"Identification and stereotypes as determinants of brand extension potential"

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Identification and stereotypes as determinants of brand extension potential

Abstract

Current research suggests that social identification processes play an important role in markets. In this study, the authors propose that marketing research has neglected one important factor, which influences the success of a brand extension, namely the group processes between social groups and brand communities framing the new product introduction. Based on social identification theory, the authors derive a framework integrating identification and stereotyping processes, simultaneously testing for drivers of brand extension potential, which have been found to be important in past empirical studies. Using a structural equation modeling approach, the authors test for in-group and out-group effects in two hypothetical brand extension scenarios of one snowboard brand (Burton), and a surf brand (Billabong) into the ski market. They find that the social identification processes underlying the new product introduction significantly drive the potential success of the brand extension. By being the first study to explore the role of identification and stereotype effects in brand extension, the authors make an important contribution to research in this area. Moreover, our study provides important implications for brand managers planning to extend their brands into new product categories.

Introduction

"Wearing ridiculous clothing and using words like 'steez', 'shred the gnar' […] doesn't make you a snowboarder, it makes you sound like a retarded ex-gangster. Snowboarding is a lifestyle choice, you choose to be unconcerned with politics and social crap, including belittling other people. You snowboard, because it gives you a rush, because you like the peace and quiet of the hill, and because it's fun, it has nothing to do with status". (http://www.urbandictionary.com/define.php?term=snowboarder).

"You surf…"? I reply "What do you mean"? They tell me "Ahh nothing, you do not strike me as a surfer" I say "Why, because I don't have blond hair, blue eyes, a brand name quiver, with brand name board shorts, or that I don't walk around in flip flops everyday"? (http://thecardiffkook.info/tag/surfing-stereotypes/).

Brand extensions represent the most frequent type of new product introductions, summing up to 90% in the area of fast moving consumer goods and services (Yorkston et al., 2010; Aaker/Keller, 1990; Rangaswamy et al., 1993). A brand extension represents a branding strategy in which a firm marketing a product with a well-developed image uses the same brand name to introduce a product into a different product category (Aaker/Keller, 1990). Using this strategy, companies use the positive brand associations and the high degree of brand awareness among consumers to introduce their new product into a new market at a significantly lower cost and far more quickly than by setting up a new brand.

However, there is one important hitch to this solution, which offers so many tempting benefits: brand extensions involve a high risk for the company, because frequent examples of failed new product introductions using existing brand names illustrate how these flops can severely hurt the mother brand (Loken/John, 1993). Against this background, there is a mounting pressure on brand managers to be able to develop strategies on how to forecast the brand extension potential (BEP) in a given case and prevent malinvestments and damages to the existing brand (Aaker/Keller, 1990; Sattler, 1997a; Zatloukal, 2002).

Since the end of the 1980s, scientific studies have been conducted seeking insight on this elusive phenomenon. The most important drivers of BEP that have been identified in past research are the customers' perceived *fit between mother brand and the new product* and the customers' perceived *quality of the mother brand* (Aaker/Keller, 1990; Völckner/Sattler, 2006). However, mixed findings have been accumulated concerning further determinants of brand extension potential as, e.g., the number of previous brand extensions, and the naming of the brand extension. Sattler et al. (2002) attribute these diverging findings to the potential differences in the product categories that have been researched (see also Sattler/Völckner, 2003).

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It could, however, very well be that unexplained variance in the success of brand extensions is caused by factors, which have previously been neglected. A considerable amount of past studies has explored the effects of social identification in markets. Escalas and Bettman (2005), for instance, find that brands, which fit the image of a social group well, are consumed by the members of the group to symbolize their group membership, as well as to differentiate from other groups. These findings deliver tentative evidence for the assumption that social identification and stereotyping processes could also play a significant role in determining the potential of a brand extension. However, though surprising, these two research streams have so far never been brought together.

In this study, we propose that marketing research on brand extensions has so far neglected one important factor, which influences the success of a brand extension, namely, the group processes between social groups and brand communities framing the new product introduction. Based on social identification theory, we derive a framework integrating identification and stereotyping processes, simultaneously testing for drivers of brand extension potential (BEP), which have been found to be important in past empirical studies. Integrating customer-company identification (CCI) into our framework, we further test for so-called 'oppositional loyalty effects', which have recently been discussed in the marketing literature (Thompson/Sinha, 2008; Muniz/Hamer, 2001), meaning the phenomenon that highly identified customers are less willing to buy from competitor companies.

As the empirical setting, we chose the sports apparel industry, which offers a great potential of intergroup relationships, which are characterized by severe stereotyping. More specifically, we test for in-group and out-group effects in two hypothetical brand extension scenarios of one snowboard brand (Burton), and a surf brand (Billabong) into the ski market, finding that the social processes underlying the new product introduction significantly drive the potential success of the brand extension.

The product categories of skis, snowboards and surfboards are specifically interesting, as among the members of the respective groups (skiers, snowboarders and surfers), there is a strong variance in out-group stereotypes ranging from very positive (i.e., skiers who admire snowboarders for their 'cool attitude') to very negative stereotyping (i.e., skiers who despise snowboarders for their 'lazy lifestyle') (Nordlohne, 1993). The brand Burton is strongly associated with the social group of snowboarders and the brand Billabong with the group of surfers,

respectively. The group of skiers is in itself quite heterogeneous, as it contains young and fashion-oriented so-called 'freeskiers' who will most probably hold the prior type of positive stereotypes and traditional rather conservative skiers who will most probably hold the latter beliefs.

To measure perceived quality of the mother brand, perceived fit between the product categories, attitude towards the product category, in-group identification, and CCI, we draw on existing scales, which have been previously applied and tested in the literature (John et al., 1998; Keller/Aaker, 1992; Leach et al., 2008; von Loewenfeld, 2006; Mael/Ashforth, 1992; Park et al., 1991a). To develop psychometric scales on positive and negative out-group stereotypes towards snowboarders, we conducted focus group interviews to arrive at the most salient snowboarder/surfer stereotypes among the group of skiers (Churchill, 1979). All scales show a high degree of reliability and validity.

Our models fit the data well. The results suggest that, in line with the previous literature, perceived quality of the mother brand and perceived fit between the product categories have the strongest impact on BEP. Besides these long known effects, however, we find a significant effect of positive out-group stereotypes on BEP, which is robust over the two different brands/product categories. In the first model (mother brand = Burton), the effect of positive out-group stereotypes is partially mediated by the perceived fit between the product categories. We do not find a significant effect of negative out-group stereotypes on BEP, whereas the negative out-group stereotypes are significantly reduced by a positive attitude towards the product category. Furthermore, in line with the psychological literature on stereotyping, we find that in-group identification has a positive effect on negative out-group stereotyping, whereas it alleviates positive out-group stereotypes (Tajfel/Turner, 1979).

Hence, using a non-student sample of real customers (high degree of external validity), our results support the assumption that brand extensions will be more promising if the targeted customers have strong positive stereotypes towards the group of customers of the mother brand (Escalas/Bettman, 2005). This effect is stronger if the out-group is relevant for social comparisons (skiers tend to rather compare themselves with snowboarders than with surfers) and if intergroup contact is low (we conducted multiple group comparisons for the group of people who only ski and the group of people who are also active in snowboarding/surfing besides skiing). Contrary to our expectations, we do not find evidence for oppositional loyalty effects in our data.

Our findings have important implications for research, as well as for the management of brand extensions. We reveal that the so far neglected social identification and stereotyping effects during brand extensions add to a deeper understanding and the knowledge of these underlying psychological processes may make or break a brand extension strategy.

In the following section, the existing research on brand extensions will be briefly presented. In a second step, the reader will be introduced to the social identity approach and the most important findings on the effect of identification in the area of marketing will be summarized. Building on the foundation of social identification theory, stereotyping processes will be explained and the applications in marketing, which remain few up to now, will be briefly introduced. Having discussed this theoretical background, a conceptual model will be derived, which hypothesizes which role identification and stereotyping processes play in determining brand extension potential. Subsequently, hypotheses will be derived and empirically tested. The section 'method' will explain our empirical study, our data, and the applied statistical techniques. Subsequently, our results are presented, discussed and implications for theory and practice are derived. Finally, our paper concludes with final remarks.

1. Theoretical background

1.1. Brand extensions. If a company decides to extend its product line, different marketing strategies are available. If a business decides against a new brand strategy when introducing a new product, but launches the product under an already established brand name, this is referred to as a brand image transfer (also: brand extension, brand stretching) (Aaker/Keller, 1990; Völckner/Sattler, 2006). Nowadays, more than 90% of all fast moving consumer goods and services are launched under an established brand name, which makes this kind of marketing strategy the most widespread form of new product introduction (O'Sullivan/Steven, 2003; Yorkston et al., 2010; Aaker/Keller, 1990; Rangaswamy et al., 1993; Sattler, 1998b).

The main reason for the widespread prevalence of brand transfer strategies can be found in the lower startup costs for a new product, when launched under a well-established brand name. The costs of the introduction of new products using a brand image transfer strategy are relatively low in comparison to new brand strategies. This is due to the fact that the new product benefits from the degree of brand awareness, as well as the image of the existing brand (Aaker/Keller, 1990; Keller,

1993). Moreover, a reduction of advertising expenses via the so called 'umbrella-advertising' can be generated (Gürhan-Canli/Maheswaran, 1998). This advertising concept is characterized by the procedure that an advertising campaign simultaneously promotes multiple products of one brand. Yet, another advantage – compared to a new brand strategy – consists in the possibility to eliminate problems while searching for an appropriate brand mark. Under certain circumstances, another positive effect for the mother brand can emanate from the transferred product itself. With a brand image transfer, spill-over effects can, for instance, appear for superordinate product categories of the mother brand (John et al., 1998). If the transferred product is able to establish itself in the product category, an upgrade of the entire brand image is commonly achieved (Aaker, 1990). Advertising activities for the transferred product can also benefit the aggregate product range of the mother brand, as it brings about a higher level of awareness for the brand as a whole and therewith also indirectly increases the recognition value of all products. At best, this can even lead to a revitalization and consequently to a life cycle prolongation of matured brands (Reddy et al., 1994).

Alongside with the just named positive spill-over effects, the brand transfer can also entail negative implications for the firm. Thus, a brand image transfer can lead to the problem that the originally positive image of the brand is being weakened and accordingly damaged by the transferred products (Aaker, 1990). In the past, various studies have been conducted on conditions, which cause negative effects of brand image transfers on the mother brand and when these negative spill-over effects have a particularly bad impact. The work of Loken and John (1993) shows that a negative spill-over effect can especially be attributed to brand image transfers with a minor fit between the respective product categories (Loken/John, 1993; Milberg et al., 1997). The authors trace the reason for such an observation back to the dilution of the value proposition, which materializes/comes about due to very different products of a single brand (Gürhan-Canli/Maheswaran, 1998). Negative spill-over effects in terms of cannibalization effects can, in addition, appear with the introduction of transferred products in product categories, which are already existent in the mother brand. The introduction of new products can, in this case, cause a decrease in sales figures of other products of the brand (Aaker, 1990). In contrast, so called flagship products are generally less prone to negative spill-overs (John et al., 1998). However, these results could basically be detected in regard to franchise extensions.

Regarding line extensions, where normally a high fit exists, negative spill-over effects due to brand image transfer could as well be found. There are further drawbacks attributed to potential negative spill-over effects: a brand image transfer strategy, thus, offers only a very little creative leeway for the image design of a new product, as the consumer associates the transferred product with the other products of the mother brand (Broniarczyk/Alba, 1994). Moreover, coordination requirements between the marketing activities of the individual products rise with every additional product of the brand.

On grounds of the immense expenditures, as well as of the high flop ratio of brand transfers, it is not astonishing that the analysis of the critical factors of success has already attracted interest in science and practice for quite some time (Aaker/Keller, 1990). Since 1985, around 50 empirical studies concerning the success factors of brand image transfers have been published. The two most often examined factors of success are, firstly, the fit between mother brand and transferred product and, secondly, the perceived quality of the mother brand. In doing so, nearly all studies have discovered a significant impact of these factors of success on the success of the brand image transfer. Other studies have explored the role of context (Wänke et al., 1998), different branding strategies (Milberg et al., 1997), personal factors such as involvement (Maoz & Tybout, 2002), mood (Barone & Miniar, 2002; Barone, 2005), need for cognition (Wood & Swait, 2002), retrievability (Dawar, 1996), self-regulatory focus (Yeo & Park, 2006), construal level (Kim & John, 2008), and emotional attachment (Mathur et al., 2012), as well as brand-level qualities such as visual art (Cheng et al. 2012), brand names (Achenreiner & John, 2003; Sen, 1999), dominance (Herr et al., 1996), luxuriousness (Hadtvedt & Patrick, 2008), up to taxonomic feature-based versus thematic relation-based similarity (Estes et al., 2012). With regard to the significance of most other factors of success, no universally valid statement can be made.

This is due to the fact that results of the studies arrive at contradictory conclusions or that the factors are investigated merely in very few product categories. The high relevance of the quality estimation concerning the mother brand and of the fit is also being proved by the work of Zatloukal (2002), as well as by the study of Sattler und Völckner (2003) which is based on the former. The aim of these two studies is to derive statements on the generalization of the success factors of a brand image transfer by providing broad empirical studies.

While the work of Zatloukal (2002) analyzes different factors of success on the basis of a customer survey simulating hypothetical brand image transfers, the study of Sattler und Völckner (2003) tests the validity of Zatloukal's derived findings by means of an investigation of real brand image transfers (Zatloukal, 2002; Sattler/Völckner, 2003). The results of both studies show a high accordance, which verifies the generalization of their findings. Both studies confirm the great influence of perceived quality of the mother brand and of the fit between mother brand and transferred product (Sattler/Völckner, 2003).

Further, all other previously examined factors of success of brand image transfers can be classified into the following four groups: 1) history of earlier brand image transfers, 2) characteristics of transferred product's category, 3) type of transferred information, and 4) characteristics of the mother brand. The group of the history of earlier brand image transfers incorporates the analysis of the influence of the number of earlier brand transfers, the width of the product range of the mother brand, the variance of the perceived quality between different products of the same mother brand, as well as the positioning of the influence of earlier brand image transfers on the actual success of the latest brand transfer (Zatloukal, 2002). In this group of potential drivers, only the hypothesis that the likeliness of success of the planned brand transfer will decrease with a higher variance of quality assessment of other products of the mother brand can be confirmed (Dancin/Smith, 1994; Sattler/Völckner, 2003; Zatloukal, 2002). The majority of studies, on the contrary, could not prove that the likelihood of success of future brand image transfers rises with an increased number of previous brand image transfers, a wide product range of the mother brand, or with the consistent positioning of previous brand image transfers (Boush/Loken, 1991; Dancin/Smith, 1994; Reddy et al., 1994; Sattler/Völckner, 2003; Sheinin/Schmitt, 1994; Smith/Park, 1992; Zatloukal, 2002). The characteristics of the transferred product's product category represent the second group of success factors. For certain product categories, it has been shown that the likelihood of a brand image transfer success of a well-known brand increases with a low level of customer awareness and involvement regarding the product category of the transferred product (Nijssen/Bucklin, 1998; Smith/Park, 1992). However, the hypothesis could not be approved for all tested product categories (Sattler/Völckner, 2003; Zatloukal, 2002). Furthermore, the fact that the likelihood of success of a brand image transfer increases with a rising perceived difficulty in production of the transferred product could only be testified on the ground of Aaker's und Keller's work (1990). The third group of potential success factors

can be summarized as the type of transferred information. The analyses of Broniarczyk and Alba (1994), Zatloukal (2002), as well as Nakamoto et al. (1993) prove that the probability of a successful brand image transfer rises when the relevance of the transferred mother brand association for the product category increases. Hence, a positive customer knowledge composition regarding a certain brand is not sufficient, if those associations are not relevant for the transferred product category (Broniarczyk/Alba, 1994). Similar to the brand concept consistency, Reddy et al. (1994) demonstrated that more image-oriented information has a greater influence on the probability of a brand image transfer success than function oriented product information. The study of Reddy et al. (1994) analyzes which corporate characteristics of the mother brand have an influence on the likelihood of a successful brand image transfer. Those characteristics represent the fourth group of success factors. The study proves that characteristics, such as the dimension, the marketing expertise, as well as the advertising expenditures of the mother brand, have a significant influence on the probability of success of future brand image transfers of a certain company.

1.2. Social identity theory. Social identity approach comprises the social identity theory, as well as the theory of self-categorization. Social identity theory (SIT) goes back to the idea of Turner (1982), Tajfel/Turner (1979, 1986) and offers basic approaches to explain inter-group processes. The theory of self-categorization (SCT) has been authored by Turner et al. (1987), Turner/Oakes (1989) and marks an advancement of SIT. By means of this theory, inter- and intra-group processes are being described according to/as a function of cognitive mechanisms (Turner et al., 1987).

The concept of social categorization is based on cognitive psychology and indicates that individuals arrange information in order to structure and classify their social environment. Individuals define their own position and consequently the position of other individuals in society by building social groups and by evaluating them (Tajfel/Turner, 1986). As every individual strives for a positive self-perception, there evolves a desire to belong to a group that transfers a positive social identity (Thomas, 1992). By means of social comparisons, individuals try to attain a positive social identity. For this purpose, they compare individuals from their in-group to those from relevant out-groups, while tending to set their own in-group positively apart from other relevant groups. This is being achieved by drawing on those dimensions in which the in-group outmatches the relevant out-group (Turner, 1982). This distorted inter-group comparison is referred to as in-group bias and increases with an

increasing identification with the in-group (Crocker/Luthanen, 1990). Thus, social comparisons are used in order to achieve a positive social distinctiveness of the own group compared to the out-group.

1.3. Stereotypes. A stereotype is "a cognitive structure, which contains our knowledge, beliefs, and expectations on a social group of human beings" (Jonas et al., 2007, p. 607). This implies that stereotypes do not necessarily have to be negative, but can also entail positive attributes (Sherif, 1966). The social identity approach helps to explain the formation, the different functions, as well as the consequences of stereotypes, because the process of categorization can be seen as the cognitive trigger for stereotypes. According to the principle of accentuation, a classification of stimuli leads to an overestimation of differences between groups and an underestimation of similarities within a group (Tajfel, 1959). Stereotypes arise through the homogeneous perception of the group members. If individuals are aware of their group membership, they will evaluate their in-group as superior to the compared out-group, in order to obtain a positive social identity. At the same time, an antipathy to the out-group can be experienced, which manifests itself in stereotypes (Tajfel/Turner, 1979). Prejudices signify a negative attitude towards members of out-groups and contain a cognitive and a behavior component. Stereotypes, which form the cognitive component of the prejudice, are generalizations of human beings based on their affiliation to a social category (Abrams/Hogg, 1988). For this reason, in-group members will generally be associated with positive, and out-group members with negative stereotypes.

1.4. Identification with brands. Belk (1988) already stated that "our possessions are a major contributor and reflection of our identities" (Belk, 1988, p. 139). According to this, the self-concept plays an important role during the product purchase procedure, as individuals want to express their identity through the possession of a product. Through the possession of certain products, individuals, on the one hand, have the possibility to differentiate themselves from other individuals and, on the other hand, can express their affiliation to a specific group (Escalas/Bettman, 2005; Kleine et al., 1995). Individuals who strongly identify with a social group will, therefore, predominantly consume brands, which match the image of their specific group (Escalas/Bettman, 2005).

The work of Ashforth and Mael (1989) is the first of its kind to establish a connection between social identity theory and the identification with organizations. The authors argue that the consumer will identify with an organization, if it contributes to a positive self-perception of the consumer

(Ashfort/Mael, 1989). Bergami and Bagozzi (2000) follow this argumentation and define the identification with an organization "as a form of social identification whereby a person comes to view him- or herself as a member of a particular social entity, the organization" (Bergami/Bagozzi, 2000, p. 557). This definition encloses both the identification of an employee or member with its organization, as well as the identification of consumers with a company (Homburg et al., 2009). The identification of the customer with a company is referred to as customer-company identification (CCI). In addition, Lam et al. (2010) introduce the term customer-brand identification (CBI), which they define as "a customer's psychological state of perceiving, feeling, and valuing his or her belongingness with a brand" (Lam et al., 2010, p. 129). In their study, the authors examine how the CBI and the perceived gain of customers for an already well established brand change when a new brand enters the market. The results of this study highlight the enormous importance of CBI for the area of marketing. Thus, a higher identification with a brand leads to a lower probability that a customer changes to another brand if a new brand enters the same product category (Lam et al., 2010, p. 129).

Bhattacharya and Sen (2003) claim that based on an increasing influence of companies on the contemporary consumer society, individuals will try to express their own personality through the consumption of certain brands (Bhattacharya/Sen, 2003; Homburg et al., 2009). Hence, for companies,

the customer identification with the company/brand demonstrates "[…] the primary psychological substrate for the kind of deep, committed, and meaningful relationships that marketers are increasingly seeking to build with their customers" (Bhattacharya/Sen, 2003, p. 76).

Muniz and O'Guinn (2001) define brand communities as "a specialized non-geographically bound community, based on a structured set of social relationships among admirers of a brand" (Muniz/O'Guinn, 2001, p. 412). BCs can, thus, be understood as an informal social group with a certain brand as its core element (Muniz/O'Guinn, 2001). Members of brand communities (BC) are, in particular, very loyal regarding their BC brand and show some kind of antipathy towards competing brands (Algesheimer et al., 2005; McAlexander et al., 2002). This antipathy, which expresses itself in a longer adoption period of new products of a competing brand, is referred to as 'oppositional loyalty' (Thompson/Sinha, 2008).

2. Conceptual framework and hypotheses

Based on the theory of social identification, identification with companies/brands, and the theory on stereotyping processes, the following section will be dedicated to deriving a social identity-based framework of brand extension potential. In this framework, formal hypotheses will be derived, which will be tested in the empirical study. Figure 1 graphically illustrates the conceptual framework.
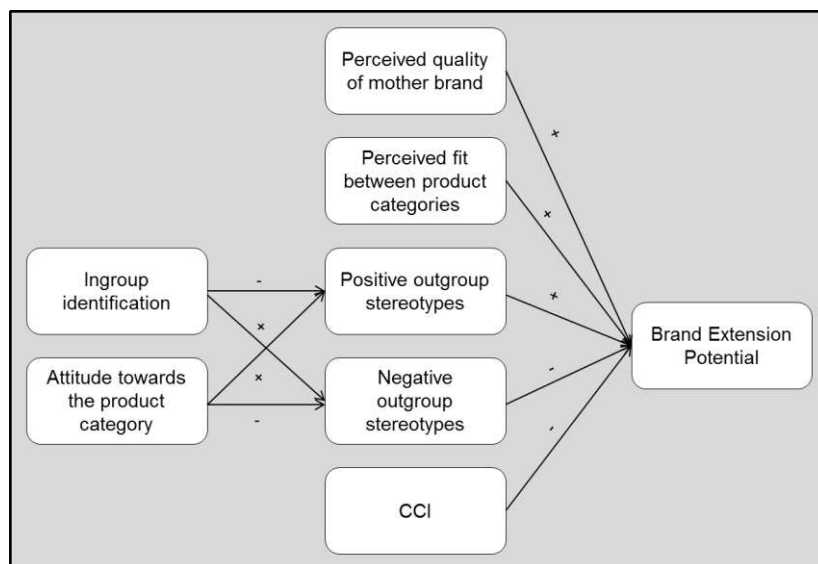
Fig. 1. Conceptual framework

2.1. In-group identification and out-group stereotypes. Individuals strive for a positive self-perception. In order to achieve this, they will attach themselves to social groups that best comply with their moral concepts (Thomas, 1992). The more essential the group membership for the self-

perception of a person is, the stronger the individual will identify with the group (Turner et al., 1987). Further, in order to structure their environment, individuals classify other people in certain groups (Tajfel, 1978). The theory of social identity seizes that individuals tend to rate their in-group more

positively than relevant out-groups (in-group bias) (Tajfel/Turner, 1979). This is being reflected in social comparisons in which individuals compare their in-group to relevant out-groups. For social comparisons, individuals mainly draw on dimensions that set the in-group apart from the out-group, because a positive social comparison leads to a positive self-perception (Tajfel, 1978). Stereotypes possess a value function, which helps the individual to maintain his or her value system. If the result of a social comparison turns out to be positive, the individual is keen to preserve the inter group differences by means of stereotyping, in order to conserve the positive self-evaluation (Tajfel, 1981).

Thus, if an individuals' identification with the in-group is very strong, it becomes even more important for him/her to succeed to positively differentiate the own in-group from the out-group. During this process, the strong in-group identification leads to less positive out-group stereotypes and more negative out-group stereotypes. In the context of consumer groups, this can be illustrated using the example of skiers and snowboarders. The more a skier identifies with the in-group of skiers, the more negative will his/her out-group stereotypes towards snowboarders or surfers be. Against this background, the first hypothesis can be derived:

H1: The more an individual identifies with an in-group, (a) the weaker are the positive stereotypes and (b) the stronger are the negative stereotypes concerning the out-group.

2.2. Attitude towards the product category. We additionally assume that the attitude towards a product category will influence the stereotypes regarding consumers of this product category: the more positive the attitude of a skier towards the product category of snowboards/surfboards, the more positive will his/her out-group stereotypes towards the group of snowboarders/surfers be. Thus, our empirical study will also take into account the following hypothesis:

H2: The more positive the attitude of an individual towards the product category of the mother brand is, (a) the stronger are the positive and (b) the weaker are the negative stereotypes regarding the consumer of this product category.

2.3. Out-group stereotypes and brand extension potential. Further, group members try to actively differentiate themselves from other groups by means of their behavior and appearance (Tajfel, 1978). The study of Escalas and Bettman (2005) reveals that social groups use particular brands in order to symbolize their cohesion and to differentiate from other groups.

Thus, for a brand extension into a new product category to be successful, the target group of customers should be willing to use the mother brand to communicate their self-concept. If the personality attributed to this mother brand is consistent with a group member's self-concept, a positive evaluation of the brand extension will result (Escalas/Bettman, 2005). However, if the target group of consumers has negative stereotypes towards the group of consumers from the original market and, thus, is not willing to use the mother brand as a means of communicating their own self-concepts, the evaluation of the brand extension is very likely to be negative. Hence, an individual's evaluation of a brand extension of a mother brand from another product category is assumed to depend on the stereotypes towards the group of consumers from the mother brand's original market. For the context of the brand extension in our empirical study, this would mean that if a skier has very positive stereotypes towards the group of snowboarders/surfers, the more likely he/she will be to be willing to use skis of a snowboard/surf brand (brand extension of a snowboard/surf brand into the ski market) to communicate his/her own self-concept. However, if the skier has very negative stereotypes towards the group of snowboarders/surfers, such a brand extension will not be likely to be adopted by this customer. From this, the following two hypotheses can be derived:

H3: The stronger the positive stereotypes regarding an out-group are, the higher is the hypothetical success of a brand image transfer of a brand that is consumed by and associated with this out-group.

H4: The more distinct negative stereotypes regarding an out-group are, the lower is the hypothetical success of a brand image transfer of a brand that is consumed by and associated with this out-group.

2.4. Oppositional loyalty. Moreover, we test whether a stronger identification with the current brand, which is commonly consumed by the own in-group, leads to a less positive evaluation of a brand extension of a brand, which is typically associated with an out-group. Similar effects have already been discovered in connection with brand communities: BC members, who strongly identify with the BC show a very high loyalty regarding the BC brand (McAlexander et al., 2002). Beside the typical positive effects of loyalty (repurchase, recommendation, and cross buying), a so-called oppositional loyalty effect could be detected (Aaker, 1999; Bhattacharya/Sen, 2003). Thompson and Sinha (2008) empirically show that BC members consider competing brands as a threat for the brand community's brand and, as a result, refuse to buy products of this brand (Muniz/Hamer, 2001; Thompson/Sinha, 2008).

Such effects may just as well be observable in the context of brand extensions. We can imagine that a customer who strongly identifies with a certain ski brand would be less likely to adopt a new brand extension of a snowboard/surf brand into the ski market. In order to check whether this oppositional loyalty effects observed in brand communities can also be found in the context of brand extensions spanning different social groups, the following hypothesis is derived:

H5: The stronger a customer identifies with a brand of which he/she is a loyal customer, the less positive the evaluation of a brand extension of a brand associated with an out-group will turn out.

2.5. Perceived quality of the mother brand. When evaluating a new product, consumers commonly draw on their own past experiences and associations regarding the brand (Zatloukal, 2002). Hence, the brand holds an important information function during the purchase decision process when buying new products. One of the main objectives of brand extensions consists in transferring the knowledge structures associated with the mother brand to the transferred product (Reinstrom, 2007). If a brand is associated with high quality, the risk perceived by the consumer consequently decreases and the willingness to try the respective branded product increases (Sullivan, 1998). Accordingly, a brand extension will be evaluated more positively if consumers associate a high quality with the mother brand (Aaker/Keller, 1990; Park et al., 2002). In the context of this study, we will assume that if a customer perceives the quality of a snowboard/surf brand to be high, he/she will be more likely to be willing to buy skis from this mother brand. Hence, the following hypothesis will be examined:

H6: The higher the perceived quality of the mother brand, the better the evaluation of the brand extension.

2.6. Perceived fit between product categories. The findings of social categorization theory hypothesize that a brand image transfer will obtain a superior evaluation if a high fit between the products of the mother brand and the transferred product exists (Reinstrom, 2007). Social categorization theory indicates that the cognitive category in which the product is being ranked influences the evaluation of new products (Dubé et al., 1992). With an increasing perceived fit between the mother brand and the transferred product, knowledge structures of the customer regarding the mother brand can easier be transferred to the product (Aaker/Keller, 1990). This leads to the formulation of the following hypothesis:

H7: The higher the perceived fit between mother brand and the brand extension, the higher the probability of success of the brand extension.

2.7. Out-group stereotypes and fit between product categories. Furthermore, it shall be analyzed whether the stereotypes towards an out-group have an influence on the perceived fit between product categories. We assume that individuals whose positive stereotypes regarding an out-group are quite distinct will perceive the fit between product categories, which are associated with the respective group to be much higher than individuals, whose positive stereotypes regarding this out-group are less pronounced. Thus, the following hypothesis shall be tested:

H8: The stronger the positive stereotypes regarding the out-group, the higher the perceived fit between the product categories.

2.8. Boundary-spanning group memberships. By joining social groups, individuals strive for a positive social identity (Thomas, 1992). Some individuals may categorize themselves as being a member of multiple groups. Accordingly, a lower in-group bias for such individuals can be expected when comparing the groups of which he/she feels to be a part of. In our example, we can imagine a customer who mainly enjoys skiing, but from time to time goes snowboarding and surfing. For such a customer, the group of snowboarders/surfers does not represent a genuine out-group, because he somehow feels to be a part of and identifies with this group as well. He/she is more/less likely to have positive/negative out-group stereotypes towards the group of snowboarders or surfers. Against this background, the following hypotheses are formulated:

H9: For individuals who identify with both groups, which are being socially compared, the positive stereotypes are more distinct than for individuals that do not identify with the out-group.

H10: For individuals who identify with both groups, which are being socially compared, the negative stereotypes are less distinct than for individuals that do not identify with the out-group.

H11: Individuals who solely identify with the in-group evaluate a brand extension of a brand, which is associated with the out-group worse than individuals who identify with both groups.

3. Methodology

To empirically test our conceptual framework, a survey among skiers was conducted in a skiing resort in Germany during January 2011. In order to motivate as many skiers as possible to participate, a beverage cart was set up at which all participants received a hot beverage while completing the questionnaire. In the

questionnaire, each respondent was asked to evaluate one of two hypothetical brand extension scenarios: 1) the brand extension of a snowboard brand (Burton) into the ski market, i.e., "Burton Skis" and 2) the brand extension of a surf brand (Billabong) into the ski market ("Billabong Skis").

3.1. Empirical setting. The share of the Swiss population that feels associated with the group of skier lies at 37%, in Germany at 15%, and in the Netherlands at 13% (Grabler et al., 2004; McKinsey&Company, 2010). Hence, the group of skiers comprises over 15 million members just in those four countries. The average share of all Europeans that count themselves as skiers amounts to over 20% (Grabler et al., 2010). In addition to the huge number of members, a high heterogeneity within the group, regarding the interpretation and meaning of the sport, can be identified. Of the 37% skiing Swiss population, only 8% practice the sport intensively (McKinsey&Company, 2010). Moreover, the group of skiers, subject to different skiing styles, allows to be split in smaller, more homogeneous groups. 75% and, thus, the predominant part of skiers still conduct the sport in the traditional way on groomed tracks, while the remaining 25% practice the sport mostly in snow parks or off the groomed track (Grabler et al., 2010). Thus, the group of skiers can be divided into the group of traditional skiers and so-called "freeskiers".

Due to the relatively short history of the sport of snowboarding, the group of snowboarders is explicitly smaller than the group of skiers. In the year 2010, pursuant to a representative study of the Austrian Federal Ministry of Economic Affairs, Family Affairs and Youth, every fourth winter sports enthusiast reckons herself/himself among the group of snowboarders (Grabler et al., 2010).

Between the two groups of skiers and snowboarders a fierce relationship can be encountered. When, at the beginning of the 1990s, snowboarding became more and more popular as a new snow sport and collided with the sport of skiing, most skiers saw snowboarders as some kind of enemy (Nordlohne, 1993). With the increasing popularity of snowboarding, the number of winter sport enthusiasts rose in skiing regions and thereby the waiting period at the ski lift stations increased as well. In addition, due to the different riding styles of snowboarders and skiers, the number of accidents on the tracks grew considerably. By means of their appearance and the related lifestyle, snowboarders clearly separate themselves from the group of skiers. Skiers typically stereotype snowboarders as 'daredevils' and 'slobs'. On the other hand, the group of snowboarders commonly perceives the prototypical skiers as bourgeois and old-fashioned. Because of the niche subculture of "freeskiing", which is perceived as more modern and fashionable the

relationship between the two sports, has improved again during the last years. In addition, high investments of skiing regions in lift facilities and snow parks (which are today also increasingly used by skiers) have helped to cut back the prevailing hatred. Moreover, a considerable number of people practice both sports at the same time. Nonetheless, a certain rivalry still reamins between the two groups, which is frequently reflected in articles issued in special interest journals and shares in internet forums.

A comparable rivalry cannot be found between the two groups of skiers and surfers. The reason for this lies in the fact that skiing and surfing can be seen as complementary sports. Many people that ski in the winter, practice surfing during summer. Furthermore, regarding social comparisons, the group of snowboarders holds a higher relevance for the group of skiers than the group of surfers due to the direct contact in the skiing regions.

The selection of the brands for the empirical study took place based on an online survey interviewing approx. 50 skiers. Respondents were asked to name the first snowboard and surf brand that comes to their mind. Over 70% of the questioned individuals named "Burton Snowboards" as a brand for snowboards and 40% of the respondent referred to "Billabong Surfboards" as an established surf brand. This approach should ensure that the majority of respondents of the main survey actually know the listed brands, so that they are able to answer questions on the perceived quality of those brands.

3.2. Measure development. For the operationalization of the perceived quality of the mother brand, the scale of Keller and Aaker (1992) will be employed. The authors used this scale in order to analyze the influence of the perceived quality of the mother brand on the success of further brand image transfers of the mother brand:

Burton Snowboards / Billabong Surfboards are ...

QUAL_1 (1) of low quality (7) of high quality,

QUAL_2 (1) below average (7) above average,

QUAL_3 (1) not worth testing (7) worth testing.

The attitude towards the product category of the mother brand is captured by three items from the scale measuring the attitude towards the product and product category, as employed by Park et al. (1991a). This scale was also used in the context of success factors of brand image transfers. This paper will do without the inclusion of the items for the measurement of consumer attitude towards a product, originally covered by the scale. This is because this work will not analyze the attitude towards a specific product, but rather towards a specific brand.

I find the product category Snowboards/Surfboards...

ATT_PK1 (1) unfavorable (7) favorable,

ATT_PK2 (1) dislikable (7) likable,

ATT_PK3 (1) not attractive (7) attractive.

The perceived fit between the mother brand and the new product is measured by seven items altogether. The first four items (FIT1.1-FIT1.4) have been taken from the work of John et al. (1998) and the last three items (FIT2.1-FIT2.3) have been adopted from the work of Keller and Aaker (1992). The scales have been designed in order to examine the influence of the perceived fit between the product categories of the transferred product and the mother brand on the brand image transfer's success.

Please assess how well the product Burton Skis/Billabong Skis matches the image of the brand Burton/Billabong:

FIT1.1 (1) unfavorable (7) favorable,

FIT1.2 (1) dislikable (7) likable,

FIT1.3 (1) not attractive (7) attractive,

FIT1.4 (1) not consistent / not congruent (7) consistent / congruent,

FIT2.1 (1) poor fit between Burton/ Billabong and Ski (7) good fit between Burton/ Billabong and Ski,

FIT2.2 (1) absolutely not logical of Burton/ Billabong (7) absolutely logical of Burton/ Billabong,

FIT2.3 (1) absolutely not suitable for Burton/ Billabong (7) absolutely suitable for Burton/ Billabong.

The operationalization of the construct in-group identification has been carried out via the items of Leach et al. (2008), measuring the perceived importance of the group membership for the self-concept of an individual (measured on a 7-point rating scale starting at 1="absolutely disagree" to 7="absolutely agree"):

IDSKI1 I often think of me being a skier.

IDSKI2 The fact that I am a skier is very important to me.

IDSKI3 The fact that I am a skier is an important part of my self-reflection.

The operationalization of the construct brand identification (CCI) has been carried out by the scale developed by Mael and Ashforth (1992). The scale has been originally developed in order to measure the identification with a company. Given that the scale has been shown to be suitable to also measure identification with brands, the employment of the scale for the purpose of this paper seems appropriate. The

measuring of the construct's indicators is executed via a 7-point rating scale beginning at 1="absolutely disagree" to 7="absolutely agree":

CCI1 I strongly identify with my skiing brand.

CCI2 I feel good about being a customer of my skiing brand.

CCI3 I like to tell others that I am a customer of my skiing brand.

CCI4 My skiing brand suits me very well.

CCI5 I am loyal to my skiing brand.

The development of the scale for the operationalization of the construct stereotypes regarding the out-group has been carried out following the outline/guideline of Churchill (1979). After contextual considerations regarding the definition of the measured construct, a two-step pretest has been conducted. For this purpose, an item battery with different attributes, which are credited to out-group members, has in the first step been developed by means of internet research and explorative focus group interviews with in-group members (skiers). By using the subsequently formulated items, a pretest of the scale with over 189 in-group members has been conducted. After reliability and validity tests a two-dimensional scale for each of the two out-groups could be generated. The two dimensions can be identified as positive and negative stereotypes regarding the respective out-groups:

Positive snowboarder stereotypes: *(1) I absolutely disagree (7) I absolutely agree*

SNBSTPOS1 Snowboarders are cool.

SNBSTPOS2 Snowboarders are sexy.

SNBSTPOS3 Snowboarders are freethinkers.

SNBSTPOS4 Snowboarders are relaxed.

Negative snowboarder stereotypes: *(1) I absolutely disagree (7) I absolutely agree*

SNBSTNEG1 Snowboarders are drug-addicts.

SNBSTNEG2 Snowboarders are lazybones.

SNBSTNEG3 Snowboarders are no-goods.

SNBSTNEG4 Snowboarders are only showing-off.

Positive surfer stereotypes: *(1) I absolutely disagree (7) I absolutely agree*

SURFSTPOS1 Surfers are cool.

SURFSTPOS2 Surfers are easy-going.

SURFSTPOS3 Surfers are frugal.

SURFSTPOS4 Surfers are relaxed.

Negative surfer stereotypes: (1) I absolutely disagree (7) I absolutely agree

SURFSTNEG1 Surfers are dull.

SURFSTNEG2 Surfers are primitive.

SURFSTNEG3 Surfers are lazy.

SURFSTNEG4 Surfers are not reliable.

For the operationalization of the construct brand extension potential (BEP), the scales employed by Aaker and Keller (1990), as well as Hem et al. (2003), have been used. Given that BEP is the central construct, the scale has been augmented by two more items (BEP2.1, BEP2.2) used by Algesheimer (2005), which measure the purchase intention of the brand extension.

BEP1 How likely is it that you would test Burton/Billabong Ski?

(1) most likely (7) most likely not

BEP 2 How would you estimate the quality of the brand image transfer altogether?

(1) very poor (7) very good

BEP 3 I intend to buy Burton/Billabong Skis in the near future.

(1) I absolutely disagree (7) I absolutely agree

BEP 4 I would actively look for Burton Skis in order to test the brand.

(1) I absolutely disagree (7) I absolutely agree

BEP 5 Overall, I am positive about the brand image transfer.

(1) negative (7) positive

BEP 6 What attitude do you have towards the brand image transfer?

(1) negative (7) positive

BEP 7 How would you assess the brand Burton/Billabong Skis in comparison to other ski manufacturers in the ski market

(1) as one of the worse (7) as one of the best

3.3. Scale evaluation. In the first step the indicators are analyzed in terms of their internal consistency with the help of Cronbach's alpha. With values of more than 0.7, all scales of the Burton dataset expose a high degree of reliability. The reliability check of the scales of the Billabong dataset shows a Cronbach's alpha for (the construct of) brand identification of 0.473. On the basis of the item-to-total correlation, the indicator CCI5 contributes only very little to an explanation. After the elimination of the indicator CCI5, a Cronbach's Alpha of 0.850 is being shown for the construct of identification with brands. By using

confirmatory factor analysis, every construct is, then, separately tested for reliability and validity. For this purpose, the quality criteria factor reliability (FR), indicator reliability (IR), average variance extracted (AVE), t-value of the factor loadings, and the Fornell-Larcker criterion are being consulted. All the constructs fulfill the requested local quality criteria. The values for the calculation of the factor reliability and average variance extracted are above the threshold value of 0.60 and 0.50, respectively. The t-values of the factor loadings of the single indicators exceed the tabular t-value of 1.645. Thus, the assumption that all factor loadings are large enough and significantly different from zero can be confirmed on 5% level. All in all, the quality criteria militate in favor of a good measure of the constructs via the attributed indicators and of a convergence validity of the constructs. The discriminant validity of the constructs is confirmed, as, for every construct, the average variance extracted is larger than every squared correlation of the factor with another factor (Fornell/Larcker, 1981). The results of the Fornell-Larcker tests vitiate the assumption, materialized by the explorative factor analysis of the Billabong dataset, that the constructs perceived quality of the mother brand and attitudes towards the product category of the mother brand, as well as the constructs perceived fit between product category and the success of the brand image transfer do not show a sufficient discriminant validity. The global quality criteria of the confirmatory factor analysis over all constructs provide first evidence for the fit of the structural equation model. Both the CFI-values (DS-Burton: 0.926; DS-Billabong: 0.936), as well as the TLI-values (DS-Burton: 0.917; DS-Billabong: 0.929) surpass the critical threshold of 0.9. Moreover, the RMSEA values (DS-Burton: 0.063; DS-Billabong: 0.063) suggest that the model adequately reflects the data and also the values of the second inference statistical quality criterion SRMR (DS-Burton: 0.051; DS-Billabong: 0.044) lies below the critical value of 0.11. The Chi-square values amount to 1058.254 (DS-Burton) and 967.689 (DS-Billabong), respectively, at a variance (degree of freedom) of 532 and 595. The resulting coefficients of 1.989 and 1.626, respectively, fall below the, in literature, claimed threshold of 2.5. Table 1 gives an overview of the reliability statistics of the individual constructs and a detailed summary of the results of the scale evaluation can be found in Table 6.

3.4. Data collection. In order to boost the attractiveness of the questionnaire, the first page refers to the raffle of four 'Sportcheck' (a nation-wide chain for sports apparel) gift coupons amounting to 50 Euros per coupon. Only entirely answered questionnaires took part in the raffle. On the second page, participants were asked whether they practice surfing and/or snowboarding in addition to skiing. Furthermore, they were asked if they rather identify with the group of

free skiers or traditional skiers. In the first section of the main part of the questionnaire, the constructs identification with the in-group and identification with the brand have been collected. The second section of the questionnaire deals with the hypothetical brand extension, as well as with the product category and social group associated with the brand. Thus, in the second section, the constructs positive and negative stereotypes regarding snowboarders, fit between the product category ski and snowboards, attitudes towards the product category of snowboards, perceived quality of the brand Burton/Billabong, and, last but not least, the overall assessment of the hypothetical brand extension (BEP) were surveyed. At the end of the questionnaire, demographic data (age and gender), as well as information on the seasonal expenditures of the respondent for the skiing sport were retrieved.

3.5. Data. The applicable random sample (after an adjustment of the total set of data was made, where all questionnaires with more than 10 percent missing values were eliminated) comprises of 253 observations for the *model Burton* and 219 for the *model Billabong*. The gender distribution of all questioned persons constitutes as follows: in both models, the majority of respondents, that is to say, three quarters, were male (*Burton:* 75.4 percent, *Billabong:* 74.9 percent), only 24.6 percent and 25.2 percent, respectively, of the participants were women. Responding to the question how regularly the interviewed persons practice the sport of skiing, 43.9 percent (42.65 percent) of individuals indicated that they skied regularly. 40.43 percent (42.16 percent) declared that they skied frequently and 15.65 percent (15.2 percent) stated that they ski irregularly. Furthermore, 60.08 percent (60.73 percent) of the respondents view themselves as traditional skiers, whereas 41.11 percent (39.27 percent) identify with the group of freeskiers.

4. Results

Hypotheses H4 and H5, which assume a negative effect of the negative out-group stereotypes, as well as of the identification with the current brand on the success of the brand extension have to be rejected on the grounds of missing significance of the correlation. In contrast to this, the constructed hypotheses H1b, H2a, H2b, H3, H6 and H7 can be confirmed in both models. The identification with the group of skiers has a medium positive influence on the negative stereotypes regarding the group of snowboarders, indicated by a γBur of 0.377 and with a γBil of 0.152 only a small effect on the negative stereotyping regarding the group of surfers. The hypothesis H1b can consequently be accepted. With a γBur of 0.174 and γBil of 0.157, the attitude towards the product category of the mother brand shows a significantly positive influence on the positive stereotypes regarding

the out-group in both models. Furthermore, a significant negative influence on the negative stereotypes regarding the out-group can be detected with a γBur of -0.194 and a γBil of -0.140. These results confirm the correlation postulated in hypotheses H2a and H2b. Hypothesis H3 as well can be accepted throughout both models. With a βBur of 0.136 and a βBil of 0.119, these positive stereotypes regarding the out-group have a significant positive influence on the success of the brand extension potential. The hypotheses H6 and H7, which assume a direct effect of the perceived quality of the mother brand and the perceived fit on the success of the brand image transfer, can be accepted throughout both models. The standardized regression coefficients of the perceived quality of the mother brand on the success of the brand iextension amount to a γBur of 0.288 and a γBil of 0.409, which portrays a medium to large effect. With standardized regression coefficients of γBur = 0.377 and γBil = 0.726, the perceived fit between product categories represents the strongest effect on the success of the brand extension. The causality assumed in hypothesis H1a between the in-group identification and the positive stereotypes regarding the out-group can be accepted in the model *Burton*. The regression coefficient accounts for γBur = -0.135 and, thus, demonstrates a small effect. In contrast, due to missing significance of the postulated correlation, hypothesis H1a could not be accepted in the model *Billabong*. The hypotheses H4 and H5, which postulate a direct effect of the negative stereotypes (H4) and the identification with the brand (H5) on the success of the brand extension, are rejected in both models, as the regression coefficients are not significant.

In addition to this, in the model *Burton*, hypothesis H8 can be accepted, which shows that positive stereotypes towards the out-group have a positive influence on the perceived fit between the product categories. Moreover, the assumption of the hypothesis presumes a mediating effect of the fit for the correlation between the positive stereotypes and the success of the brand extension. In the following, this possible mediation shall be analyzed. Following the logic of Baron and Kenny (1986) for a mediation, multiple cause-effect relationships need to be mutually independently tested for significance. In a first step, it is checked whether a significant correlation between the latent variable positive stereotypes and the potential mediator fit exists. This relationship can be approved for the model Burton (γBur = 0.241***). Subsequently, a significance examination of the correlation between the positive stereotypes and the success of the brand image transfer without the assumed mediation of the fit is carried out. The standardized regression coefficient of the correlation between the positive stereotypes and the success of the brand image transfer

takes on the value of γBur = 0.187 and is highly significant. By adding the positive stereotypes (γBur = 0.136***), the comparison of the value with the standardized regression coefficients militate in favor of a partial mediation of the fit for a correlation between the positive stereotypes and the success of the brand image transfer. For the further examination of the significance of the mediation an additional, Sobel Test is being conducted. The test statistics show that with a level of significance of one percent, the null hypothesis (the mediation effect is equal to zero) can be rejected. The fit between the product categories consequently acts as a partial mediator of the correlation between positive stereotypes and the success of the brand

image transfer. The squared multiple correlation complies with the variance of latent constructs, which are explained by the model. Due to the specified relations, in model Burton 59.3 and in model Billabong 73.1 percent of the variance of the latent construct success of brand image transfer can be explained. Furthermore, due to the formulated correlations, in model Burton 19.4 percent (4.3 percent in model Billabong) of the variance of the construct negative stereotypes regarding the out-group and 5.4 percent (3.6 percent in model Billabong) of the variance of the construct positive stereotypes regarding the out-group can be explained. Figure 2 shows both models.
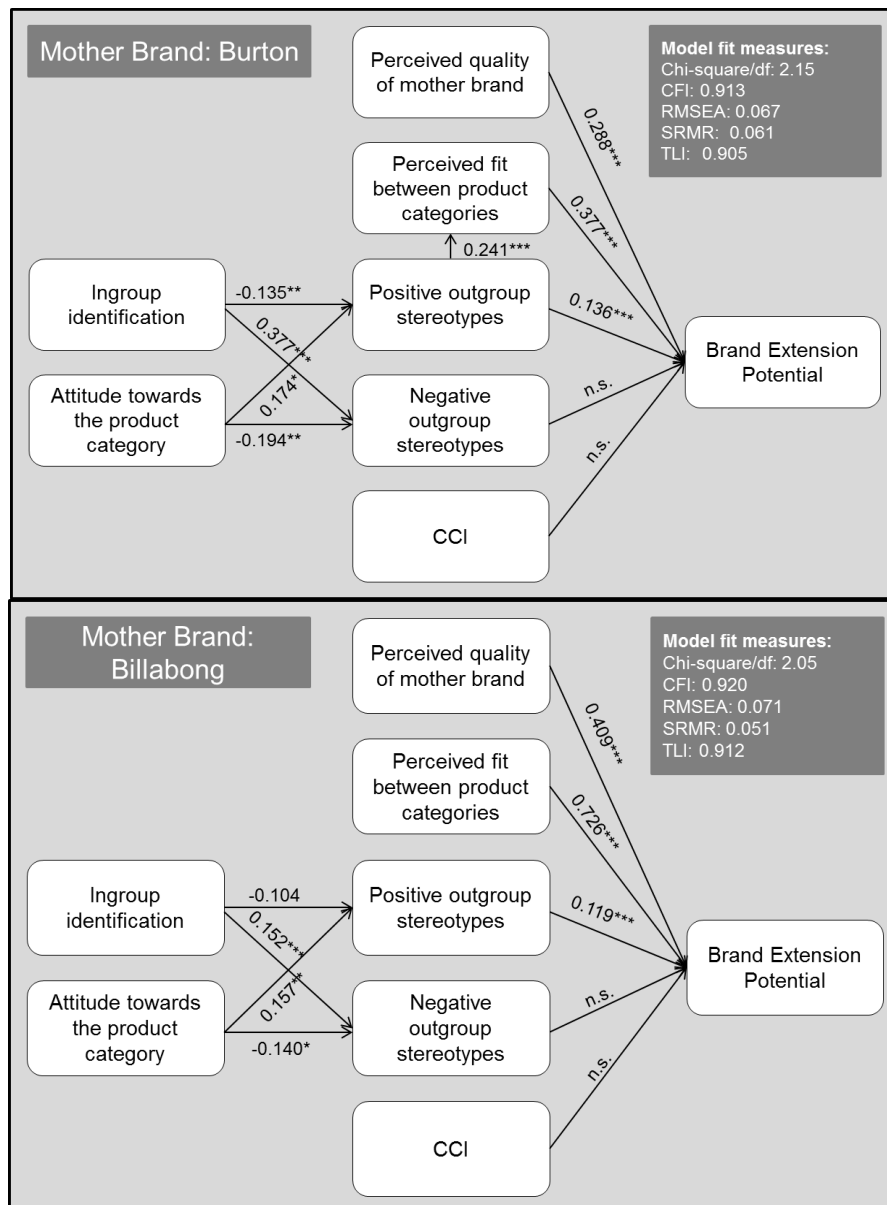
Fig. 2. Structural equation models with path coefficients and model fit measures

The regression coefficients are denoted as standardized values with respective level of significance. With the help of t-tests, the construct means of both models are being tested for significant differences. In Table 2, the construct means of both models, as well as the results

of the t-tests with respect to the significant differences of the means are being displayed. Table 2 shows that highly significant differences between the construct means exist. Only for the construct in-group identification and customer company identification, no

significant differences could be found. This is, however, unremarkable, as both constructs refer to issues independent from the examined out-group and brand of the brand image transfer.

4.1. Multiple group analysis. By means of a multiple group comparison, it shall be examined in the following whether the differences between individuals who, alongside with skiing, occasionally practice snowboarding/surfing, and individuals who only ski can be confirmed. Precondition for the acceptance of a simultaneous estimation of a causal model over multiple groups is the existence of measuring invariance of the measuring model (Byrne et al., 1989). Hence, the measuring models will be tested for configural and metric invariance. In order to check the configural invariance of the measuring models, the factor loading of the two groups will be freely estimated. Since all standardized factor loadings in both groups take on values of greater than 0.6 and are significantly different from zero, the constraint for configural invariance is met (Steenkamp/Baumgartner, 1998). In order to compare the relationships of the constructs in the structure model, metric invariance alongside with configural invariance should exist. The measuring models will be tested for metric invariance by restricting the factor loadings in both groups (Temme/Hildebrandt, 2009). With the help of a Chi-square difference test, the measuring models will subsequently be checked for metric invariance. Table 3 summarizes the Chi-square values and the number of degrees of freedom for the unrestricted and restricted model. The empirical Chi-square difference value adds up to 32.351 and is smaller than the tabular Chi-square value of the χ^2 (0.95|27) distribution (40.11). The introduction of equality restrictions for the factor loadings in the face of the unrestricted model

consequently leads to no significant increase of the χ^2-value. Thus, the constraint of metric invariance is fulfilled (Temme/Hildebrandt, 2009). For the comparison of the means and for the juxtaposition of the groups with the help of indices, the measuring models must, in addition to the configural and metric invariance, be tested for scalar measuring invariance. For this, the absolute terms must be equated between the groups. The in a such way restricted model will subsequently be compared to the unrestricted model for the verification of the metric invariance. Since the equalization of the absolute means does not give rise to a significant deterioration of the Chi-square values, a strong form of factorial invariance is on hand, which allows a comparison of the means (Temme/Hildebrandt, 2009).

For the validity verification of the structure relationships of the hypothesis model, the model will be separately calculated for the two groups. While the first group comprises people who perform both skiing and snowboarding (N=98), the second group contains the individuals who only ski (N= 154).

By means of the path coefficients, a subsequent statement regarding the validity and effect intensity of the structure relationships in the different groups can be made. By the use of the comparison of the means, it can be shown if significant differences in the various groups in regard to the average occurrence of the measured values exist. Figure 3 summarizes the validity and effect intensity of the structure relationships, as well as the means of the constructs for both examined groups. Thereby the black numbers refer to the group of individuals that ski and snowboard, whereas the red numbers refer to the people that only ski.
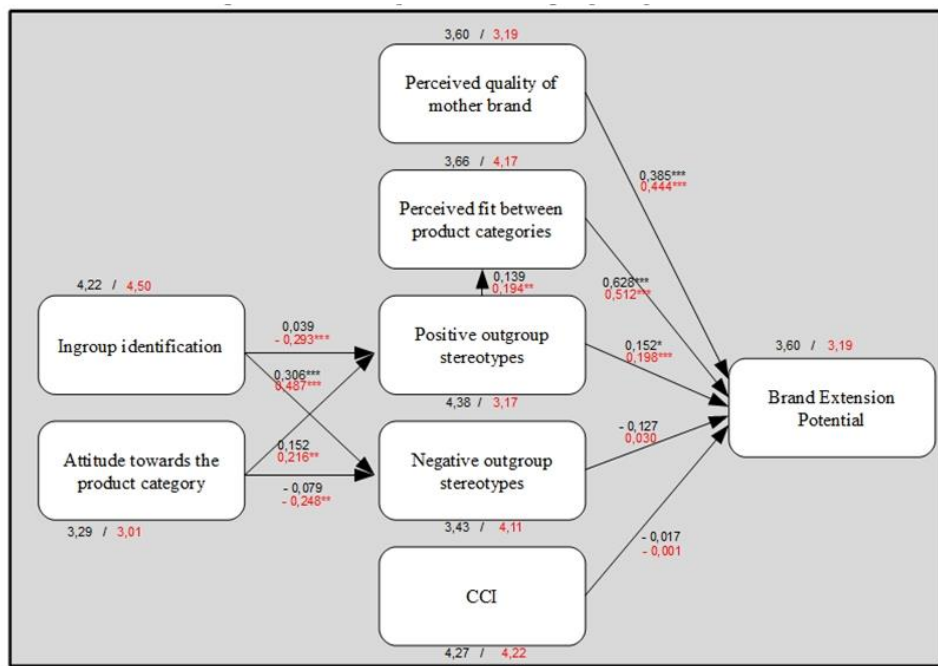

Fig. 3. Multiple group analysis

This comparison of the path coefficients shows that the identification with the in-group of individuals that do not have a direct link to the out-group (skiers that do not snowboard), holds a highly significant negative effect on the positive stereotypes regarding the out-group. Observing the group of people who do hold a direct link to the out-group (skiers who also snowboard), no significant correlation between the in-group identification and the positive stereotypes regarding the out-group can be found. The correlation between the identification with the in-group and the negative stereotypes regarding the out-group is positive and highly significant in both groups. The attitude towards the product category of the mother brand solely has a reductive significant influence on the negative stereotypes regarding the out-group of snowboarders in the group of skiers. The constructs negative stereotypes regarding the out-group and customer company identification have no significant bearing on the success of the brand image transfer in either group. In contrast, in both groups, the brand extension success is being positively affected by the positive stereotypes regarding the out-group. In accordance with the group specific model, the fit between the product category and the quality of the mother brand have the strongest influence on the success of the brand image transfer. In all examined groups, both factors hold a highly significant influence on the success of the brand image transfer. The path coefficients, significant in both groups, were tested for significant differences with respect to the intensity of the cause-effect relationship between both considered groups. Table 4 summarizes the data relevant for the calculation, as well as the obtained t-values. None of the calculated t-values exceeds the tabular t-value of the t(0.90|200) distribution (1.653). Hence, no significant differences between the considered groups regarding the intensity of the cause-effect relationships could be discovered. The examination of significant differences between the construct means of both groups is being carried out by a t-test for the mean consistency via independent random sampling. The results of this examination are displayed in Table 5. The means of the positive and negative stereotypes regarding the out-group ($p<0.05$), as well as the success of brand image transfer ($p<0.10$), differ significantly between both groups. The other construct means exhibit no significant differences between the two groups. Compared to people who solely identify with the in-group, negative stereotypes regarding the out-group held by people who identify with both relevant groups are less pronounced, whereas the positive stereotypes are more distinct. Hypotheses H9 and H10 are, thus, approved by the model. Furthermore, individuals who practice both skiing and snowboarding evaluate the success of the brand image transfer higher than people who only ski. Hypothesis H11 can, hence, also be accepted, even though only on a level of significance of 10 percent.

Discussion

In line with the past literature, the results of the empirical study show that in both models and also in the multiple group comparison, the strongest influence on the potential success of the brand extensions emanates from the fit between product categories, as well as from the perceived quality of the mother brand. If a consumer perceives the product categories of the mother brand to be consistent with the transferred product, a positive evaluation of the product will result. The same also applies to the quality perception of the mother brand: a higher perceived quality of the mother brand will lead to a greater potential success of the brand extension.

Over and above these well-known effects, our models reveal the significant positive effect of positive stereotypes towards the out-group on the potential success of the brand extension. If a brand is associated with a specific social group, positive stereotypes regarding this social group will lead to an enhanced evaluation of a brand extension by this brand into another product category. In the model Burton, where the perceived fit between the product categories skis and snowboards is significantly higher than for the model Billabong (fit between product category skis and surfboards), the relationship between positive stereotypes and the success of the brand image transfer is partially mediated by the perceived fit. The fit, in turn, exerts a strong influence on the success of the brand image transfer.

The intensity of the positive stereotypes is influenced by the identification with the in-group (for the model Burton), as well as with the attitude towards the product categories of the mother brands. In the model Burton, where negative out-group stereotypes towards the group of snowboarders are stronger and positive, snowboarder stereotypes are less pronounced than in the case of the model Billabong (group of surfers), a negative influence of the identification with the in-group on the positive stereotypes regarding the out-group can be found. A strong identification with the group of skiers, thus, results in an alleviated/eased intensity of the negative/positive stereotypes regarding the group of snowboarders. The result of the multiple group comparison illustrates that the intensity of this relation increases when looking at individuals who solely ski. For individuals who only ski, a strong identification with the in-group has a stronger alleviated/eased effect on the negative/positive stereotypes regarding the out-group than for people who like to both ski and snowboard.

Our results indicate that the potential success of the brand extension is higher in the case of a brand extension of a brand from a similar product category (snowboard brand into the ski market as in model Burton) than for the brand extension of a brand, where the fit between the product categories is lower (surf brand into the ski market as in model Billabong). Moreover, the potential success of the brand extension is higher for those customers who have positive stereotypes towards the out-group, whereas potential negative stereotypes do not seem to play a significant role. The brand extension potential is the highest, if there is an overlap between the users of both groups, hence, if the customers of the target group of customers of the brand extension are also using the product category of the mother brand's products. However, if the relationship between the groups of users is characterized by conflict (as in the case of skiers and snowboarders), customers with a strong identification with their original in-group will be very likely to have less positive stereotypes towards the out-group and might be less likely to adopt a brand extension of a brand from that product category. Further research should take these results as a starting point and investigate these effects further using different product categories and settings.

Our study also generates important implications for practitioners: our results reveals that, besides the long known factors which influence the success of brand extensions, the social identification and stereotyping processes should be taken into account by brand managers intending to launch brand extensions across different product categories and the corresponding groups of users. The results of our empirical study indicate that positive out-group stereotypes (i.e., stereotypes towards the group of customers of the mother brand) will enhance the brand extension potential into the target market. Hence, when planning a brand extension to other product categories, managers should take into account the potential social identification and stereotyping processes in the heads of the consumers. A thorough knowledge of the target customer groups and their relationship to the group of customers of the mother brand is needed to ensure successful adoption of the brand extension.

Conclusion

Based on a survey of skiers evaluating hypothetical brand extensions of a snowboard and a surf brand into the ski market, this study reveals that positive stereotypes towards the group of customers of the mother brand (snowboarders and surfers) significantly enhance the likelihood of adopting the brand extension. Being the first study to explore social identification and stereotyping processes underlying brand extensions, our study generates important evidence for the importance of taking into account such effects when forecasting the brand extension potential.

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Appendix

Table 1. Reliability statistics of the individual constructs

	Cronbachs Alpha (BUR)	Number of items	Cronbachs Alpha (BIL)	Number of items
Fit	0.960	7	0.988	7
CCI	0.940	5	0.850*	4
Perceived quality	0.972	3	0.991	3
Identification skiers	0.904	3	0.906	3
Positive stereotypes	0.893	4	0.938	4
Negative stereotypes	0.833	5	0.996	4
Attitude towards product category	0.973	3	0.928	3
Brand extension potential	0.911	7	0.989	7

Note: * After elimination of the indicator CCI5.

Table 2. T-test for verifying significant differences of the mean values of the structural models

Construct	Mean		p-value	Significance
	Burton	Billabong	(double-sided)	
In-group identification	4.19	4.18	0.898	n.s.
Attitude towards product category of mother brand	3.16	2.65	0.000	***
Positive stereotypes towards out-group	3.65	4.26	0.000	***
Negative stereotypes towards out-group	3.84	2.24	0.000	***
Customer-company identification	4.24	4.08	0.163	n.s.
Perceived fit of product category	3.49	1.73	0.000	***
Perceived quality of mother brand	4.25	2.25	0.000	***
Brand extension success	3.36	2.24	0.000	***

Table 3. Chi-square difference test for verifying the metric invariance

	Unrestricted model	Restricted model	Difference Δ
χ^2	1834.319	1866.670	32.351
df	1091	1118	27
p-value	0.000	0.000	

Table 4. T-test for verifying significant differences of the path coefficients

Regression path	Standardized coefficient		Standard error		t-value	Significance
	Ski & Snb	Ski	Ski & Snb	Ski	(ttab =1.653)	
In-group identification → Negative stereotypes	0.306	0.487	0.113	0.076	1.369	n.s.
Positive stereotypes → Brand extension success	0.152	0.198	0.089	0.074	0.397	n.s.
Perceived fit → Brand extension success	0.628	0.512	0.081	0.079	0.983	n.s.
Perceived quality of mother brand → Brand extension success	0.385	0.444	0.101	0.085	0.443	n.s.

Table 5. T-test for verifying significant differences of the mean values of the multiple group comparison

Construct	Mean		p-value	Significance
	Ski & Snb	Ski	(double-sided)	
In-group identification	4.22	4.50	0.669	n.s.
Attitude towards product category of mother brand	3.29	3.01	0.252	n.s.
Positive stereotypes towards out-group	4.38	3.17	0.000	***
Negative stereotypes towards out-group	3.43	4.11	0.005	***
Customer-company identification	4.27	4.22	0.835	n.s.
Perceived fit of product category	3.66	4.17	0.227	n.s.
Perceived quality of mother brand	3.60	3.19	0.434	n.s.
Brand extension success	3.60	3.19	0.056	***

Table 6. Local measures of goodness of the individual constructs

Identification with brands					
Factor reliability ≥ 0.6		AVE ≥ 0.5		Fornell-Larcker	
Burton	Billabong	Burton	Billabong	Burton	Billabong
0.93	0.92	0.78	0.80	satisfied: 0.78 > 0.203	satisfied: 0.80 > 0.18
Item		Indicator reliability		t-value of factor loading ≥ 1.645	
		Burton	Billabong		
CCI1		0.778	eliminated	-	45.641
CCI2		0.778	0.776	49.666	45.641
CCI3		0.814	0.799	56.197	48.871
CCI4		0.795	0.824	52.350	54.111
CCI5		0.710	eliminated	-	33.883
Identification with in-group					
Factor reliability ≥ 0.6		AVE ≥ 0.5		Fornell-Larcker	
Burton	Billabong	Burton	Billabong	Burton	Billabong
0.91	0.91	0.76	0.77	satisfied: 0.76 > 0.160	satisfied: 0.77 > 0.53
Item		Indicator reliability		t-value of factor loading	
		Burton	Billabong		
ID_SKI1		0.793	0.808	43.164	42.029
ID_SKI2		0.826	0.816	46.389	42.753
ID_SKI3		0.667	0.676	31.405	30.026
Perceived quality of mother brand					
Factor reliability ≥ 0.6		AVE ≥ 0.5		Fornell-Larcker	
Burton	Billabong	Burton	Billabong	Burton	Billabong
0.97	0.94	0.92	0.84	satisfied: 0.92 > 0.468	satisfied: 0.84 > 0.57
Item		Indicator reliability		t-value of factor loading	
		Burton	Billabong		
QUALI1		0.949	0.907	157.708	70.395
QUALI2		0.885	0.807	99.066	50.368
QUALI3		0.931	0.811	137.656	51.286
Attitude towards product category of mother brand					
Factor reliability ≥ 0.6		AVE ≥ 0.5		Fornell-Larcker	
Burton	Billabong	Burton	Billabong	Burton	Billabong
0.96	0.94	0.9	0.87	satisfied: 0.9 > 0.048	satisfied: 0.87 > 0.224
Item		Indicator reliability		t-value of factor loading	
		Burton	Billabong		
ATT_PuK1		0.854	0.826	70.428	60.071
ATT_PuK2		0.913	0.886	99.102	79.038
ATT_PuK3		0.933	0.909	109.937	87.897

Table 6 (cont.). Local measures of goodness of the individual constructs

Positive stereotypes towards out-group					
Factor reliability ≥ 0.6		AVE ≥ 0.5		Fornell-Larcker	
Burton	Billabong	Burton	Billabong	Burton	Billabong
0.89	0.93	0.68	0.76	satisfied: 0.68 > 0.136	satisfied: 0.76 > 0.030
Item		Indicator reliability		t-value of factor loading	
		Burton	Billabong		
STE_(SURF/SNB)POS1		0.726	0.781	32.931	47.352
STE_(SURF/SNB)POS2		0.668	0.859	28.934	62.572
STE_(SURF/SNB)POS3		0.680	0.554	28.836	21.858
STE_(SURF/SNB)POS4		0.631	0.837	25.805	57.563
Negative stereotypes towards out-group					
Factor reliability ≥ 0.6		AVE ≥ 0.5		Fornell-Larcker	
Burton	Billabong	Burton	Billabong	Burton	Billabong
0.84	0.69	0.64	0.53	satisfied: 0.64 > 0.017	satisfied: 0.53 > 0.026
Item		Indicator reliability		t-value of factor loading	
		Burton	Billabong		
STE_(SURF/SNB)NEG1		eliminated	0.705	-	29.214
STE_(SURF/SNB)NEG2		0.631	0.760	23.150	32.359
STE_(SURF/SNB)NEG3		0.723	0.554	26.426	18.671
STE_(SURF/SNB)NEG4		0.723	0.504	48.446	16.507
Perceived fit between product categories					
Factor reliability ≥ 0.6		AVE ≥ 0.5		Fornell-Larcker	
Burton	Billabong	Burton	Billabong	Burton	Billabong
0.96	0.97	0.77	0.82	satisfied: 0.77 > 0.533	satisfied: 0.70 > 0.684
Item		Indicator reliability		t-value of factor loading	
		Burton	Billabong		
FIT1		0.856	0.865	79.208	82.760
FIT2		0.824	0.885	65.870	94.065
FIT3		0.783	0.804	54.004	58.365
FIT4		0.736	0.805	44.152	58.719
FIT5		0.793	0.833	56.669	66.802
FIT6		0.647	0.730	31.359	40.565
FIT7		0.781	0.797	53.088	54.601
Brand extension potential (BEP)					
Factor reliability ≥ 0.6		AVE ≥ 0.5		Fornell-Larcker	
Burton	Billabong	Burton	Billabong	Burton	Billabong
0.91	0.94	0.60	0.70	satisfied: 0.60 > 0.533	satisfied: 0.70 > 0.684
Item		Indicator reliability		t-value of factor loading	
		Burton	Billabong		
BEP1		0.435	0.404	15.501	14.172
BEP2		0.616	0.760	26.095	44.000
BEP3		0.698	0.768	31.051	42.659
BEP4		0.585	0.697	22.811	32.940
BEP5		0.707	0.823	32.134	56.003
BEP6		0.636	0.788	25.844	47.366
BEP7		0.513	0.666	19.548	31.242