionally, what about the gender of a spokesperson? To what

extent does the spokesperson serve as a gender cue? Does a female spokesperson evoke more brand warmth when paired with a high competence cue? Future research might investigate how product design, packaging decision and spokesperson gender affects warmth and competence perception.

Finally, in our study we discover that explicit warmth cues (charity initiatives) influence the impression of a brand yet not its perception along the warmth dimension. We previously argued that humans are able to perceive warm behavior as bogus and it is very difficult to establish genuine warmth. Hence, it would be of interest to explore how explicit warmth cues translate into warmth over time (e.g., a brand shows warm behavior such as donating over a long time of period). For example, can firms that consistently fulfill their social mission enhance trust (McElhaney 2009)? In addition, it would be of interest to see how sticky perceptions of warmth and competence are when primed with implicit gender cues. Future research should address the potential long term effect of explicit warmth cues and implicit gender cues on consumer behavior.

APPENDIX 1: FOLLOW UP STUDY ABOUT PERCEPTION OF COMPETENCE OF GENDER-TYPED PRODUCTS

In order to identify the perceived competence from masculine (Camcorder, Hair Wax and Coffee) and feminine products (Mobile Phone, Hair Spray and Chocolate Drink) participants ($N= 23$; 45% female) from New Zealand were asked to assess Camcorder, Hair Wax and Coffee (masculine products) as well as Mobile Phone, Hair Spray and Chocolate Drink (feminine products) via an online study. With each product, participants were asked: “To what extent would you associate the product above with the following traits?” On a 5-point scale (1 = this product is not at all like this, 5 = this product is very much like this) participants then could rate their perception of the products competence (competent, effective, efficient). The results of one sample t-tests reveal that masculine products are perceived as significantly higher in competence compared to the midpoint of 3 ($M_{mas} = 3.34$; $SD = 0.74$; $t(28) = 2.49$, $p < .02$), whereby feminine products are not significantly lower nor higher than the midpoint of 3. ($M_{fem} = 3.24$; $SD = 0.64$; $t(28) = 1.99$, $p > .05$). Based on these results we can summarize that masculine products are perceived as high in competence and that feminine products are perceived as neither low nor high in competence.

APPENDIX 2: REPRESENTATIVENESS OF CONSUMER SAMPLE IN STUDY 2

In this sample, 49.2% of the respondents were women (compared to 50.8% of New Zealand's population; Statistics New Zealand, 2012). In terms of age, 31.3% of the sample were 18-35 years of age (32.7% of New Zealand's population over 18), 28.0% were 36-50 years (27.4% of New Zealand's population over 18), 24.1% were 51-65 years (23.7% of New Zealand's population over 18) and 16.7% were older than 65 years (16.3% of New Zealand's population over 18).

APPENDIX 3: REPRESENTATIVENESS OF CONSUMER SAMPLE IN STUDY 3

In this sample, 47.9% of the respondents were women (compared to 50.8% of New Zealand's population; Statistics New Zealand, 2012). In terms of age, 29.7% of the sample were 18-35 years of age (32.7% of New Zealand's population over 18), 29.0% were 36-50 years (27.4% of New Zealand's population over 18), 23.8% were 51-65 years (23.7% of New Zealand's population over 18) and 17.4% were older than 65 years (16.3% of New Zealand's population over 18).

APPENDIX 4: RESULTS OF ANOVA STUDY 3

Independent variables	Dependent Variable			
	Sincerity	Ruggedness	Excitement	Sophistication
Gender	.780 (.378)	.047 (.829)	.042 (.839)	.180 (.672)
Competence	1.674 (.197)	3.244 (.73)	1.189 (.276)	3.906 (.049)*
Warmth	.979 (.323)	.134 (.715)	.008 (.929)	.065 (.799)
Gender * Competence	9.844 (.002)*	3.894 (.05)	3.746 (.054)	3.521 (.062)
Gender * Warmth	.266 (.606)	.115 (.734)	.905 (.342)	.257 (.613)
Competence * Warmth	1.374 (.242)	.964 (.327)	.752 (.386)	1.648 (.200)
Gender * Warmth * Competence	.111 (.739)	5.308 (.022)*	1.097 (.296)	.033 (.855)
Error	262	262	262	262
df	1	1	1	1

Note: F Ratio and P Value (in parentheses) for dependent variables and ANOVA results

* = $p < 0.05$

APPENDIX 5: SUMMARY OF THE MANIPULATION OF ALL THREE
STUDIES

Study	Implicit Gender Cues		Contextual Competence Cue		Contextual Warmth Cue	
	Masculine	Feminine	High	Low	High	Low
Study 1: Gender Typed Products	Bear Square Blue	Butterfly Circle Pink	Camcorder Hair Wax Coffee	Cell Phone Hair Spray Choc. Drink	Cell Phone Hair Spray Choc. Drink	Camcorder Hair Wax Coffee
Study 2: Shape & Verbal Cues	Square	Circle	High Credibility (Consumer Magazine)	Low Credibility (Coffee News)	High Donation Amount (10 dollars)	Low Donation Amount (0.01 cent)
Study 3: Color & Visual Cues	Blue	Pink	Spokes- person in Formal Lab Coat	Spokes- person in Casual T-Shirt	Spokes- person Looking Serious	Spokes- person Smiling

REFERENCES

- Aaker, Jennifer L. (1997), "Dimensions of Brand Personality," *Journal of Marketing Research*, 34 (August), 347–56
- Aaker, Jennifer, Susan Fournier, and S. Adam Brasel (2004), "When Good Brands Do Bad," *Journal of Consumer Research*, 31 (June), 1-18.
- Aaker, Jennifer., Emily N. Garbinsky, and Kathleen D. Vohs (2012), "Cultivating Admiration in Brands: Warmth, Competence, and Landing in the Golden Quadrant," *Journal of Consumer Psychology*, 22 (April), 191-94.
- Aaker, Jennifer, Kathleen D. Vohs, and Cassie Mogilner (2010), "Nonprofits are Seen as Warm and For-Profits as Competent: Firm Stereotypes Matter," *Journal of Consumer Research*, 37 (August), 224-37.
- Asbrock, Frank. (2010), "Stereotypes of Social Groups in Germany in terms of Warmth and Competence," *Social Psychology* 41 (2), 76–81.
- Abele, Andrea E. and Bogdan Wojciszke (2007), "Agency and Communion from the Perspective of Self versus Others," *Journal of Personality and Social Psychology*, 93 (November), 751–63.
- Aggarwal, Pankaj and Ann L. McGill (2012), "When Brands Seem Human, Do Humans Act Like Brands? Automatic Behavioral Priming Effects of Brand Anthropomorphism," *Journal of Consumer Research*, 39 (August), 307–23.
- Ajzen, Icek and Martin Fishbein (1980), *Understanding Attitude and Predicting Social Behavior*, Englewood Cliffs, NJ: Prentice Hall.

- Ames, Daniel L, Susan T. Fiske, and Alexander T. Todorov (2001), "Impression Formation: A Focus on Others' Intents," in *The Handbook of Social Neuroscience*, ed. Jean Decety and John T. Cacioppo, Oxford: Oxford University Press, 1–41.
- Banaji, Mahzarin R. and Curtis Hardin (1996), "Automatic Stereotyping," *Psychological Science*, 7 (May), 136-41.
- Bargh, John A. (1997), "The Automaticity of Everyday Life," in *Advances in Social Cognition*, Vol. 10, ed. Robert S. Wyer, Jr., Mahwah, NJ: Erlbaum, 1-61.
- _____ (2002), "Reflections and Reviews Losing Consciousness: Automatic Influences," *Journal of Consumer Research*, 29 (September), 280–85.
- Bargh, John A., and Tanya L. Chartrand (1999), "The Unbearable Automaticity of Being," *American Psychologist*, 54 (July), 462–79.
- Berger, Jonah, Michaela Draganska, and Itamar Simonson (2007), "The Influence of Product Variety on Brand Perception and Choice," *Marketing Science*, 26 (July-August), 460–72
- Brewer, Marilyn B. (1988), "A Dual Process Model of Impression Formation," in *Advances in Social Cognition*, Vol. 1, ed. Thomas K. Srull and Robert S. Wyer Jr., NJ: Erlbaum, 1-36.
- Broverman, Inge K., Susan Raymond Vogel, Donald M. Broverman., Frank E. Clarkson, and Paul Rosenkrantz (1972), "Sex Role Stereotypes: A Current Appraisal," *Journal of Social Issues*, 28, 59-78.

- Burger, Jerry M. (2009), "Replicating Milgram: Would People Still Obey Today?"
American Psychologist, 64 (January), 1–11.
- Blair, Irene V. and Mahzarin R. Banaji (1996), "Automatic and Controlled Processes in Stereotype Priming," *Journal of Personality and Social Psychology*, 70 (June), 1142-63.
- Carpenter, Gregory S. and Kent Nakamoto (1989), "Consumer Preference Formation and Pioneering Advantage," *Journal of Marketing Research*, 36 (August), 285–98.
- Chandon, Pierre, Vicki G. Morwitz, and Werner J. Reinartz (2005), "Do Intentions Really Predict Behavior? Self-Generated Validity Effects in Survey Research," *Journal of Marketing*, 69 (April), 1-14.
- Clarke, T. and Costall, A. (2007), "The Emotional Connotations of Color: A Qualitative Investigation," *Color Research and Application*, 33 (August), 406–10.
- Cuddy, Amy J.C., Susan Crotty, Jihye Chong, and Michael I. Norton (2010), "Men as Cultural Ideals: How Culture Shapes Gender Stereotypes," *Harvard Business School Working Paper*, 10–097 (May)
- Cuddy, Amy J. C, Susan T. Fiske, and Peter Glick (2008), "Warmth and Competence as Universal Dimensions of Social Perception: The Stereotype Content Model and the BIAS Map." *Advances in Experimental Social Psychology* 40, 61-149.

- Cuddy, Amy, J. Peter Glick, and Anna Beninger (2011), "The Dynamics of Warmth and Competence Judgments, and their Outcomes in Organizations," *Research in Organizational Behavior*, 31, 73–98.
- Deaux, Kay and Laurie L. Lewis (1984), "Structure of Gender Stereotypes: Interrelationship among Components and Gender Label," *Journal of Personality and Social Psychology*, 46 (May), 991-1004.
- Deuskens, Elisabeth, Ko de Ruyter, Martin Wetzels, and Paul Oosterveld (2004), "Response Rate and Response Quality of Internet-Based Surveys: An Experimental Study," *Marketing Letters*, 15 (February), 21-36.
- Devine, Patricia G. (1989). "Stereotypes and Prejudice: Their Automatic and Controlled Components," *Journal of Personality and Social Psychology*, 56 (January), 5–18.
- Eagly, Alice. H. and Antonio Mladinic (1994), "Are People Prejudiced Against Women? Some Answers from Research on Attitudes, Gender Stereotypes, and Judgments of Competence" in *European Review of Social Psychology*, Vol. 5 ed. Wolfgang Stroebe and Miles Hewstone, New York: Wiley, 1-35.
- Eagly, Alice. H., Antonio Mladinic, and Stacey Otto (1994), "Cognitive and Affective Bases of Attitudes toward Social Groups and Social Policies," *Journal of Experimental Social Psychology*, 30 (March), 113-37.
- Eagly, Alice. H. and Valerie Steffen (1984), "Gender Stereotypes Stem from the Distribution of Women and Men into Social Roles," *Journal of Personality and Social Psychology*, 46 (April), 735-54.

- Engell, Andrew D., James V. Haxby, and Alexander Todorov (2007), "Implicit Trustworthiness Decisions: Automatic Coding of Face Properties in Human Amygdala," *Journal of Cognitive Neuroscience*, 19 (September), 1508–19.
- Engers, Maxim (1987), "Signalling with Many Signals," *Econometrica*, 55 (May), 663-74.
- Epley, Nicholas, Adam Waytz, and John T Cacioppo. (2007), "On Seeing Human: A Three-Factor Theory of Anthropomorphism," *Psychological Review* 114 (October), 864–86.
- Fagot, Beverly I., Mary D. Leinbach, Barbara E. Hort, and Jennifer Strayer (1997), "Qualities Underlying the Definitions of Gender," *Sex Roles*, 37 (July), 1-17.
- Feldman, Jack M. and John G. Lynch Jr. (1988), "Self-Generated Validity and Other Effects of Measurement on Belief, Attitude, Intention, and Behavior," *Journal of Applied Psychology*, 73 (August), 421-435.
- Fischer, Marc, Franziska Völckner, and Henrik Sattler (2010), "How Important are Brands? A Cross-Category, Cross-Country Study," *Journal of Marketing Research*, 47 (October), 823-39.
- Fiske, Susan T., Amy J. C. Cuddy, and Peter Glick (2007), "Universal Dimensions of Social Cognition: Warmth and Competence," *Trends in Cognitive Sciences*, 11 (February), 77-83.
- Fiske, Susan T., Monica Lin, M., and Steven L. Neuberg (1999), "The Continuum Model: Ten Years Later," in *Dual-Process Theories in Social Psychology*,

ed. Shelly Chaiken and Yaacov Trope, New York: Guilford Press, 231-254.

Fiske, Susan T. and Steven L. Neuberg (1990), "A Continuum Model of Impression Formation from Category-Based to Individuated Processes: Influences of Information and Motivation on Attention and Interpretation" in *Advances in Experimental Social Psychology*, Vol. 3, ed. Mark P. Zanna, NY: Academic Press: 1-74

Fournier, Susan (1998), "Consumers and their Brands: Developing Relationship Theory in Consumer Research." *Journal of Consumer Research*, 24 (March): 343-73.

Fournier, Susan and Claudio Alvarez (2012), "Brands as Relationship Partner: Warmth Competence, and In-Between," *Journal of Consumer Psychology*, 22 (April), 177-85.

Fraser, Tom and Adam Banks (2004), *Designer's color manual: The complete guide to color theory and application*. San Francisco: Chronicle Books.

Freeman, Harvy R. (1987), "Structure and Content of Gender Stereotypes: Effects of Somatic Appearance and Trait Information," *Psychology of Women Quarterly*, 11 (March), 59-68.

Fugate, Douglas. L. and Joanna Phillips (2010), "Product Gender Perceptions and Antecedents of Product Gender Congruence," *Journal of Consumer Marketing*, 27 (3), 251-61.

Gayle A. Sulik (2010), *Pink Ribbon Blues: How Breast Cancer Culture Undermines Women's Health*. NY: Oxford University Press.

- Gill, Tripat (2008), "Convergent Products: What Functionalities Add More Value to the Base?" *Journal of Marketing*, 72 (March), 46–62.
- Gidron, David, Derek J. Koehler, and Amos Tversky (1993), "Implicit Quantification of Personality Traits," *Personality and Social Psychology Bulletin* 19 (October), 594–604.
- Grandey, Alicia, Glenda Fisk, Anna Mattila, Karen Jansen, and Lori Sideman (2005), "Is 'Service with a Smile' Enough? Authenticity of Positive Displays During Service Encounters," *Organizational Behavior and Human Decision Processes*, 96 (January), 38-55.
- Grohmann, Bianca (2009), "Gender Dimensions of Brand Personality," *Journal of Marketing Research* 46 (February), 105–119.
- Hassin, Ran R., James S. Uleman, and John A. Bargh (2005), *The New Unconscious*, NY: Oxford University Press.
- Herr, Paul M., Steven J. Sherman, and Russell H. Fazio (1983), "On the Consequences of Priming: Assimilation and Contrast Effects," *Journal of Experimental Social Psychology*, 19 (July), 323–40.
- Hicks, John R. (1939), *Value and Capital: An Inquiry into Some Fundamental Principles of Economic Theory*. Oxford: Clarendon Press.
- Infanger, Martina., Janine Bosak,., and Sabine Sczesny (2012), "Communitary sells: The impact of perceivers' sexism on the evaluation of women's portrayals in advertisements," *European Journal of Social Psychology*, 42 (2), 219–226.

- Judd, Charles M., Hawkins, Laurie James-Hawkins, Vincent Yzerbyt, and Yoshihisa Kashima (2005), "Fundamental Dimensions of Social Judgment: Understanding the Relations between Judgments of Competence and Warmth," *Journal of Personality and Social Psychology*, 89 (December), 899-913.
- Keller, Kevin L. (2012), "Understanding the Richness of Brands Relationship: Resaerch Dialogue on Brands as Intentional Agents" *Journal of Consumer Psychologie*, 22 (April), 186-190
- Kervyn, Nicole, Susan T. Fiske, and Chris Malone (2012), "Brands as Intentional Agents Framework: How Perceived Intentions and Ability can map brand perception," *Journal of Consumer Psychology*, 22 (April), 166-176
- Labrecque, Lauren I., and George R. Milne (2012), "Exciting Red and Competent Blue: The Importance of Color in Marketing"" *Journal of the Academy of Marketing Science*, 40 (September), 711–727.
- Leinbach, Mary Driver, Barbara E. Hort, and Beverly I. Fagot (1997), "Bears are for Boys: Metaphorical Associations in Young Children ´s Gender Stereotypes," *Cognitive Development*, 12 (March), 107-30.
- Logoblog (2012), "IBM Logo" (accessed November 27, 2012), [available at <http://www.logoblog.org/ibm-logo.php>].
- Lynch, J. G., Alba, J. W., Krishna, A., Morwitz, V. G., & Gürhan-Canli, Z. (2012), "Knowledge Creation in Consumer Research: Multiple routes, multiple criteria," *Journal of Consumer Psychology*, 22 (October), 473–85.
- Mahnke, F. H. (1996). *Color, Environment, and Human Response*. NY: Reinhold.

- Martin, Douglas and Neil C. Macrae. (2007), "A Face with a Cue: Exploring the Inevitability of Person Categorization," *European Journal of Social Psychology* 37 (September/October), 806–16.
- McElhaney, Kellie (2009), *Just Good Business*, San Francisco: Berrett-Hoehler.
- Melnyk, Valentyna, Kristina Klein, and Franziska Völckner (2012), "The Double-Edged Sword of Foreign Brand Names for Companies from Emerging Countries," *Journal of Marketing* 76 (November), 21–37.
- Milner, Laura M. and Dale Fodness (1996), "Product Gender Perceptions: The Case of China," 13 (August), 40–51.
- Moss, Gloria (2009), "Gender, Design and Marketing: How Gender Drives our Perception of Design and Marketing, Surrey, UK: Gower Publishing.
- Nosek, Brian A., Spies, Jeffrey R., and Matt Motyl (2012), "Scientific Utopia: II. Restructuring Incentives and Practices to Promote Truth over Publishability," *Perspectives on Psychological Science*, 7 (November), 615–31.
- Nowlis, Stephen M. and Itamar Simonson (1996), "The Effect of New Product Features on Brand Choice," *Journal of Marketing Research*, 33 (February), 36–47.
- Preacher, Kristopher J. and Andrew F. Hayes (2008), "Asymptotic and Resampling Strategies For Assessing and Comparing Indirect Effects in Multiple Mediator Models," *Behavior Research Methods*, 40 (August), 879-91.

- Puntoni, Stefano, Steven Sweldens, and Nader T. Tavassoli (2011), "Gender Identity Salience and Perceived Vulnerability to Breast Cancer," *Journal of Marketing Research*, 48 (June), 413–24.
- Purohit, Devavrat and Joydeep Srivastava. (2001), "Effect of Manufacturer Reputation, Retailer Reputation, and Product Warranty on Consumer Judgments of Product Quality: A Cue Diagnosticity Framework," *Journal of Consumer Psychology*, 10 (3), 123–34.
- Reeder, Glenn D., Shamala Kumar, Matthew S. Hesson-McInnis and David Trafimow (2002), "Inferences about the Morality of an Aggressor: The Role of Perceived Motive." *Journal of Personality and Social Psychology*, 83(4), 789-803.
- Reeder, Glenn D., J. B. Pryor, and Bogdan Wojciszke (1992), "Trait Behaviour Relations in Social Information Processing", in *Language and Social Cognition*, ed. G. Semin and K. Fiedler, Beverly Hills, CA: Sage, 37-57.
- Richetin, Juliette, Federica Durante, Silvia Mari, Marco Perugini, and Chiara Volpato (2012), "Primacy of Warmth versus Competence: A Motivated Bias?" *The Journal of Social Psychology*, 152 (July-August), 417–35.
- Rudman, Laurie A. (1998), "Self-promotion as a risk factor for women: the costs and benefits of counterstereotypical impression management." *Journal of Personality and Social Psychology*, 74 (3), 629.
- Rudman, Laurie A., and Peter Glick. (2008), "*The Social Psychology of Gender: How Power and Intimacy Shape Gender Relations.*" Guilford Press.

Schmidt, Stefan (2009), "Shall we Really do it Again? The Powerful Concept of Replication is Neglected in the Social Sciences. *Review of General Psychology*, 13 (June), 90–100.

Schwarz, Norbert and Herbert Bless (1992), "Constructing Reality and Its Alternatives: Assimilation and Contrast Effects in Social Judgment," in *The Construction of Social Judgment*, ed. Leonard L. Martin and Abraham Tesser, Hillsdale, NJ: Lawrence Erlbaum Associates, 217–45.

Slovic, Paul and Sarah Lichtenstein (1971), "Comparison of Bayesian and Regression Approaches to the Study of Information Processing in Judgment," *Organizational Behavior and Human Performance*, 6 (November), 649-744.

Spence, Janet T., and Camille E. Buckner (2000), "Instrumental and expressive traits, trait stereotypes, and sexist attitudes: What do they signify?" *Psychology of Women Quarterly*, 24 (1), 44-53.

Spence, Janet T., and Robert L. Helmreich, (1978). *Masculinity and femininity: Their psychological dimensions, correlates, and antecedents*. Austin: University of Texas Press.

Skowronski, John J. and Donal E. Carlston (1987), "Social Judgment and Social Memory: The Role of Cue Diagnosticity in Negativity, Positivity, and Extremity Biases," *Journal of Personality and Social Psychology*, 52 (April), 689-99.

- Skowronski, John J. and Donal E. Carlston (1989), "Negativity and Extremity Biases in Impression Formation: A Review of Explanations," *Psychological Bulletin*, 105 (January), 131-42.
- Statistics New Zealand (2012), "National Population Estimates: September 2012 quarter," (accessed November 27, 2012), [available at http://www.stats.govt.nz/browse_for_stats/population/estimates_and_projections/NationalPopulationEstimates_HOTPSep12qtr.aspx].
- Tausch, N., J. Kenworthy, and Hewstone, M. (2007), "The confirmability and disconfirmability of trait concepts revisited: Does content matter?" *Journal of Personality and Social Psychology*, 92, 542-56.
- Twenge, Jean M. (1997), "Changes in Masculine and Feminine Traits over Time: A meta-analysis." *Sex Roles*, 36.5-6: 305-325.
- van Knippenberg, Ad, Mariette van Twuyver, and José Pepels, (1994), "Factors Affecting Social Categorization Processes in Memory" *British Journal of Social Psychology*, 33, 419-431.
- Vohs, Kathleen D., Nicole L. Mead, and Miranda R. Goode (2006), "The Psychological Consequences of Money," *Science*, 314 (November), 1154–56.
- Waytz, Adam, Carey K. Morewedge, Nicholas Epley, George Monteleone, Jiahong Gao, and John T Cacioppo (2010), "Making Sense by Making Sentient: Effectance Motivation Increases Anthropomorphism," *Journal of Personality and Social Psychology* 99 (September), 410–35.

- Wojciszke, Bogdan and Andrea E. Abele (2008), "The Primacy of Communion over Agency and its Reversals in Evaluations," *European Journal of Social Psychology*, 38 (November), 1139-47.
- Wojciszke, Bogdan, Roza Bazinska, and Marcin Jaworski (1998), "On the Dominance of Moral Categories in Impression Formation," *Personality and Social Psychology Bulletin*, 24 (December), 1245–1257.
- Wright, A. (1988), *The Beginner's Guide to Colour Psychology*, London: Colour Affects Ltd.
- Ybarra, Oscar, Emily Chan, and Denise Park (2001), "Young and Old Adults' Concerns about Morality and Competence," *Motivation and Emotion*, 25 (June), 85–100.
- Ybarra, Oscar and Walter G. Stephan, (1999), "Attributional Orientations and the Prediction of Behavior: The Attribution-Prediction Bias," *Journal of Personality and Social Psychology*, 76 (May), 718- 727.
- Yorkston, E., and de Mello, G. E. (2005), "Linguistic Gender Marking and Categorization," *Journal of Consumer Research*, 32 (September), 224–234.
- Zhao, Xinshu., John G. Lynch Jr., and Qimei Chen (2010), "Reconsidering Baron and Kenny: Myths and Truths about Mediation Analysis," *Journal of Consumer Research*, 37 (August), 197-206.
- Ziamou, Paschalina (Lilia) and S. Ratneshwar (2003), "Innovations in Product Functionality: When and Why Are Explicit Comparisons Effective," *Journal of Marketing*, 67 (April), 49–91.

Chapter 5: Synthesis and General Conclusion

Stereotypes are a well-researched topic amongst social psychology scholars. In recent years stereotypes and their application have received an increased interest within the field of marketing as they have proven to influence consumer behavior. The primary goal of this dissertation was to investigate how one can effectively utilize stereotypes in the field of marketing, with a particular focus on gender stereotypes.

For researchers and marketing practitioners alike, it is important to understand how stereotypes can be effectively utilized in order to enhance consumer behavior. Hence, in chapter 2 of this dissertation we developed a conceptual framework of stereotype application to marketing. We first distinguished between two types of stereotyping: self and other–stereotyping, and reviewed significant research that has been completed in both marketing and consumer behavior. We examined the activation process and multiple consequences that account for self- versus other stereotyping. From this, we distinguished between three outcomes: (1) a consumer’s indirect behavior, (2) memory and (3) automatic behavior. In the second section of chapter 2 we described types of stereotypes that exist in the marketing context, such as salesperson, physical attractiveness, gender, race, age, baby-face, overweight, country and firm stereotypes. Throughout chapter 2, we identified gaps in the literature and pointed out opportunities for further research contributions.

We provided evidence that the stereotype activation processes and consequences of self- and other-stereotyping are increasingly diverse. Throughout chapter 2 it becomes apparent that the construct of other-stereotyping (people,

objects and firms) receives substantially more attention than self-stereotyping, yet there is more research needed within both forms of stereotyping. In respect to the activation and consequences of other-stereotypes, marketers need to better understand how they can 'control' (or inhibit) the activation process of negative stereotypes. For example, to what extent can emotional advertising, in-store environment, or even the behavior of salespeople influence the activation process? Further, the majority of research concerning the consequences of other-stereotypes in consumer behavior and marketing has focused on stereotypes and their effect on perception, attitude and indirect behavior, yet, very little research focuses on the effects of other-stereotypes on automatic behavior. Specifically, does an activated 'elderly' stereotype lead to a decrease in memory performance (automatic stereotypical consistent behavior) of a consumer, and consequently to decreased brand/ ad recall? Future research should identify market relevant stereotypes that activate automatic behavior in consumers or salespeople. Additionally, previous researchers were unable to conclusively determine whether consistent versus inconsistent stereotypes have a positive or negative influence on consumer analytical processing and memory performance. Future research is needed to further investigate the impact and underlining mechanism of marketing relevant stereotypes on consumer memory performance.

Compared to other-stereotyping, within the self-stereotyping domain, there is vast potential for almost all critical aspects of the stereotyping process and its consequences such as automatic behavior, memory performance and indirect behavior. Future research is needed to investigate areas where situation stereotype threat/lift can occur, what the potential effects are and how it can be reduced/facilitated. This is a relatively untapped research area which provides a

broad range of research opportunities. Additionally, researchers have shown that consumers use stereotypes such as physical attractiveness, gender, occupation (e.g. salesperson), physical attributes (e.g. babyface) and country information in their categorization of others and products. Research has shown that these categorizations can have many outcomes (e.g., attitude, encoding of information). However, the literature to date is still insufficient in identifying the processes that underlie the effects of categorization on multiple consequences. Using stereotype knowledge from the social psychology literature provides valuable insights that can help to assess how categorization (e.g. country information, attractiveness of salesperson etc.) might impact a consumer's response to advertising, brands and salespeople.

Having first identified future directions within chapter 2, we tested applications of stereotypes in marketing in chapters 3 and 4. In particular we demonstrated how, and under what conditions, gender stereotypes can be utilized to enhance brand perception. In chapter 3 we tested whether the use of gender stereotypes in a product description can influence brand perception along the dimensions of warmth and competence and purchasing likelihood. We tested the effect of gender cues dependent upon the gender type of a product. We demonstrated that feminine cues compared to masculine cues enhance perceived warmth and subsequent purchasing likelihood for masculine products. In Chapter 4 we built upon and integrated the findings of chapter 3. Specifically, we investigated the effect and underlying mechanism of implicit gender cues in the presence of warmth and competence cues. Consistent with the idea that implicit gender cues can activate gender-stereotype knowledge of warmth and competence, we found that implicit gender cues incorporated into marketing efforts can enhance brand perception

along the warmth and competence dimensions under the right conditions. Across three different gender cues and across multiple contextual competence and warmth manipulations (see Table 1 for a summary of the operationalization of all conditions across all experiments) we discovered a consistent pattern with an asymmetric effect of implicit gender cues for contextual high and low competence cues. In particular we discovered that implicit masculine gender cues (i.e., bears, squares and the color blue) enhance perceived brand competence and purchase intention in the presence of high competence cues, yet backfire in the presence of low competence cues.

TABLE 1: SUMMARY OF OPERATIONALIZATION ACROSS ALL STUDIES

Study	Implicit Gender Cues		Contextual Competence Cue		Contextual Warmth Cue	
	Masculine	Feminine	High	Low	High	Low
Study 1: Gender Typed Products	Bear Square Blue	Butterfly Circle Pink	Camcorder Hair Wax Coffee	Cell Phone Hair Spray Choc. Drink	Cell Phone Hair Spray Choc. Drink	Camcorder Hair Wax Coffee
Study 2: Shape & Verbal Cues	Square	Circle	High Credibility (Consumer Magazine)	Low Credibility (Coffee News)	High Donation Amount (10 dollars)	Low Donation Amount (0.01 cent)
Study 3: Color & Visual Cues	Blue	Pink	Spokes- person in Formal Lab Coat	Spokes- person in Casual T-Shirt	Spokes- person Looking Serious	Spokes- person Smiling

Finally, we found that implicit feminine gender cues (i.e., butterflies, circles and the color pink) enhance perceived brand warmth and purchase intention in the presence of high competence cues, yet decreases purchasing likelihood in the presence of low competence cues. The effects of implicit feminine cues are found in the presence of masculine products, verbal competence (i.e., recommendation

from a highly credible source) and visual contextual (i.e., spokesperson dressed in lab coat) cues.

Further, we found that adding of a contextual warmth cue to a contextual competence cue does not affect perceived warmth or purchasing likelihood. These results indicate that, when exposed to an obvious warmth prime, consumers resist the persuasive attempt. Our findings are consistent with existing evidence that perceived warmth is more difficult to gain when compared with perceived competence (Reeder, Pryor, & Wojciszke, 1992; Tausch, Kenworthy, & Hewstone, 2007; Ybarra & Stephan, 1999). This is due to the fact that human beings believe that warmth can be more easily falsified than competence (Cuddy, Glick, & Beninger, 2011).

Contributions

Throughout chapters 3 and 4 we have brought additional insights into how stereotypes can be effectively utilized in marketing and consumer behavior. In particular we have examined how and when gender stereotypes can be effectively employed to enhance brand equity. In these ways, this research makes several contributions to extant literature.

First, we contribute to the emergent subject of stereotypes in the field of marketing (Homburg, Wieseke, Lukas, & Mikolon, 2011) by demonstrating how gender stereotypes can be utilized in a marketing context. Further we contribute to the gender stereotype literature (Banaji & Hardin, 1996; Deaux & Lewis, 1984) by providing evidence that gender cues incorporated into marketing materials can activate the content of gender stereotypes and thereby enhance brand perception and purchase likelihood. Social psychology literature has previously demonstrated

that cues which are related to a gender can activate the content of gender stereotypes. With this research we extend these phenomena from an interpersonal social setting to a consumer setting, namely to brand perception.

Next, we contribute to extant research on warmth/competence perception in a consumer setting (Aaker, Garbinsky, & Vohs, 2012; Aaker, Vohs, & Mogilner, 2010; Fournier & Alvarez, 2012; Keller, 2012; Kervyn, Fiske, & Malone, 2012). We explored conditions in which implicit warmth and competence cues (gender cues) affect brand perception and subsequent consumer purchasing intentions. We investigate how a consumer reacts to the interaction between multiple warmth and competence cues. With this research we demonstrated that consumer positively respond to (1) a warmth cue in the presence of a high competence cue, and (2) a competence cue in the presence of a low competence cue.

Finally, this research fulfills the call to investigate how companies who signal competence can cultivate a perception of warmth (Aaker et al., 2010). With this research we demonstrated that implicit feminine cues (implicit warmth cues) can enhance perception of warmth; however, contextual warmth cues are unable to cultivate warmth in a brand.

Managerial Implications

The findings of this dissertation have real implications for marketing practitioners looking to find effective ways to improve their brand building efforts with consumers who have increasingly low attention spans. In particular, we reveal that feminine cues, such as butterflies, circles and pink colors, or masculine cues such as bears, squares and blue colors placed on the product or in the background of a print ad can be either beneficial or harmful to a brand. In our

research we demonstrate that marketers of masculine products should consider integrating feminine cues such as circles, butterflies or the color pink instead of masculine cues in their print ads. Furthermore, marketers need to be aware of their brand perception (as the brand name can serve as a competence cue) to make better layout decisions for their brands (print ads). Marketers of brand names which signal high competence, such as Coca Cola (Kervyn et al., 2012), should incorporate implicit feminine cues versus implicit masculine cues in their advertising campaigns in order to increase purchasing intent. In recent years Coca Cola has moved in the right direction. In a 2008 campaign, Coca Cola's print ads featured feminine cues and colors such as hearts, butterflies, birds and pink backgrounds. Comparatively, marketers of brands such as Veteran's Hospital, USPS and Amtrak, which are low in perceived competence (Kervyn et al., 2012), would benefit from using masculine cues in their advertising efforts.

Additionally, in this research we demonstrate that contextual warmth cues such as corporate social responsibility information initiatives do not translate into a higher perception of warmth and purchasing intention, yet implicit feminine cues do (paired with a high competence cue). This is highly relevant for marketing practitioners in order to evoke perception of warmth and to enhance purchasing behavior. For example, marketers of companies that score high in competence yet lack warmth (e.g. Insurance Companies, Banks) should incorporate implicit feminine cues in their advertising instead of using corporate social responsibility initiatives in order to enhance their brand's warmth perception by consumers.

Limitation and Direction for Future Research

The studies of this dissertation come with limitations that offer opportunities for future research. First, in our studies we primarily measure behavioral intention rather than actual behavior. Although self-reported purchasing intention is an important indicator of one's actual behavior and attitudes, and intention relates positively to purchasing behaviors (e.g., Ajzen & Fishbein, 1980), purchasing intention does not always transform into actual (purchasing) behavior (Chandon, Morwitz, & Reinartz, 2005). Therefore, more research is needed into the effect of implicit gender cues and competence cues on actual behavior.

Next, we found an influence of gender-related cues on a brand's warmth and competence perception and subsequent purchasing intention. However, many other group stereotypes exist that are associated with warmth and competence. The question then arises; do cues which are related to other group stereotypes (e.g., age) have similar effects as implicit gender cues? Future research might explore whether different cues (which are related to a stereotypical group) would have similar effects on brand perception and consumer behavior.

Also, we conducted our studies in a Western country. Recently, Cuddy et al. (2010) found that the content of gender stereotypes varies between cultures with different core cultural values. Differing core values across cultures may result in different consumer patterns/behaviors in the respective countries when exposed to implicit gender cues. More research is needed to investigate cross cultural differences in brand perception and purchasing intention when exposed to gender cues.

Furthermore, we find effects of implicit gender cues, such as symbols and colors. However, gender cues are not simply limited to symbols and colors on a product or in an advertisement. Could future research consider other marketing tactics such as product design and packaging decisions (e.g. shape of the packaging)? Should motor oil (i.e., male typed) come in round, curved bottles (i.e. implicit feminine cue)? Additionally, should the gender of a spokesperson be considered? To what extent does the spokesperson serve as a gender cue? Does a female spokesperson evoke more brand warmth when paired with a high competence cue? Hence, future research may investigate how product design, packaging decisions and spokesperson gender may affect warmth and competence perception and consequent purchasing likelihood.

Finally, in our study we discover that explicit warmth cues (charity initiatives) influence the impression of a brand yet not its perception along the warmth dimension. We previously argued that humans are able to perceive warm behavior as bogus and it is very difficult to establish genuine warmth. Hence, it would be of interest to explore how explicit warmth cues translate into warmth over time (e.g., a brand shows warm behavior such as donating over a long time period). For example, can firms that consistently fulfill their social mission enhance trust (McElhaney 2009)? In addition, it would be of interest to further understand how sticky perceptions of warmth and competence are when primed with implicit gender cues. Future research should address the potential long term effect of explicit warmth cues and implicit gender cues on consumer behavior.

References

- Aaker, J., Garbinsky, E. N., & Vohs, K. D. (2012). Cultivating admiration in brands: Warmth, competence, and landing in the “golden quadrant”. *Journal of Consumer Psychology, 22*(2), 191–194.
- Aaker, J., Vohs, K. D., & Mogilner, C. (2010). Nonprofits are seen as warm and for-profits as competent: firm stereotypes matter. *Journal of Consumer Research, 37*(2), 224–237.
- Ajzen, I., & Fishbein, M. (1980). *Understanding Attitude and Predicting Social Behavior*. Englewood Cliffs, NJ: Prentice Hall.
- Banaji, M. R., & Hardin, C. D. (1996). Automatic stereotyping. *Psychological Science, 7*(31), 136–141.
- Chandon, P., Morwitz, V. G., & Reinartz W. J. (2005). Do intentions really predict behavior? self-generated validity effects in survey research. *Journal of Marketing, 69*(2), 1-14.
- Cuddy, A., Glick, P., & Beninger, A. (2011). The dynamics of warmth and competence judgments, and their outcomes in organizations. *Research in Organizational Behaviour, 31*, 73–98.
- Cuddy, A.J.C., Crotty, S., Chong, J., & Norton M. I. (2010). Men as cultural ideals: How culture shapes gender stereotypes. *Harvard Business School Working Paper, 10–097*(May)
- Deaux, K., & Lewis, L. L. (1984). Structure of gender stereotypes: Interrelationships among components and gender label. *Journal of Personality and Social Psychology, 46*(5), 991–1004.

- Fournier, S., & Alvarez, C. (2012). Brands as relationship partner: Warmth, competence, and in-between. *Journal of Consumer Psychology*, 22(2), 177–185.
- Homburg, C., Wieseke, J., Lukas, B. A., & Mikolon, S. (2011). When salespeople develop negative headquarters stereotypes: Performance effects and managerial remedies. *Journal of the Academy of Marketing Science*, 39(5), 664–682.
- Keller, K. L. (2012). Understanding the richness of brands relationship: Research dialogue on brands as intentional agents. *Journal of Consumer Psychology*, 22(2), 186–190.
- Kervyn, N., Fiske, S. T., & Malone, C. (2012). Brands as intentional agents framework: How perceived intentions and ability can map brand perception. *Journal of Consumer Psychology*, 22(2), 166–176.
- McElhaney, K. (2009). *Just Good Business*. San Francisco: Berrett-Hoehler.
- Reeder, G. D., Pryor, J. B., & Wojciszke, B. (1992). Trait behaviour relations in social information processing, in *Language and Social Cognition*, ed. G. Semin and K. Fiedler, Beverly Hills, CA: Sage, 37–57.
- Tausch, N., Kenworthy, J., & Hewstone, M. (2007). The confirmability and disconfirmability of trait concepts revisited: Does content matter? *Journal of Personality and Social Psychology*, 92, 542–556.
- Ybarra, O. & Stephan, W. G. (1999). Attributional orientations and the prediction of behavior: The attribution-prediction bias,” *Journal of Personality and Social Psychology*, 76, 718–727.

Appendices

Appendix A: Questionnaire Study 1

Appendix B: Questionnaire Study 2

Appendix C: Questionnaire Study 3

Appendix D: Co-Authorship Form

Appendix A: Questionnaire Study 1

LANDING PAGE



Dear Participant,

Thank you for participating in this pilot study on consumer decision making. It is important for us to understand the consumers' perception of brands and products; hence, we appreciate your honest opinion. Please answer each question with the first answer that comes to your mind; There is no "right" or "wrong" answer. The following questionnaire will take you approximately 15 minutes in total and it is very important that you answer the questionnaire completely. Your responses are anonymous, strictly confidential and only serve scientific purposes. The findings of this survey will be reported in the form of a PhD thesis, journal articles, and seminar papers. If you take part in this survey, you have the right to:

- Refuse to answer any particular question
- Withdraw from the survey at any time up until you have completed and submitted the survey
- Ask further questions about the study that occur to you during participation
- Be given access to a summary of the findings upon the conclusion of the research (please send an e-mail to the address below requesting a report of findings)

Once again, thank you very much for your participation.

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Please click >> to start.



NEXT PAGE

During this survey, you will be asked to evaluate 3 different advertised products. Each product will be shown for a very brief time and then followed by several questions which you are required to answer. After you see each advertisement you will be *automatically* redirected to the set of questions.



NEXT PAGE

A new Camcorder will be available in the marketplace soon. Look at the picture, which includes information about the product, and imagine you came across this product in a store. Please answer a few questions about this product.

VAL Camcorder

*Products for the future...
VAL makes it possible*

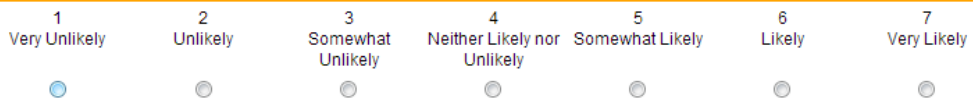
- NEW DESIGN
- 2YR WARRANTY
- MONEY BACK GUARANTEE



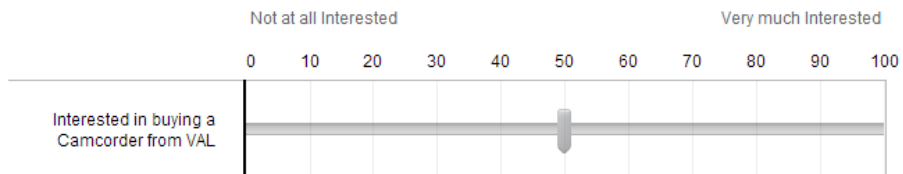
\$277.95 incl. GST

NEXT PAGE

Imagine you are going to buy a **Camcorder**, how likely is it that you would buy this "**VAL**" **Camcorder**?



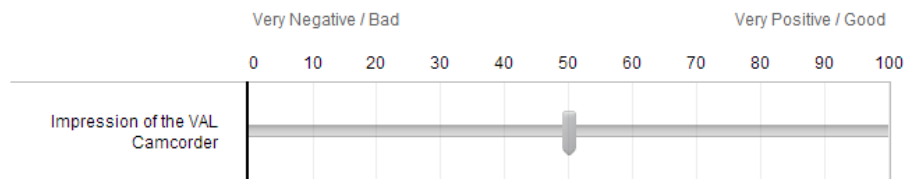
How interested are you in buying a **Camcorder** from "**VAL**"? (Please move the sliding bar to indicate your answer)



>>

NEXT PAGE

What are your impressions of the **Camcorder** from "VAL"? (Please move the sliding bar to indicate your answer)



How do you expect the quality of a "VAL" Camcorder to be?

- | | | | | | | |
|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|
| 1
Very Bad | 2
Bad | 3
Somewhat Bad | 4
Neutral | 5
Somewhat Good | 6
Good | 7
Very Good |
| <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> |

>>

NEXT PAGE

How likely is it that you would buy this **Camcorder** for your.....? (Relationship Status)

	1 Very Unlikely	2 Unlikely	3 Somewhat Unlikely	4 Neither Unlikely nor Likely	5 Somewhat Likely	6 Likely	7 Very Likely
Partner	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Parent	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Friend	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

How likely is it that you would buy this **Camcorder** for a....? (Gender)

	1 Very Unlikely	2 Unlikely	3 Somewhat Unlikely	4 Neither Unlikely nor Likely	5 Somewhat Likely	6 Likely	7 Very Likely
Woman	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Man	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

How likely is it that you would buy this **Camcorder** for someone aged.... years old? (Age)

	1 Very Unlikely	2 Unlikely	3 Somewhat Unlikely	4 Neither Unlikely nor Likely	5 Somewhat Likely	6 Likely	7 Very Likely
Under 15 years	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Between 15 and 30	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Between 31 and 45	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Between 46 and 60	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Over 60	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

>>

NEXT PAGE

Please look again at the Ad and answer the following questions.

VAL Camcorder

*Products for the future...
VAL makes it possible*



- NEW DESIGN
- 2YR WARRANTY
- MONEY BACK GUARANTEE

\$277.95 incl gst

NEXT PAGE

To what extent do you believe that "VAL" is.....?

	1 Not at all	2	3	4	5	6	7 Very much
Graceful	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Likable	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Spirited	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Effective	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Kind	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Down to earth	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Successful	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Brave	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Thorough	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Sensitive	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Attractive	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Upper class	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>



NEXT PAGE

To what extent do you believe that "VAL" is.....?

	1 Not at all	2	3	4	5	6	7 Very much
Imaginative	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Up-to-date	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Honest	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Adventurous	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Wholesome	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Fragile	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Cheerful	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Feminine	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Efficient	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Sturdy	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Generous	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Dominant	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>



NEXT PAGE

To what extent do you believe that "VAL" is.....?

	1 Not at all	2	3	4	5	6	7 Very much
Intelligent	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Aggressive	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Tender	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Expresses tender feelings	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Masculine	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Daring	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Reliable	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Warm	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Calming	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Outdoorsy	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Sweet	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Competent	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>



NEXT PAGE

Please indicate how well each of the word pairs below apply to "VAL"?

Ineffective	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	Effective
Feminine	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	Masculine
Incompetent	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	Competent
Kind	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	Unkind
Generous	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	Stingy
Inefficient	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	Efficient
Warm	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	Cold



NB: Participants are asked the same question sets for a Hair Spray and Hot Beverage product.

NEXT PAGE

VAL Camcorder

*Products for the future...
VAL makes it possible*

- NEW DESIGN
- 2YR WARRANTY
- MONEY BACK GUARANTEE

\$277.95 adpt

To what extent do you believe that the advertising above is.....?

	1 Not at all	2	3	4	5	6	7 Very much
Attractive	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Likable	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>



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To what extent do you believe that the advertising above is.....?

	1 Not at all	2	3	4	5	6	7 Very much
Attractive	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Likable	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

>>

NEXT PAGE



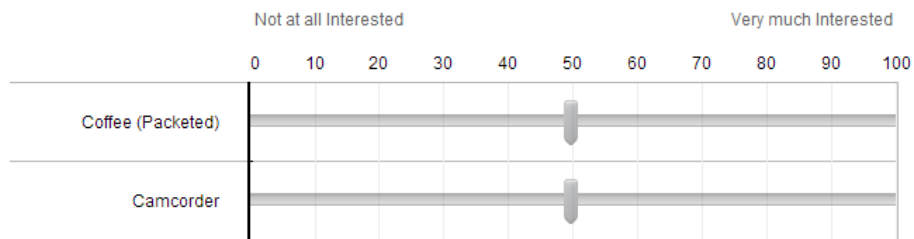
To what extent do you believe that the advertising above is.....?

	1 Not at all	2	3	4	5	6	7 Very much
Attractive	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Likable	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

>>

NEXT PAGE

In general how interested are you in the following products?



NEXT PAGE

How often do you purchase a packet of Coffee?

Never
 Less than once every three months
 About once every two months
 About once a month
 About once a fortnight
 At least once a week

How often do you purchase a Camcorder?

Never
 Less than once every four years
 About once every three years
 About once every two years
 About once a year
 At least twice a year

How often do you purchase Hair Spray?

Never
 Less than once every four months
 About once every three months
 About once every two months
 About once a month
 At least once every two weeks



NEXT PAGE

How would you rate the masculinity / femininity of the following products?

	1 Definitely feminine	2	3	4	5	6	7 Definitely masculine
Chocolate Drink	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Coffee	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Hair Spray	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Hair Wax	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Mobile Phone	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Camcorder	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>



NEXT PAGE

Finally could you please provide some information about yourself.

Please indicate your gender.

- Male Female

In which age bracket do you belong?

- 16-20 years
 21-25 years
 26-30 years
 31-35 years
 36-40 years
 41-45 years
 46-50 years
 51-60 years
 61-65 years
 66-70 years
 71-85 years



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What is your highest completed education?

- None formally completed
 High School / College
 Polytechnic / Institute of Technology (or equivalent)
 University / Bachelors Degree
 University / Honours Degree
 University / Masters Degree
 University / PhD
 Other - please specify

Thank you very much for participating.

If you are interested in the findings of this study please e-mail Alexandra Hess at the following address:
ach19@waikato.ac.nz

Please click on the >> Button to submit the questionnaire. If you wish to withdraw from the survey please click on the "close" icon.



THE UNIVERSITY OF
WAIKATO
Te Whare Wānanga o Waikato

We thank you for your time spent taking this survey.
Your response has been recorded.

Appendix C: Questionnaire Study 2

LANDING PAGE

Dear Participant,

This is a study about consumer decision making. It is important for us to understand the consumer's perception of brands and products. We appreciate your honest opinion. Please be aware there are no "right" or "wrong" answers.

Please fill out the questionnaire. You will be asked to evaluate an advertised product. It will take you approximately 5 minutes.

It is very important that you answer the questionnaire completely. Your responses will be strictly confidential and only serve scientific purposes.

Thank you very much for your participation!

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In which age bracket do you belong?

- 0-17
- 18-20
- 21-25
- 26-30
- 31-35
- 36-40
- 41-45
- 46-50
- 51-55
- 56-60
- 61-65
- 66-70
- 71-75
- 76-80
- 81-85
- Over 85

Please indicate your gender.

- Male
- Female

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NEXT PAGE

A new pair of sport shoes will soon be available on the market. Please look at the advertisement which includes some information about the product. Take your time while reading the product information. Imagine you would come across this product in a store. Please answer a few questions about it.

VAL Sport Shoes



Unisex Sport Shoes

featuring special stretching panels that expand and contract with each step.
RRP 100 NZD



VAL Sport Shoes donates **01 cent** from this purchase to the Salvation Army during the month of April



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NEXT PAGE

VAL Sport Shoes



Unisex Sport Shoes

featuring special stretching panels that expand and contract with each step.
RRP 100 NZD

consumer magazine Recommends
VAL Sport Shoes

VAL Sport Shoes donates **01 cent** from this purchase to the Salvation Army during the month of April

THE SALVATION ARMY

What is your first impressions of the VAL sport shoes?

1 Very negative	2 Negative	3 Somewhat negative	4 Neutral	5 Somewhat positive	6 Positive	7 Very positive
<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

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VAL Sport Shoes



Unisex Sport Shoes

featuring special stretching panels that expand and contract with each step.

RRP 100 NZD



VAL Sport Shoes donates **01 cent** from this purchase to the Salvation Army during the month of April



Please indicate the extent to which you agree with the following statements.

	1 Definitely no	2 Probably no	3 More likely no than yes	4 Neither nor	5 More likely yes than no	6 Probably yes	7 Definitely yes
Would you like to try this product?	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Would you buy this product if you happened to see it in the store?	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Would you actively seek out this product?	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

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VAL Sport Shoes



Unisex Sport Shoes
featuring special stretching panels that expand and contract with each step.
RRP 100 NZD

consumer magazine Recommends
VAL Sport Shoes

VAL Sport Shoes donates **01 cent** from this purchase to the Salvation Army during the month of April

How do you expect the quality of VAL sport shoes to be?

1	2	3	4	5	6	7
Very bad	Bad	Somewhat bad	Neutral	Somewhat good	Good	Very good
<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

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Please indicate the extent to which you agree with the following statements

How likely is it that the brand VAL....

	1	2	3	4	5	6	7
	Very unlikely	Unlikely	Somewhat unlikely	Neither unlikely nor likely	Somewhat likely	Likely	Very likely
...uses child labour	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
...uses organic products	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

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VAL Sport Shoes



Unisex Sport Shoes

featuring special stretching panels that expand and contract with each step.
RRP 100 NZD



VAL Sport Shoes donates **01 cent** from this purchase to the Salvation Army during the month of April



Imagine that the brand VAL had come to life as a person. Please think of the sort of person VAL would represent in terms of it's personality, physical appearance, opinion, approach, profession, conversational style, etc.

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To what extent do you believe that VAL is.....?

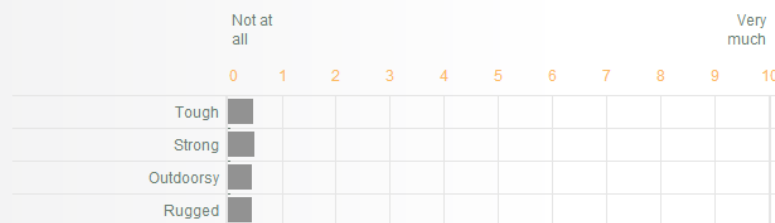
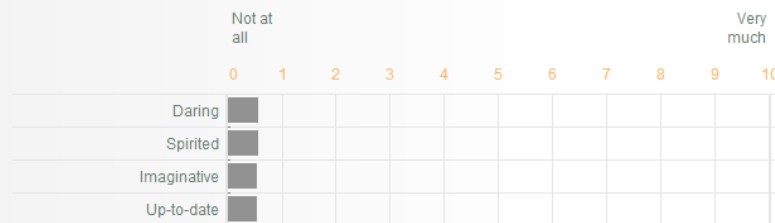
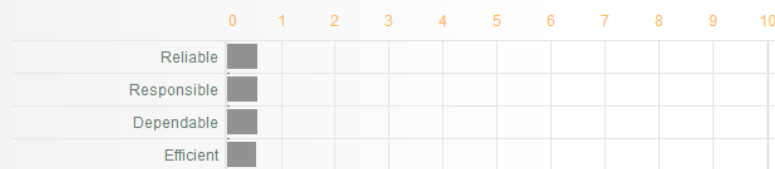
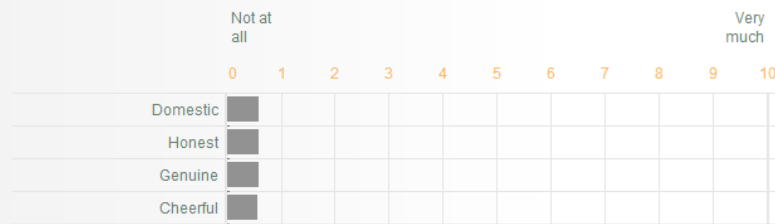
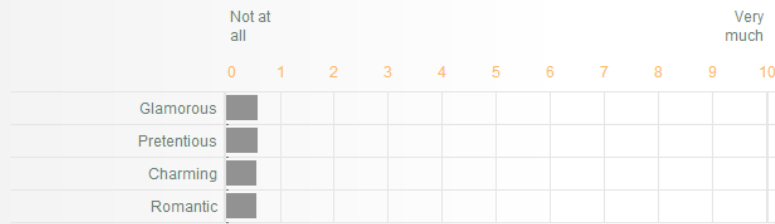
	1 Not at all	2	3	4	5	6	7 Very much
Feminine	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Warm	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Kind	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Generous	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
	1 Not at all	2	3	4	5	6	7 Very much
Masculine	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Competent	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Effective	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Efficient	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
	1 Not at all	2	3	4	5	6	7 Very much
Likable	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Attractive	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Admirable	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

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NEXT PAGE

To what extent do you believe that VAL is.....? (Please ensure you move the sliding bar – if you wish to indicate 0.5 please move the sliding bar to the right or the left and back to 0.5)



NEXT PAGE

Please indicate how well the word pair below apply to VAL

VAL is...

Warm | | Cold

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In general, how you would rate sport shoes?

	1 Men only	2 Mostly men	3 Men and women	4 Mostly women	5 Women only
Sport Shoes can be used by....	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

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In general, how interested are you in sport shoes? (Please ensure you move the sliding bar – if you wish to indicate the mid-point please move the sliding bar to the right or the left and back to the mid-point)

Not at all interested | 0 1 2 3 4 5 6 7 8 9 10 | Very much interested

Sport Shoes

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How **credible** do you perceive the **endorser** of the product to be? (Please ensure you move the sliding bar – if you wish to indicate the mid-point please move the sliding bar to the right or the left and back to the mid-point)

Not at all Very much

0 1 2 3 4 5 6 7 8 9 10

Credible




How **competent** do you perceive the **endorser** of the product to be? (Please ensure you move the sliding bar – if you wish to indicate the mid-point please move the sliding bar to the right or the left and back to the mid-point)

Not at all Very much

0 1 2 3 4 5 6 7 8 9 10

Competent



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How much does VAL donate per sold sport shoes to the Salvation Army?

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NEXT PAGE

Please indicate the extent to which you agree with the following statements.

In general, a brand who donates 01 cent per sale is... (Please ensure you move the sliding bar – if you wish to indicate 0.5 please move the sliding bar to the right or the left and back to 0.5)

	0	1	2	3	4	5	6	7	8	9	10
Warm	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Kind	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Generous	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

Not at all

Very much

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Thank you very much for your participation!!!

Please click >> to collect your reward

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Appendix C: Questionnaire Study 3

LANDING PAGE

Dear Participant,

This is a study about consumer decision making. It is important for us to understand the consumer's perception of brands and products. We appreciate your honest opinion. Please be aware there are no "right" or "wrong" answers.

Please fill out the questionnaire. You will be asked to evaluate an advertised product. It will take you approximately 5 minutes.

It is very important that you answer the questionnaire completely. Your responses will be strictly confidential and only serve scientific purposes.

Thank you very much for your participation!

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In which age bracket do you belong?

- 0-17
- 18-20
- 21-25
- 26-30
- 31-35
- 36-40
- 41-45
- 46-50
- 51-55
- 56-60
- 61-65
- 66-70
- 71-75
- 76-80
- 81-85
- Over 85

Please indicate your gender.

- Male
- Female

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NEXT PAGE

A new antiperspirant gel will soon be available on the market. Please look at the advertisement which includes some information about the product. Take your time while reading the product information. Imagine you would come across this product in a store. Please answer a few questions about it

Blan Antiperspirant Shower Gel



For Him and Her

2 in 1 formula prevents perspiration and softens the skin

For just \$ 19.95

400 mls

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NEXT PAGE

Blan Antiperspirant Shower Gel



For Him and Her

2 in 1 formula prevents perspiration and softens the skin

For just \$ 19.95

400 mls

What is your first impressions of the **Blan antiperspirant shower gel**?


- | | | | | | | |
|-----------------------|-----------------------|------------------------|-----------------------|------------------------|-----------------------|-----------------------|
| 1
Very negative | 2
Negative | 3
Somewhat negative | 4
Neutral | 5
Somewhat positive | 6
Positive | 7
Very positive |
| <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> |

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NEXT PAGE

Blan Antiperspirant Shower Gel



For Him and Her

2 in 1 formula prevents perspiration and softens the skin

For just \$ 19.95

400 mls

Please indicate the extent to which you agree with the following statements.


	1 Definitely no	2 Probably no	3 More likely no than yes	4 Neither nor	5 More likely yes than no	6 Probably yes	7 Definitely yes
Would you like to try this product?	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Would you buy this product if you happened to see it in the store?	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Would you actively seek out this product?	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

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Blan Antiperspirant Shower Gel



For Him and Her

2 in 1 formula prevents perspiration and softens the skin

For just \$ 19.95

400 mls

How do you expect the quality of Blan antiperspirant shower to be?

1 Very bad	2 Bad	3 Somewhat bad	4 Neutral	5 Somewhat good	6 Good	7 Very good
<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

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Please indicate the extent to which you agree with the following statements

How likely is it that the brand **Blan**....


	1 Very unlikely	2 Unlikely	3 Somewhat unlikely	4 Neither unlikely nor likely	5 Somewhat likely	6 Likely	7 Very likely
...uses child labour	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
...uses organic products	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

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Blan Antiperspirant Shower Gel



Blan
Antiperspirant
Shower
Gel
400 mls

For Him
and Her

2 in 1 formula
prevents
perspiration and
softens the skin

For just \$ 19.95

Imagine that the **brand Blan** had come to life as a person. Please think of the sort of person **Blan** would represent in terms of it's personality, physical appearance, opinion, approach, profession, conversational style, etc.

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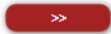
To what extent do you believe that **Bian** is.....?

	1 Not at all	2	3	4	5	6	7 Very much
Feminine	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Warm	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Kind	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Generous	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

	1 Not at all	2	3	4	5	6	7 Very much
Masculine	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Competent	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Effective	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Efficient	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

	1 Not at all	2	3	4	5	6	7 Very much
Likable	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Attractive	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Admirable	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

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To what extent do you believe that **Blair** is.....? (Please ensure you move the sliding bar – if you wish to indicate 0.5 please move the sliding bar to the right or the left and back to 0.5)

	Not at all	0	1	2	3	4	5	6	7	8	9	10	Very much
Glamorous													
Pretentious													
Charming													
Romantic													

	Not at all	0	1	2	3	4	5	6	7	8	9	10	Very much
Domestic													
Honest													
Genuine													
Cheerful													

	0	1	2	3	4	5	6	7	8	9	10
Reliable											
Responsible											
Dependable											
Efficient											

	Not at all	0	1	2	3	4	5	6	7	8	9	10	Very much
Daring													
Spirited													
Imaginative													
Up-to-date													

	Not at all	0	1	2	3	4	5	6	7	8	9	10	Very much
Tough													
Strong													
Outdoorsy													
Rugged													

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Please indicate how well the word pair below apply to **Bian**

Bian is....

Warm | | Cold

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In general, how you would rate antiperspirant shower gels?

	1 Men only	2 Mostly men	3 Men and women	4 Mostly women	5 Women only
Antiperspirant Shower Gels can be used by....	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

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In general, how interested are you in antiperspirant shower gel? (Please ensure you move the sliding bar – if you wish to indicate the mid-point please move the sliding bar to the right or the left and back to the mid-point)

Not at all interested | Very much interested

0 1 2 3 4 5 6 7 8 9 10

Antiperspirant Shower Gel

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To what extent do you believe the person in this picture is.....? (Please ensure you move the sliding bar – if you wish to indicate 0.5 please move the sliding bar to the right or the left and back to 0.5)

	0	1	2	3	4	5	6	7	8	9	10
Warm	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Kind	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Generous	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Effective	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Efficient	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Competent	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

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Thank you very much for your participation!!!

Please click >> to collect your reward

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Appendix D: Co-Authorship Form



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WAIKATO
Te Whare Wānanga o Waikato

Co-Authorship Form

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Website: <http://www.waikato.ac.nz/sasd/postgraduate/>

This form is to accompany the submission of any PhD that contains research reported in published or unpublished co-authored work. **Please include one copy of this form for each co-authored work.** Completed forms should be included in all copies of your thesis submitted for examination and library deposit (including digital deposit), following your thesis Abstract.

Please indicate the chapter/section/pages of this thesis that are extracted from a co-authored work and give the title and publication details or details of submission of the co-authored work.

Chapter 2: Application of Stereotypes in Marketing: Research Findings and Direction for Future Work.

Nature of contribution
by PhD candidate

Chiefly responsible for conception, review of literature as well as writing the paper.

Extent of contribution
by PhD candidate (%)

80

CO-AUTHORS

Name	Nature of Contribution
Valentyna Melnyk	Conception advise and commenting/advising on all versions of the manuscript.
Carolyn Costley	Conception advise and editing of paper.

Certification by Co-Authors

The undersigned hereby certify that:

- ❖ the above statement correctly reflects the nature and extent of the PhD candidate's contribution to this work, and the nature of the contribution of each of the co-authors; and
- ❖ in cases where the PhD candidate was the lead author of the work that the candidate wrote the text.

Name	Signature	Date
Valentyna Melnyk		18/02/2013
Carolyn Costley		18/02/2013



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Co-Authorship Form

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This form is to accompany the submission of any PhD that contains research reported in published or unpublished co-authored work. **Please include one copy of this form for each co-authored work.** Completed forms should be included in all copies of your thesis submitted for examination and library deposit (including digital deposit), following your thesis Abstract.

Please indicate the chapter/section/pages of this thesis that are extracted from a co-authored work and give the title and publication details or details of submission of the co-authored work.

Chapter 3: Brand Perception: Influence of Gender Cues on Dimensions of Warmth and Competence

Nature of contribution
by PhD candidate

Chiefly responsible for the conception and design of this work, conducting the experiments, analyzing and interpreting the data, as well as the writing of the manuscript.

Extent of contribution
by PhD candidate (%)

70

CO-AUTHORS

Name	Nature of Contribution
Valentyna Melnyk	Advising on research question, questionnaire, data analysis, implications and manuscript.
Carolyn Costley	Advising on research question, questionnaire and editing of final paper.

Certification by Co-Authors

The undersigned hereby certify that:

- ❖ the above statement correctly reflects the nature and extent of the PhD candidate's contribution to this work, and the nature of the contribution of each of the co-authors; and
- ❖ in cases where the PhD candidate was the lead author of the work that the candidate wrote the text.

Name	Signature	Date
Valentyna Melnyk		18/02/2013
Carolyn Costley		18/02/2013



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Please indicate the chapter/section/pages of this thesis that are extracted from a co-authored work and give the title and publication details or details of submission of the co-authored work.

Chapter 4: Warmth and Competence: How and When Implicit Gender Cues enhance Brand Perception

Nature of contribution by PhD candidate	Chiefly responsible for the conception and design of this work, conducting the experiments, analyzing and interpreting the data, as well as writing the manuscript.
Extent of contribution by PhD candidate (%)	70

CO-AUTHORS

Name	Nature of Contribution
Valentyna Melnyk	Advising on conception, questionnaire, data analysis, implications and manuscript.
Carolyn Costely	Advising on conception and questionnaire design as well as editing of final paper.

Certification by Co-Authors

The undersigned hereby certify that:

- ❖ the above statement correctly reflects the nature and extent of the PhD candidate's contribution to this work, and the nature of the contribution of each of the co-authors; and
- ❖ in cases where the PhD candidate was the lead author of the work that the candidate wrote the text.

Name	Signature	Date
Valentyna Melnyk		18/02/2013
Carolyn Costely		18/02/2013