Consumer perceived brand innovativeness: 
*Effects and Moderation*

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Abstract

Purpose
The purpose of this research is to extend the understanding of consumers’ perceived brand innovativeness.

Methodology
Within a quantitative approach an online survey was conducted, using a quota-sample of 501 physically active Germans. The data was analyzed through simple linear regression, mediation and moderation analysis. Further, the effects for two brands were compared.

Findings
The findings corroborate previous literature, suggesting a highly positive effect of consumers’ perceived brand innovativeness (CPBI) on brand attitude, purchase intention, consumer satisfaction and consumer excitement. Further, brand attitude mediates the impact of CPBI on purchase intention and consumer satisfaction. Consumer innovativeness and involvement have a negative significant effect on the majority of the relations. Most of the constructs are controlled by previous purchase experience.

Implications and limitations
Managers should consider CPBI as a possible antecedent for consumer behavior, however, CPBI should be in line with the actual offer of the brand. Further, the involvement and innovativeness of the desired target group should be taken into account for the brand positioning. However, the survey was conducted using non-probability sampling, focusing on the sporting goods market in Germany, which might have caused some limitations.

Originality / value
The study contributes to the CPBI literature in supporting the scale for CPBI and providing further knowledge into the effects CPBI has on consumer outcomes. Further, the research points out the differences in consumers’ evaluation of CPBI based on their level of innovativeness and involvement.

Keywords
Perceived brand innovativeness, consumer attitude, purchase intention, consumer satisfaction, consumer excitement
Table of Contents

1. Introduction.................................................................................................................. 1
   1.1 Background ............................................................................................................. 1
   1.2 Problem Discussion ............................................................................................... 2
   1.3 Purpose ................................................................................................................... 3
   1.4 Research Questions ............................................................................................... 3
   1.5 Delimitations ........................................................................................................... 4
   1.6 Report structure .................................................................................................... 4

2. Literature Review ......................................................................................................... 4
   2.1 Perceived Innovativeness ....................................................................................... 5
   2.2 Perceived Brand Innovativeness ........................................................................... 5

3. Theoretical Framework ................................................................................................. 6
   3.1 Brand Attitude ....................................................................................................... 7
   3.2 Purchase Intention ................................................................................................. 7
   3.3 Consumer Satisfaction .......................................................................................... 8
   3.4 Consumer Excitement ......................................................................................... 8
   3.5 Consumer Innovativeness .................................................................................... 9
   3.6 Consumer Involvement ....................................................................................... 9

4. Conceptual Framework ............................................................................................... 10
   4.1 Concepts and Hypotheses ..................................................................................... 10
   4.2 Conceptual Model ............................................................................................... 14

5. Methodology ............................................................................................................. 15
   5.1 Research approach and research design .............................................................. 15
   5.2 Data Sources ....................................................................................................... 16
   5.3 Sampling ............................................................................................................... 16
   5.4 Data Collection .................................................................................................... 18
   5.5 Questionnaire Design ......................................................................................... 18
   5.6 Operationalization .............................................................................................. 19
   5.7 Pretest .................................................................................................................. 20
   5.8 Data Analysis Method ......................................................................................... 23
   5.9 Quality Criteria ................................................................................................. 23
   5.10 Ethical Considerations ...................................................................................... 24

6. Data Analysis and Results ......................................................................................... 25
6.1 Demographic results......................................................................................................................... 25
6.2 Descriptive Statistics, Reliability and Validity .................................................................................. 26
6.3 Linear Regression Analysis............................................................................................................... 27
6.4 Brand Comparison.............................................................................................................................. 28
6.5 Mediation Analysis............................................................................................................................. 29
6.6 Moderation Analysis .......................................................................................................................... 30
6.7 Hypotheses testing.............................................................................................................................. 32
7. Discussion ............................................................................................................................................ 33
8. Conclusion and Contributions .............................................................................................................. 37
9. Implications, limitations and further research ..................................................................................... 38
9.1 Managerial Implications..................................................................................................................... 38
9.2 Limitations.......................................................................................................................................... 38
9.3 Recommendation for future research ............................................................................................... 39
References ............................................................................................................................................... 40
Appendix ................................................................................................................................................. 48

List of Appendices

Appendix 1: Questionnaire items............................................................................................................ 48
Appendix 2: Distribution Education and Personal Net Income ............................................................... 51
Appendix 3: Cronbach’s alpha.................................................................................................................. 51
Appendix 4: Exploratory Factor Analysis ............................................................................................... 51
List of Tables

Table 1: Quota Sample Distribution ................................................................................................................................. 17
Table 2: Operationalization .................................................................................................................................................. 21
Table 3: Distribution Demographic Data ............................................................................................................................ 26
Table 4: Descriptive Statistics and Pearson Correlations Coefficients ............................................................................. 26
Table 5: Linear Regression to measure the effect of CPBI on the dependent variables ..................................................... 28
Table 6: Comparison of Nike and Adidas ............................................................................................................................ 29
Table 7: Mediation Analysis for Brand Attitude .................................................................................................................. 30
Table 8: Moderation Analysis for Consumer Innovativeness and Involvement ................................................................. 31
Table 9: Summary of Hypotheses Testing .......................................................................................................................... 33

Table of Figures

Figure 1: Conceptual Model Direct Effect .......................................................................................................................... 14
Figure 2: Conceptual Model Indirect Effect ........................................................................................................................ 15
Figure 3: Results Testing Conceptual Model Direct Effect ................................................................................................ 32
Figure 4: Results Testing Conceptual Model Indirect Effect ............................................................................................... 32
1. Introduction

This chapter presents the topic of brand innovativeness and its importance for the overall evaluation of a brand. Subsequently, the problem discussion reveals the research gap identified as well as the purpose of this research and the research questions. Finally, the chapter closes with the study’s delimitation and the report structure.

1.1 Background

Innovation has become one of the key elements to differentiate from the competition leading to growth and profitability (Aaker 2007; Kunz et al. 2011). Brands belonging to the world’s top 100 (e.g. Coca-Cola, Disney, Nike) designate innovation as one of their core values (Pappu and Quester 2016), spending billions of dollars to appear innovative towards consumers (Henard and Dacin 2010). Consumers’ perception of an innovative brand is shaped by brand creativeness, innovativeness, dynamisms and the ability to change the market (Kunz et al. 2011). Further, consumers’ perceptions can help brands to develop sustainable competitive advantages (Danneels and Kleinschmidt 2001) and can be a key element to build customer equity, ultimately resulting in shareholder value (Kunz et al. 2011). Therefore, consumers’ perceptions are regarded as the essential prerequisite to successful innovations.

Perceived innovativeness has been the subject of a stream of literature in the past, where firms and products have been evaluated according to their feasibility to create and launch novelty products and services (Brown and Dacin 1997; Danneels and Kleinschmidt 2001; Fu and Elliot 2013). However, only within the last 15 years, several authors have pointed out the importance of brand perception in regards to innovativeness (Aaker 2007; Barone and Jewell 2013; Eisingerich and Rubera 2010; Kunz et al. 2011; Pappu and Quester 2016; Quellet 2006; Shams et al. 2015). Brand innovativeness is specified as the extent to which consumers experience a brand to be innovative (Barone and Jewell 2013). Consumers’ perceived brand innovativeness (CPBI) is further described as an important association influencing a brand’s reputation (Barone and Jewell 2013), which along with other associations, leads to the brand’s market position and ultimately to the consumer’s overall evaluation of the brand (Barone and Jewell 2013; Brown and Dacin 1997; Keller 1993), designated as brand attitude (Berger and Mitchell 1989; Mitchell and Olson 1981). Several authors (Aaker 2007; Kunz et al. 2011; Pappu and Quester 2016; Shams et al. 2015) have backed up this theory by identifying a direct impact of CPBI on brand attitude.
The importance of CPBI is often illustrated by the example of Apple. While competitors were investing in the development of new features, Apple made its first iPhone a "must have", although it did not meet the global industry standard "G3" at that time (Kunz et al. 2011) – enabled through high CPBI. As a consequence, Apple was able to pursue a premium price strategy while Sony and Microsoft where criticized for doing the same for equal products (Barone and Jewell 2013). Moreover, although the technological enhancement between the iPhone 5S and iPhone 6 was marginal, the product was still perceived as innovative, thanks to the CPBI of “Apple” (Shams et al. 2015).

1.2 Problem Discussion

Although the strategic influence of branding theory in marketing literature is sufficiently recognized (Aaker 1991; Keller 1993), only a few authors have taken branding into account when researching on perceived innovativeness. Nevertheless, these few studies often examine different aspects of branding and innovativeness, and therefore do not represent a consistent view. Quellet (2006) found a significant effect of CPBI on brand attitude moderated by consumer innovativeness, pointing out that companies should consider the innovativeness of their consumers when developing novel products. Aaker’s (2007) article presents several reasons for incorporating innovation in branding. Such as, branding an innovation can increase the credibility, legitimacy and visibility of the innovation, as by implication the success of an innovation can positively affect the brand’s reputation. Beverland et al. (2010) suggest that product innovations can have a positive effect on the brand positioning, however state that the innovation approach a brand occupies should be aligned with their existing brand positioning. Eisingerich and Rubera (2010) measure CPBI as one of four brand management decision elements and attribute it as an impact on brand commitment. Barone and Jewell (2013) examine the effect of CPBI on the use of atypical marketing strategies, coming to the conclusion that innovative brands can use deviant strategies, which in turn can strengthen their positing as an innovative brand. Pappu and Quester (2016) identify that CPBI leads to a higher level of brand loyalty by changing the perceived quality of the brand and thus to a higher level of brand equity, while Shams et al. (2015) take the presumption that CPBI is in many cases the vital factor for a brand’s success, as product quality among competing brands such as HTC and Samsung is often at the same level.

As seen above, there is evidence to suggest that innovativeness and branding are connected, however, the interrelation has not been fully substantiated. Shams et al. (2015) criticize in this context the limitations of previous research due to a focus on the managerial perspective and a lack of consolidation and therefore develop a scale explicitly tailored for the measurement of CPBI. The correct determination of the influence of CPBI on key outcomes (brand attitude, purchase intention,
consumer satisfaction and brand excitement) helps companies to test their own brand positioning and to decide upon possible changes in regards to innovativeness. Nevertheless, Shams et al.’s (2015) scale has no corroboration in literature.

As a result, this study aims to contribute to existing brand innovativeness literature by testing the findings of Shams et al. (2015), taking into account the findings of previous research on CPBI. Consequently, the influence of CPBI on purchase intention (Shams et al. 2015), consumer satisfaction (Kunz et al. 2011; Pappu and Quester 2016; Shams et al. 2015; Stock 2011), and excitement (Henard and Dacin 2010; Shams et al. 2015) is examined. Further, brand attitude is considered to be the outcome of perceived brand innovativeness (Quellet 2006; Shams et al. 2015). Beyond that, it is also recognized as an antecedent for consumer behavior (Keller 1993; Priester and Nayakankuppam 2004; Schiffman and Wisenblit 2015) and is often mentioned to have a proportionate influence on perceived innovativeness (Aaker 2007; Barone and Jewell 2013; Brown and Dacin 1997; Keller 1993; Kunz et al. 2011; Pappu and Quester 2016). Therefore, it is moreover applied as a mediator in this study. In addition, following the suggestion of Stock (2011), this study considers the effect of moderators on the relationships between CPBI and the dependent variables. Kunz et al. (2011) calls in this context for the allowance of innovative consumers, as they could be opinion leaders for other consumers, while others (Henard and Dacin 2010; Pappu and Quester 2016; Shams et al. 2015) propose to incorporate consumer involvement. All in all, the present research has the opportunity to improve the comprehensibility of Shams et al.’s (2015) scale, by providing a more complete picture of the phenomenon.

1.3 Purpose

The purpose is to extend the understanding of consumers’ perceived brand innovativeness.

1.4 Research Questions

RQ1: How does the perception of a brand’s innovativeness affect consumer brand attitude, purchase intention, consumer satisfaction and consumer excitement towards a brand?

RQ2: How does a brand’s overall evaluation, namely brand attitude, mediates the relationship between CPBI and consumer outcomes (purchase intention, consumer satisfaction and excitement)?

RQ3: How do consumer involvement and innovativeness moderate the influence CPBI has on the consumer outcomes (brand attitude, purchase intention, consumer satisfaction and excitement)?
1.5 Delimitations

The authors delimited this study in several ways. First the conceptual model is based on Shams et al. (2015), excluding additional factors both as dependent and independent variables. This choice is based on the circumstance that to the authors knowledge the scale developed by Shams et al. (2015) is the only one found to be explicitly evolved to measure CPBI, but has so far not received any corroboration within literature. In order to assess this scale, the researchers therefore tried to use the exact same setting, by only changing the context of the research. To keep the emphasis on the measurement of CPBI and its effects, other concepts such as brand attitude and consumer innovativeness have been measured using unidimensional scales. Finally, to make an own contribution to the CPBI literature, the researchers incorporated two moderators, suggested within previous literature, but also reasonable in this context.

1.6 Report structure

The first chapter introduces the topic and the key concepts of the study. Then the relevance of the research is presented in the problem discussion which identifies the research gap and leads to the purpose of the study. The second chapter provides a literature review on the major construct of the study. Thereafter, chapter 3 develops the theoretical base for the proposed analysis, defining theoretical models that have already been largely researched. Chapter 4 connects the different theoretical concepts with each other and presents arguments for an expected impact of one variable to another. The following chapter explains the methodological choices made in order to conduct the research. Chapter 6 presents the analysis of the gathered data, testing the relationships between the variables. The subsequent chapter connects the results found in the previous chapter with the theory to interpret their outcomes. Chapter 8 presents the conclusion and the theoretical contributions of the study. Finally, the last chapter includes suggestions for managerial implications based on the study’s findings as well as recommendations for possible trails to follow in future examinations.

2. Literature Review

Through a review of existing literature, this chapter provides the theoretical context covering the major construct of perceived innovativeness, divided into the previous literature about firm and product innovativeness, followed by the more specific research about consumers’ perceived brand innovativeness.
2.1 Perceived Innovativeness

Recent research distinguishes between two perspectives of perceived innovativeness: an organizational perspective and a consumers’ perspective (Shams et al. 2015). The organizational perspective, which received a lot of attention from scholars, can be defined as the perception of innovation by the companies (Lee and Colarelli O'Connor 2003). McNally et al. (2010) mention that two dimensions arise from innovative firms: The technological discontinuities, as the company faces several new challenges, such as the usage of new technologies or new processes and the marketing discontinuities, such as the adjustment to new distribution channels, new competitors, or new customers. Whereas, the consumer perspective of perceived innovativeness highlights how the consumer perceives the innovative attributes of the product or the values communicated by the firm (Shams et al. 2015).

However, researchers do not only define innovativeness by different perspectives, but also through its level of scope (product, brand or firm). Perceived product innovativeness is the consumer’s perception of a new offer, in terms of novelty compared to previous offers, and in terms of utility and creativity to satisfy consumers’ needs (Shams et al. 2015). The emphasis is on the consumers’ perception of the technological attributes, functionality and product features (McNally et al. 2010). Nevertheless, this perspective focuses only on the product and does not take the meaning and values into account, associated to innovation and communicated by the brand /firm (Shams et al. 2015).

Firm innovativeness concentrates on the ability of firms, as business organizations, to provide new ideas and innovative solutions (Shams et al. 2015). This kind of perception is based on the evaluation of innovative product launches by firms over the year (Henard and Dacin 2010). With the firm perspective, the innovative product characteristics and the image of innovativeness of the firm is measured. However, the firms are not always well known by consumers, this is especially the case for big brands recognized for their portfolios of brands, such as Unilever or Procter and Gambler (Shams et al. 2015).

2.2 Perceived Brand Innovativeness

More recently the notion of brand innovativeness appeared in literature. For consumers, brands are more present in their everyday life and are more easily identifiable than companies (Shams et al. 2015). In addition, brand innovativeness allows researchers to analyze consumers’ perception for different brands from different firms but also from the same firm’s portfolios (Shams et al. 2015). Possibly, consumers could perceive a brand as more innovative than another one belonging to the
same firm. Thus, extending the meaning of innovativeness to the brand scope gives precious information on the effectiveness of the different strategies of branding (Pappu and Quester 2016). These different arguments encourage scholars to conceptualize brand innovativeness. The most common definition, provided by Eisingerich and Rubera (2010, p. 66), defines brand innovativeness as “The extent to which consumers perceive brands as being able to provide new and useful solutions to their needs.” The authors emphasize the ability of brands to launch innovative new products relevant to their target markets which positively affects their perception and attitude towards the brand. However, Shams et al. (2015) see a limitation in this definition, since it includes the notion of response to consumers’ needs. Indeed, people can perceive a brand as very innovative, even if they do not need the product. For example, Google is perceived as a quite innovative brand thanks to projects like the driverless car, although consumers are not necessarily interested in buying one (Shams et al. 2015).

Thus, based on the work of Henard and Dacin (2010), and their conceptualization of corporate reputation for product innovation, Shams et al. (2015, p. 1594) define the notion of CPBI as “Consumers’ perception of a brand’s track record of product innovations, degree of creativity, and potential for continued innovative activity in the future in a given market.” Through their study, divided into six steps, the researchers build up a new scale for brand innovativeness, inspired by previous findings on innovativeness in general.

The study of Shams et al. (2015) presents the limitation and complementarity of the three scopes of innovativeness (product, brand and firm), gives a better understanding of brand innovativeness, and highlights the importance of branding strategies for companies. This study confirms the importance of innovative elements such as color, design or advertisement in branding strategies. Although these elements are not linked directly to the product technical features they are very important since these elements are effective on the long run and are harder for competitors to replicate (Shams et al. 2015).

3. Theoretical Framework

The theoretical framework includes the theoretical base for planned analysis, presenting theoretical models which have already been largely researched. The chapter starts with the outcomes suggested by previous research, namely brand attitude, purchase intention, consumer satisfaction and consumer excitement. Finally, the chapter ends with the two moderators of consumer innovativeness and consumer involvement.
3.1 Brand Attitude

In general brand attitude is defined as consumers’ overall evaluation of a brand (Berger and Mitchell 1989; Mitchell and Olson 1981), which depends on consumers’ positive or negative reactions towards brand-related beliefs or stimuli (Murphy and Zajonc 1993). Multiattribute models propose that attitude should be considered a function of conspicuous beliefs a consumer has towards a product (i.e., the degree to which consumers think the brand has certain attributes) and their evaluation (i.e., if consumers consider these attributes to be good or bad) (Ajzen and Fischbein 1980; Fishbein and Ajzen 1975). These beliefs can be about product-related attributes such as functionality or quality (Zeithaml 1988) but also non-product-related attributes and symbolic benefits (Keller 1993). An overall brand attitude can besides through attributes further be formed through strong brand association (Aaker and Keller 1990). However, brand attitude can also be seen as a type of brand association making up the brand image and forming consumer behavior such as brand choice (Keller 1993; Priester and Nayakankuppam 2004). Brand attitude strength can further be an antecedent for consumer behavior such as brand consideration, purchase intention and purchase behavior (Priester and Nayakankuppam 2004). The attitude a consumer holds towards a product or a brand may influence his willingness to act in accordance with that attitude and, consequently, it may affect his willingness to buy a product or brand (Schiffman and Wisenblit 2015).

Nowadays brand attitude can be conceptualized in two different ways (Grimm 2005). The “classic” concept, also known as the ABC model, has a tri-component structure, including cognitive, affective and conative components. (Grimm 2005; Schiffman and Wiesenblit 2015). The second, more recent and unidimensional construct of attitude distinguishes between positive and negative affect and will be applied in this study.

3.2 Purchase Intention

According to Wu et al. (2011), purchase intention is the willingness of a consumer to buy a certain product in the future. Since an increase of purchase intention leads to a hike of purchase possibilities, the phenomenon has been studied a lot by researchers (Martins et al. 2018; Morwitz et al. 2007). The Theory of Planned Behavior proposed by Fishbein and Ajzen (1975) can be used to theorize purchase intention. This model explains the intended behavior of consumers, such as purchase intention, through three concepts: Attitudes, Social Norms and Perceived Behavioral Control. Purchase intention is a highly important indicator for strategic managers because it can predict future sales of an existing products or help to forecast the launch of future products and determine its market or target group (Morwitz et al. 2007). But purchase intention is also an important tool for scholars...
because it helps to understand the actual consumer’s behavior when purchasing and its determinants (Schlosser 2003).

3.3 Consumer Satisfaction

The conceptualization of consumer satisfaction incorporates the comparison between a consumer’s expectation and the actual performance delivered by a product or its specific attributes (Kunz et al. 2011). Consumer satisfaction is further described as the overall evaluation of a product or service which is based on a consumer’s purchase experience (Anderson et al. 1994) or the consumer’s feelings towards a product (Olsen et al. 2005). Oliver (1997, p. 28), one of the most cited authors in satisfaction literature, defines consumer satisfaction as “The summary psychological state resulting when the emotion surrounding disconfirmed expectations is coupled with prior feelings about the consumer experience.” Giese and Cote (2000) criticize within these definitions a lack of consistency, the use of conflicting components and a missing detailedness. However, based on an extant literature review the authors identified three general components commonly used throughout literature: consumer satisfaction is an emotional or cognitive response, which is associated with a particular focus (expectations, product and consumption experience) and happening within a particular time (after choice/consumption and based on an accumulate experience). Thus, on the one hand consumer satisfaction can be measured as an antecedent for consumer behavior such as purchase intention, ultimately resulting in customer loyalty (Espejel et al. 2008; Olsen et al. 2005), or brand assets such as brand equity (Pappu and Quester 2006). On the other hand, consumer satisfaction can be the desired outcome of brand positing, achieved through brand perceptions (Shams et al. 2015; Stock 2011).

3.4 Consumer Excitement

Aaker (1997) defines consumer excitement as one of four dimensions of brand personality, next to sincerity, competence, sophistication and ruggedness. However, scholars consider excitement as the most interesting measure since it captures the most divergent perceptions consumers have toward brands (Aaker 1997; Aaker et al. 2001; Aaker et al. 2004). Excitement is defined as the ability of a brand to make its consumers feel that they are stimulated and are part of something unique (Ismail 2015). This definition is from a brand point of view highlighting the stimulating experiences brands offer to their customers in order to be perceived as exciting (Jin and Phua 2015). Further, several scholars investigate the consumer perspective of excitement, and how consumers perceive a brand as exciting. Henard and Dacin (2010, p. 324) describe consumer excitement as a “feeling of anticipation for future firm offerings as well as an expectation of satisfaction given positive past performance.” The authors highlight the positive impact of previous successful launches of innovative products on
consumers’ excitement towards the brand/new products. Furthermore, besides perceived innovativeness other elements can be antecedents of consumer excitement such as consumer involvement (Oliver et al. 1997) as well as consumer attitudes, which are shaped through the exposure to a firm over time (Fishbein 1963; Henard and Dacin 2010).

3.5 Consumer Innovativeness

The concept of consumer innovativeness has already been thoroughly studied, where researchers agree that innovative consumers are rather open-minded towards new ideas and are relatively early in adopting or even buying new products (Cotte and Wood 2004; Midgley and Dowling 1978, Roehrich 2004; Steenkamp et al. 1999; Xie 2008). Earlier theories, such as the innovation diffusion theory (IDT) (Rogers 1995) or the concept of Midgley and Dowling (1987), argue that consumers differ in their adoption level depending from sociodemographic factors such as gender, age, education and income status. The IDT thereby distinguishes between five types of adopters: innovators, early adopters, early majority, late majority and laggards. Despite Rogers’ (1995) popularity, Kim et al. (2014) state that the distinction of the adopter levels has often been misapplied. As a consequence, more recent research has rather been dealing with the consumer himself, seeking for information and experience opportunities and purchasing new products (Cotte and Wood 2004; Robinson and Leonhardt 2018; Xie 2008). Latest scholars have used a scale ranging from low to high, assuming that consumers with a high innovativeness are more likely to purchase novel products (Robinson and Leonhardt 2018).

3.6 Consumer Involvement

The notion of involvement is a rather vague concept deriving from the field of social psychology. Involvement can be defined as “a state of interest, motivation or arousal” (Rothschild 1984, p. 216), which is provoked by the connection the consumer has with the product (Bloch 1982). A consumer can be involved with a product but also with an advertisement or a purchase decision (Zaichowski 1985). Consumer involvement with a product is defined as a state of consciousness that drives the customer to search, think and analyze information on specific products ahead of the purchase (Berkman et al. 1997). The consumer evaluates the pertinence of the product based on his interests and needs, and the more the product is perceived as relevant, the more the involvement increases. Furthermore, the degree of involvement determines the consumer’s profile (active or passive toward marketing stimuli) and thus impacts his behavior (e.g. active search, information analysis) (Laurent and Kapferer 1985).
The literature recognizes two different levels of consumer involvement: High and low involvement (Bloch 1981; 1982; Kapferer and Laurent 1985; Lastovicka and Gardner 1979; Zaichkowski 1985). Consumers with high involvement share values and beliefs with the brand or the product and perceive it as important, whereas consumers with low involvement do not perceive the product as very important and are not active in the purchase process (Guthrie and Kim 2008). High involved consumers usually invest more time, effort and money in the research for information about the product, in order to reduce the product’s risk (Bloch 1982), therefore they perceive more differences between brands within the same product category. These consumers are loyal toward their brands, even if, in order to experience alternative products, they experiment new brands (Ratchford 2001). On the contrary, low involvement consumers spend less time on brand comparisons and have a simpler decision process than their high-involved counterparts (Lastoviska and Gardner 1979). They have less preference for brands, and their brand loyalty is low (Arnould et al. 2004 cited by Chukwuemezie 2013).

In order to evaluate the level of involvement of consumers, researchers established different scales such as Zaichkowski (1985) who designed the Personal Involvement Inventory. This scale measures the overall concept of involvement conceptualized as the product’s perceived personal relevance and composed of twenty items valid for every type of product. A few years later McQuarrie and Munson (1992) revised this scale by substituting personal relevance by importance and interest to measure more precisely the involvement level of consumers and improving the usability and criterion validity of Zaichowski’s (1985) scale.

4. Conceptual Framework

Within this chapter the researchers create the references between CPBI and the suggested consumer outcomes, followed by an explanation how attitude is expected to mediate the precedent relationships and how the moderators are anticipated to alter these relations. Right after each argumentation the connected hypotheses are presented. At the end of the chapter the conceptual models can be found.

4.1 Concepts and Hypotheses

According to the findings presented in the literature review, CPBI has already been researched from different perspectives, however, Shams et al. (2015) were the first to develop a scale intended to measure CPBI. As this research partly aims to test the generalizability of Shams et al.’s (2015) scale, where CPBI was applied as an antecedent for brand attitude, purchase intention, consumer satisfaction
and consumer excitement, the same variables were taken as the conceptual basis. Nevertheless, the variables suggested by Shams et al. (2015) can also be found in other literature:

Generally, a positive brand attitude is created from consumers’ positive perception of a brand’s attributes and benefits (Keller 1993). Therefore, several authors (Aaker 2007; Eisingerich and Rubera 2010; Kunz et al. 2011; Pappu and Quester 2016; Shams et al. 2015) have incorporated brand attitude in their research about perceived innovativeness or even found that brand attitude is an important outcome of CPBI (Eisingerich and Rubera 2010; Quellet 2006). Further, literature (Fu and Eliott 2013; Rubera et al. 2011) suggests that perceived innovativeness can have a positive effect on the intention to buy innovative products. As consumer satisfaction is strongly linked to the purchase experience (Anderson et al. 1994; Giese and Cote 2000; Oliver 1997; Olsen et al. 2005) a positive effect of CPBI is also expected. This is in line with Kunz et al. (2011), who show that perceived firm innovativeness impacts both emotional and cognitive consumer satisfaction and Pappu and Quester (2016) pointing at the important relationship between brand innovativeness and consumer satisfaction. However, Kunz et al. (2011) identify that positive affect, described as the consumer’s excitement towards a brand, as a mediating factor on the relation between perceived firm innovativeness and emotional satisfaction, indicating that also consumer excitement is affected by perceived innovativeness. This supports the findings of Henard and Dacin (2010), who detected an effect of consumers’ perceived firm innovativeness on consumer excitement. Drawing from all these arguments, the following hypotheses have been developed:

\[ H1: \text{CPBI positively influences brand attitude.} \]

\[ H2: \text{CPBI positively influences purchase intention.} \]

\[ H3: \text{CPBI positively influences consumer satisfaction.} \]

\[ H4: \text{CPBI positively influences consumer excitement.} \]

Although brand attitude can be an outcome of CPBI it can also be an antecedent for consumer behavior (Keller 1993; Priester and Nayakankuppam 2004; Schiffman and Wisenblit 2015). The overall brand attitude is the most important aspect of brand image affecting consumers’ brand preference (Grimm 2005) and response to prices (Keller 1993). Successful brand building is vital for the perceived value from branded products and thereby enhancing consumers’ purchase behavior (Aaker 1991). Several authors (Keller and Lehmann 2003; Folse et al. 2012; Schivinski and Dabrowski 2014) further suggest a significant relationship between brand attitude and purchase intention. Therefore,
\textbf{H5a: Brand attitude mediates the positive effect of CPBI on purchase intention.}

Besides this, brand attitude is also known as a key determinant influencing brand loyalty (Oliver 1999) just like consumer satisfaction (Olsen \textit{et al.} 2005; Pappu and Quester 2016). Suh and Yi (2006) argue that they are both distinct concepts, as satisfaction is the overall evaluation of a buying experience compared to the expectations, while brand attitude lacks the comparison aspect. However, brand attitude can also be established based on indirect experiences such as advertising, social media or WOM (Ivens and Valta 2012; Schivinski and Dabrowski 2014). As literature indicates that brand attitude influences brand choice (Keller 1993; Priester and Nayakankuppam 2004) as well as purchase intentions (Keller and Lehmann 2003; Folse \textit{et al.} 2012; Schivinski and Dabrowski 2014), the assumption is, that brand attitude has to be established first, so that the consumer can engage in the buying process (Oliver 1999), which is then evaluated in regards to the expectations he had. Thus,

\textbf{H5b: Brand attitude mediates the positive effect of CPBI on consumer satisfaction.}

Henard and Dacin (2010) argue that a firm develops the reputation for product innovation over time influencing brand attitudes and consumer excitement. Similar to consumer satisfaction, consumer excitement is based on former product launches of a brand or firm, however, excitement is linked to their expected satisfaction (Henard and Dacin 2010). Thereby, it can be expected that a consumer has to develop a brand attitude before experiencing excitement, which is both influenced by his perception of the brand at hand. Consequently, the following hypothesis has been developed:

\textbf{H5c: Brand attitude mediates the positive effect of CPBI on consumer excitement.}

Consumer innovativeness has already been found to have a moderating effect on the relationship between CPBI and brand attitude (Quellet 2006). This is supported by previous researching indicating that consumers’ attitudes differ in regard to new and innovative products (Steenkamp \textit{et al.} 1999). McCarthy \textit{et al.} (2001) and Xie (2008) argue that innovative consumers have an increased desire for new and innovative products and might therefore rather try new brands than existing ones performing a brand extension. Therefore, innovative consumers do not necessarily buy products from a company with a higher brand attitude. However, an exception could be anticipated for innovative brands, as consumers with a high level of innovativeness perceive more emotional advantage by the innovative firm and should therefore be considered in regards to brand innovativeness as they may be opinion leaders for others (Kunz \textit{et al.} 2011). For that reason, it can be assumed that the consumers’ individual innovativeness influences the relation between CPBI and brand attitude as well as purchase intention:

\textbf{H6a: Consumer innovativeness moderates the relation between CPBI and brand attitude.}
**H6b: Consumer innovativeness moderates the relation between CPBI and purchase intention.**

Although consumer satisfaction is a main driver for consumers to seek for new products in order to solve a problem (Michel et al. 2008), only a few studies have investigated the moderating effect of consumer innovativeness on consumer satisfaction. However, researchers have proven that innovative consumers perceive innovations as a benefit and quality of service, which are predictors of consumer satisfaction (Dai et al. 2015). In addition, Kunz et al. (2011) found that the affective-experimental path, which leads to loyalty through consumer excitement and emotional satisfaction, is strongly affected by a consumer’s innovativeness. This is supported by Henard and Dacin (2010), who state that consumer excitement is a result of previous successful launches of innovative products. Therefore, it is expected that:

**H6c: Consumer innovativeness moderates the relation between CPBI and consumer satisfaction.**

**H6d: Consumer innovativeness moderates the relation between CPBI and consumer excitement.**

Compared to low involved consumers, high involved are more active and pay more attention to factual information towards products (Guthrie and Kim 2008; Petty et al. 1983). Through a better knowledge of the product and the market, high-involved consumers are rather able to recognize differences among products and brands, which can affect their evaluation and behavior toward them (Higie and Feick 1989). Therefore, it can be assumed that the relationship between brand innovativeness and brand attitude as the overall evaluation of a brand is depending on the level of involvement a consumer holds towards the brand or the products it is offering. Thus,

**H7a: Consumer involvement moderates the relation between CPBI and brand attitude.**

Further, it is known that the level of involvement is an element influencing the purchase intention through the attitude the consumer has toward a product (Petty et al. 1983; Suh and Yi 2006, Zaichkowski 1986). Horn and Salvendy (2006) affirm that an increase of information about innovative products positively affects consumers’ purchase intention. Thereby it is expected that,

**H7b: Consumer involvement moderates the relation between CPBI and purchase intention.**

Consumer satisfaction is linked to the experience a consumer makes in combination with product choice or purchase experience and his evaluation of this experience (Anderson et al. 1994; Giese and Cote 2000; Kunz et al. 2011; Oliver 1997; Olsen et al. 2005). The higher the knowledge a consumer has towards the desired product, the higher the expectations are likely to be. Thus, it can be assumed that high involved consumers might have higher expectations towards the purchase experience and
therefore react with a higher level of satisfaction when they finally purchase it. Pappu and Quester (2016), who suggest additional research to investigate potential moderators, recommend further to consider the role of involvement on the relationship between brand innovativeness and consumer satisfaction.

_H7c: Consumer involvement moderates the relation between CPBI and consumer satisfaction._

Henard and Dacin (2010) identified that the perceived innovativeness of a firm, gathered through the successful launch of previous innovative products, can increase the excitement towards the brand. Further, Oliver _et al._ (1997) state that the level of involvement is a key factor to determine consumers’ excitement for a brand. Therefore,

_H7d: Consumer involvement moderates the relation between CPBI and consumer excitement._

4.2 Conceptual Model

To keep transparency as high as possible, two conceptual models have been utilized. The first, presented in Figure 1, includes the direct relationships previously measured by Shams _et al._ (2015), as well as the hypotheses for the moderation analysis. The second model (Figure 2) illustrates the indirect relations expected through the mediation of brand attitude. As the first model measures the direct effect of CPBI on three variables, which are then analyzed again through an indirect effect in Figure 2, both models include the hypotheses H2-H4.

![Conceptual Model Direct Effect](image)
5. Methodology

This chapter presents the methodological choices made for this research, starting with the research approach and design, further covering the data sources, sampling and data collection. Moreover, the pretest, data analysis methods, quality criteria and ethical considerations are described and the operationalization table is outlined.

5.1 Research approach and research design

This study aims to examine the effect of CPBI on different dependent variables, namely brand attitude, purchase intention, consumer satisfaction and consumer excitement. The structure of this research is based on the work of Shams et al. (2015), however it extends the model to a new context. Most of the concepts used in this research have already been well explored and defined by different authors, thus a deductive approach was chosen in order to apply previous findings to a new context. According to Bruce (2006), a deductive reasoning is an approach where researchers build up hypotheses from fundamental axioms found in literature and then test them through an empirical investigation.

Further a quantitative study was chosen, which is characterized by the gathering of numerical data from a sample studied through statistical analysis, in order to generalize the findings to the interested population (Malhotra 2010). The data collected is used to test the hypotheses ventured in the conceptual framework and examines the relation between the variables in order to solve the research problem (Creswell and Creswell 2018). A quantitative method is highly suitable for this study since this research analyzes the relation between CPBI and several dependent variables.
According to Malhotra (2010), a research design is a framework detailing the different processes of a study in order to gather the appropriate information and solve the research problem. Since this study tested a previous model, adding new variables and moderators into a new context, the explanatory analysis was deemed to be the most suitable. Furthermore, this design is the best way to determine the cause and effect relation between CPBI (independent variable) and the consumer’s outcomes (dependent variables) (Malhotra 2010; Saunders et al. 2016). This design choice is also consistent with the use of a deductive reasoning based on hypothesis testing (Malhotra 2010). The current study is a snapshot of a specific market, at a specific time, through the collection of information from a sample of this population, which corresponds to a cross-sectional research (Malhotra 2010).

5.2 Data Sources

Data collection is a central element of academic research (Bryman and Bell 2011). Within literature it is usually distinguished between two types of data sources, namely primary and secondary data (Bryman and Bell 2011; Malhotra 2010). Primary data is preferentially used to fulfill the research purpose, achieved through the execution of surveys, interviews or focus groups (Saunders et al. 2016). Secondary data is deduced from existing data, gathered for another purpose than the current research pursues, found in external sources such as academic journals, governmental publications or books (Malhotra 2010).

In this research, both primary and secondary data were used. Firstly, as recommended by Malhotra (2010), the researchers collected secondary data in order to identify and define the problem as well as important variables and to be able to interpret the gathered primary data. The academic sources were mainly peer-reviewed articles extracted from ABS ranked journals but also statistical data from Statista (Statista 2018). Moreover, since the data collected in previous studies did not perfectly fit the purpose of this research, also primary data was gathered in the form of an online survey, which can provide a description of the perception and attitudes of the target population (Creswell and Creswell 2018).

5.3 Sampling

Most of the literature about CPBI is about innovativeness of tech companies (Pappu and Quester 2016; Quellet 2006; Shams et al. 2015), however, also other industries are investing in innovations and should, therefore, be a considerable area for research. The researchers perceived the sports industry as an interesting field to investigate, which is supported by a study coming from the U.S. showing that consumers rated the innovation of sports shoes as somewhat important (33%) or even
extremely important (34%) for their purchase decision (Statista 2018a). Further, the most valuable sports business brand worldwide is Nike with a revenue of 29.6 Billion USD (Statista 2018b), which is also the sporting goods manufacturer with the highest amount of patent applications within the European Patent Office (Statista 2018c). Moreover, Germany was perceived as a relevant country to test the CPBI scale since the sporting goods retail sector in Germany has constantly been increasing from 2002 to 2016 (Statista 2018d). In addition, Germany is the third European country regarding the average spending in sporting goods per household in 2011, an amount increasing each year (Statista 2018c).

In order to answer to the purpose and the research questions in the best possible way, a sample of the target population has been chosen (Bryman and Bell 2011). This sample choice was further selected to ensure a higher level of generalizability compared to Shams et al. (2015) who relied on a student sample. The sampling technique used in this study was non-probability, quota sampling. The aim of this technique is to generate a sample reflecting the target population according to different categories such as age, gender, ethnicity (Bryman and Bell 2011). The targeted population should be aware of the specific product category of sporting goods as well as the presented brands. To get the same composition of this population in our sample as suggested by Malhotra (2010), the quotation for this study was based on a study (Statista 2018e) investigating the buyers of sports clothes by age group (see Table 1) and gender (53.7% males; 46.3% females). Further, the study focused on physically active persons from the age of 18 to 69 participating in physical activity at least once a month.

Table 1: Quota Sample Distribution

<table>
<thead>
<tr>
<th>Age Group</th>
<th>Distribution</th>
<th>Quota (%)</th>
</tr>
</thead>
<tbody>
<tr>
<td>18-29</td>
<td>129</td>
<td>26 %</td>
</tr>
<tr>
<td>30-39</td>
<td>101</td>
<td>20 %</td>
</tr>
<tr>
<td>40-49</td>
<td>115</td>
<td>23 %</td>
</tr>
<tr>
<td>50-59</td>
<td>102</td>
<td>20 %</td>
</tr>
<tr>
<td>60-69</td>
<td>54</td>
<td>11 %</td>
</tr>
<tr>
<td>Total</td>
<td>500</td>
<td>100 %</td>
</tr>
</tbody>
</table>

In order to increase the likelihood that the invited respondents are able to participate in the survey, the researchers invited the participants according to their interest in doing sports as well as their age and gender. Consequently, the incidence that a member could actually take part in the survey was 80% and the response rate, which is the number of usable questionnaires divided by the number of people contacted to participate (Bryman and Bell 2011) was 35%.
According to Bryman and Bell (2011), a large size of the sample increases the reliability of the findings. Different approaches are known in order to evaluate the appropriate size of the sample, however, the rule of thumb recommend to have a minimum of ten participants per predictor (Bryman and Bell 2011; Saunders et al. 2016). Furthermore, based on the recommendation of market research experts, the sample was composed of 500 participants.

5.4 Data Collection

For the data collection a panel provider, namely Norstat, was deployed to ensure to get a significant amount of answers, distributed as needed to fulfill the purpose of this research. The online survey was set up using the software LimeSurvey Professional, as it provided all the functionality necessary for the statistical investigation, such as quotation and panel integration. The online questionnaire is a reliable technique for gathering data in a short time (Malhotra 2010). The questions were developed in English, to allow the researchers from Linnaeus University to test the questionnaire properly and keep the quality of the survey on a high level (Saunders et al. 2016). Then, the questionnaire was translated using a back-translation technique. For that purpose, a native German translator translated the questions into German and a native English translator translated it back into English in order to make a comparison of the two English source questionnaires (Saunders et al. 2016). This procedure is likely to detect most of the problems and ensures that the meaning of the questionnaire is identical in both versions. Finally, the survey was sent out per e-mail to ensure that the targeted persons were responding the questionnaire (Saunders et al. 2016). As recommended by Saunders et al. (2016) a follow-up e-mail using another design and text was sent out three days after the initial invitation in order to remind the panelists who had not answered yet.

5.5 Questionnaire Design

The survey consisted of 19 questions divided into three major parts, structured based on methodical and logical decisions. At the start page of the questionnaire the term “sporting goods” was defined, to ensure that all the participants would be aware of the research subject. First, it started with personal questions about gender, age and sports frequency. Those questions were placed at the beginning in order to filter respondents according to the targeted quotation (see Chapter 5.3). The next question set included questions about the type of physical activity the respondents took regularly part in and the budget they had invested in sports goods within the last year. Those questions were included due to general interest in the target group and were therefore not used for the analysis. The second part of the questionnaire included the moderation questions about consumer involvement towards sports goods and consumer innovativeness in general.
Further, in the main and third part of the questionnaire, the respondents had to choose from among five different sporting goods brands, picking the one they felt most comfortable with to answer questions about. The possible choices presented to the respondents were based on a survey made in 2016 in Germany (Statista 2018f), presenting the preferred brands of sports clothing for people doing sports regularly. The researcher chose the five most cited brands, namely Adidas (65%), Nike (48%), Puma (31%), Reebok (22%) and Asics (19%). This was done based on the approaches of Pappu and Quester (2016) and Shams et al. (2015), who also concerned their questionnaire on single brands chosen by consumers from a specific product category.

The subsequent questions were all referring to the chosen brand, querying the brand’s perceived innovativeness, the consumers’ attitude and excitement towards the brand, concluding with purchase intention, previous purchase experience and consumers’ satisfaction with the brand. In order to limit the halo effect usually present in the multi-attribute attitude studies, the questions on brand attitude were asked before the purchase intention (Beckwith and Lehmann 1975). Finally, the questionnaire ended with two additional control variables: education and personal net income.

The question related to consumer innovativeness, consumer involvement, CPBI, brand attitude, consumer excitement and satisfaction were closed-ended, using a seven-point Likert-Scale from “Fully disagree” (1) to “Fully agree” (7). The questions of purchase intention were also presented in this format, except the last one, which was multiple choice. Further, the question about the previous purchase experience was a dichotomous question (YES =2 /NO =1) and used as a control variable. The two other questions about consumers’ buying behavior were multiple choice question, which were also aiming at gaining more knowledge about the target group and thus, were not part of the analysis. The whole questionnaire is presented in Appendix 1.

5.6 Operationalization

In order to gather, divide and measure the different concepts used in the study, Bryman and Bell (2011) recommend to use an operationalization table. The operationalization is described by Baumeister and Vohs (2007) as a way to transform theoretical concepts into measurable variables which will be used to create the questions. Furthermore, the operationalization explains how the concepts were used, and thus, can guide future scholars to replicate the study (Baumeister and Vohs 2007).

Since different concepts used in the study are abstract, the operationalization enables to define them through measurable questions. All the questions used in the study were extracted from previous
research and adapted to the purpose. The operationalization table includes the theoretical definitions of the concepts, the adapted items fitting the purpose of the study as well as the original sources from which the items were extracted (Table 2).

5.7 Pretest

As recommended by literature, a pretest was conducted before the data collection in order to validate the questionnaire. A pretest consists of a pilot study tested on participants from the target population for ensuring the understanding of the questionnaire, but also for ensuring the functioning of the research instrument (Bryman and Bell 2011). First, the initial English questionnaire was sent to two researchers and lecturers working in the field of marketing at Linnaeus University, in order to guarantee the contextual validity. At the same time, the questionnaire was also sent to two experts within the market research industry, working for Norstat. According to the feedback from the specialists in both academics and practice, the previous purchase experience questions were adjusted from three items presented in a seven-point Likert scale, to one dichotomous item, considered as a control variable. In general, the structure of the questions was slightly modified to fulfill the function for the quota sample as well as to enable a coherent order for the participants.

Second, four interviews were conducted face-to-face using the translated German version of the questionnaire in order to ensure the questions were comprehensible. Based on the feedback of the participants, several minor changes on the language were made to ensure that the questions were understandable but still could be differentiated from each other to ensure a moderate level of correlation.

Finally, a pilot test was carried out with 30 participants from the target population to verify the functioning of the whole instrument. In order to ensure the reliability of the scales, Cronbach’s alpha coefficient was tested. The analysis resulted in a significant level of reliability of 0.89, therefore higher as the recommended value of 0.7 (Bryman and Bell 2011; Pallant 2010). As no changes had been made after the third step of the pretest, the 30 analyzed responses where included in the final dataset.
<table>
<thead>
<tr>
<th>Concept</th>
<th>Theoretical Definition</th>
<th>Component</th>
<th>Items/questions</th>
<th>References</th>
</tr>
</thead>
</table>
| **Brand Innovativeness**  
*Independent Variable* | Consumers’ perception of a brand’s track record of product innovations, degree of creativity, and potential for continued innovative activity in the future in a given market (Shams et al. 2015, p. 1594) | CPBI | BL_1. [Brand name] sets itself apart from the rest when it comes to sporting goods.  
BL_2. With regard to sporting goods, [brand name] is dynamic.  
BL_3. [Brand name] is a cutting-edge sporting goods brand.  
BL_4. [Brand name] sporting goods make me feel “Wow!”  
BL_5. [Brand name] launches new sporting goods and creates market trends all the time  
BL_6. [Brand name] is an innovative brand when it comes to sporting goods.  
BL_7. [Brand name] makes new sporting goods with superior Design.  
BL_8. With regard to sporting goods, [brand name] constantly generates new ideas.  
BL_9. [Brand name] is a new product leader in the sporting goods market.  
BL_10. [Brand name] has changed the market with its sporting goods. | Shams et al. 2015 |
| **Brand Attitude**  
*Dependent Variable + Mediator* | Brand attitude is defined as the consumers’ overall evaluation of a brand (Berger and Mitchell 1989). | Brand Attitude | BA_1. I have a pleasant idea of [brand name].  
BA_2. [Brand name] has a good reputation.  
BA_3. I associate positive characteristics with [brand name]. | Schivinski and Dabrowski 2014 |
| **Purchase Intention**  
*Dependent Variable* | The purchase intention is the possibility that consumers intend to purchase a specific product in the future. Wu et al. (2011) | Purchase Intention | PI_1. I would buy sporting goods from [brand name] rather than from any other brand available.  
PI_2. I would recommend that others buy sporting goods from [brand name].  
PI_3. I intend to purchase sporting goods from [brand name] in the future. | Developed from Schivinski and Dabrowski 2014 |
| **Consumer Satisfaction**  
*Dependent Variable* | Consumer satisfaction incorporates the comparison between a consumer’s expectation and the actual performance delivered by a product or its specific attributes (Kunz et al. 2011). | **Consumer Satisfaction** | CS_1. I am very pleased with the goods which [brand name] delivers.  
CS_2. The goods of [brand name] fulfill my expectations.  
CS_3. On an overall basis, [brand name] fulfills my expectations.  
CS_4. On an overall basis I am satisfied with [brand name]. |  
| **Consumer Excitement**  
*Dependent Variable* | Consumer Excitement is described as a “feeling of anticipation for future firm offerings, as well as an expectation of satisfaction given positive past performance” (Henard and Dacin 2010). | **Consumer Excitement** | When I think about the brand [brand name], I feel:  
CE_1. enthusiastic  
CE_2. interested  
CE_3. excited  
CE_4. inspired  
CE_5. motivated | Henard and Dacin 2010 |  
| **Consumer Innovativeness**  
*Moderator* | “The predisposition to buy new and different products and brands rather than remain with previous choices and consumption patterns” (Steenkamp et al. 1999, p. 56). | **Consumer Innovativeness** | CN_1. I like to learn about new ideas.  
CN_2. I am interested in news stories that deal with new inventions or discoveries.  
CN_3. I like to keep up with new technologies.  
CN_4. I am willing to take risks in order to try new things. | Kim *et al.* 2014 |  
| **Consumer Involvement**  
*Moderator* | Consumer Involvement is described as “a state of interest, motivation or arousal” Rothschild (1984, p. 216). | **Consumer Involvement** | CV_1. I am interested in reading about sporting goods.  
CV_2. I would read a consumer review article about sporting goods.  
CV_3. I usually pay attention to ads for sporting goods.  
CV_4. I usually talk about sporting goods with other people.  
CV_5. I usually take many factors into account before sporting goods.  
CV_6. I usually spend a lot of time choosing what kind of sporting goods to use or to buy. | McQuarrie and Munson 1992 |
5.8 Data Analysis Method

To organize and structure the data collected through the questionnaire, the IBM software SPSS was used. In order to explain the different relationship between the variables of the research, the researchers opted for linear regressions analysis (Bryman and Bell 2011). This method enables to analyze the dependence relationship between one or more independent variable and a single dependent variable (Hair et al. 2014). The analysis was divided into four parts. First, the descriptive statistics of the sample were collected, which helps to explain and compare variables and to summarize the conducted data (Saunders et al. 2016). Then the reliability and validity analysis were assessed using Cronbach’s alpha and Pearson’s correlation coefficient as well as Exploratory Factor Analysis (EFA).

Second, the findings suggested by Shams et al. (2015) were tested through linear regressions analysis between CPBI (independent variable) and each of the consumer’s outcomes (dependent variables). Further, the researchers were aiming to do a comparison of two protruding brands, that were selected based on the results of the analysis. Thus, the data was split and the full model of the first regression analysis was applied for each of the two brands (Nike and Adidas).

Third, the mediating effect of brand attitude on the relation CPBI has towards purchase intention, consumer satisfaction and excitement was examined. A mediator is a third variable affecting two other related constructs (Hair et al. 2014). To establish the mediating effect with the outcome variables (Hair et al. 2014), a multiple regression was made to test the combined effect of CPBI and brand attitude on the dependents variables.

Fourth, the moderating effect of consumer involvement and consumer innovativeness was assessed on the results found from the previous analysis. A moderator is an independent variable, which depending on its value, changes the relation between independent/dependent variables (Hair et al. 2014). Thus, the independent variable was multiplied with the standardized moderator variable, then the impact of the resultant variable on the dependent variables was tested through linear regression. All of the above-mentioned regression analysis incorporated the before mentioned control variables.

5.9 Quality Criteria

When conducting a research, it is very important to ensure its quality, which requires certifying the reliability and validity of the study (Bryman and Bell 2011). The reliability refers to the replicability of the research which means the capacity to find the same findings using the same instruments. Bryman and Bell (2011) associate reliability with the internal consistency of scales which can be evaluated with the test of Cronbach’s Alpha. This test assesses the coherence between the questions
within the same concepts. According to literature a value above 0.7 ensures the consistency of a study (Bryman and Bell 2011; Pallant 2010).

The validity of a research ensures that the survey measures the appropriate variables which have to be evaluated. To do so, different tools exist to evaluate validity (Bryman and Bell 2011). The first tool is the pretest, which helps researchers to certify that the measurement of a variable reflects the essence of the variable. The thereby measured face validity was ensured through the pretest as described in chapter 5.7.

The other tool is Pearson’s Correlation analysis which secures the construct validity of the study. According to Saunders et al. (2016), this analysis evaluates the strength of the relation between two measured variables. A value close to +1 means that there is a positive correlation between the two variables. On the contrary, if the value is close to -1, the two variables are negatively related. According to literature a correlation that is too high, i.e. above 0.9, means that the variables measure the same thing. Thus, a lower value is recommended (Saunders et al. 2016).

Another test to measure the validity is the EFA which assesses the number of latent variables behind a series of items (DeVellis 2003). It is used to reduce dimensionality and to facilitate the interpretation of the gathered data (Yong and Pearce 2013). The EFA was carried out in two steps: The first one was made for the independent variables, analyzed with an unrotated principal component analysis (PCA). The second one was carried out for all the dependent variables simultaneously. Like the previous EFA, the variables were first analyzed with an unrotated PCA (Hair et al. 2014) and then with orthogonal rotation analysis: Varimax, Quartimax and Equamax. As a high correlation and therefore factor loading among the dependent variables was expected, due to the close vicinity of the different concepts towards the buying process and the lack of established theory behind the concept of consumer excitement, a fixed number of four factors was determined. Based on the sample size the factor loading of 0.3 would have been required for significance, however, according to practical significance a value of 0.5 or greater is deemed as appropriate (Hair et al. 2014).

5.10 Ethical Considerations

According to Punch (2013), a research study is a collection of data from people and about people, thus it is very important that scholars establish a relationship of trust with the participants (Creswell and Creswell 2018). Bryman and Bell (2011) state that the “Ethical Considerations can be specified as one of the most important parts of the research.” In order to prevent ethical issues, researchers have to promote the integrity of the research and protect their participants.
During this study, the researchers followed several rules to minimize the ethical issues (Bryman and Bell 2011; Creswell and Creswell 2018). In this research, all the participant who responded to the survey were volunteers and were not forced to participate in any case. Then before the survey, a descriptive text was written in order to inform the participants about the purpose of the study, so they could freely decide whether to respond or not by being fully aware of its implication. The researchers were also careful in the formulation of the questions in order not to harm anyone. The different pretests with other researchers and the face-to-face interview ensured this ethical consideration. All the data collected from the participants were anonymous and kept private, no names were used in the coding process of the data. The secondary data used in the research were referenced at the end of the study, using the Harvard referencing system. Finally, researchers wrote the study, having the highest level of objectivity possible.

6. Data Analysis and Results

This chapter presents the analysis of the gathered data. The chapter is divided into three parts, starting with demographic distribution as well as delivers other information about the participants and their sporting behavior. Then, the descriptive statistics and reliability tests are depicted. Finally, the relationships between the dependent and independent variables are analyzed through linear regression analysis.

6.1 Demographic results

In total 501 Germans took part in the questionnaire. All respondents were active in sports at least once per month. The majority did sports 1-2 times per week (223/45%), followed by 179 (36%) doing sports 3-4 times per week, while 66 (13%) respondents stated to do sports even more often. Only a few participants answered to be physically active twice (25/5%) or once (8/2%) a month. In terms of age and gender, the distribution was according to the quotas as stated in chapter 5.3. Therefore, the sample consisted of 270 (54%) males and 231 (46%) females. The exact distribution per age and gender can be found in Table 3. Out of all the participants 470 (94%) had previous purchase experience (PPE) with sporting goods from the chosen brand, while 31 (6%) had not. When asking for regular physical activities, most of the participants stated that they regularly do running (56%), followed by swimming (34%), fitness training (34%) and ball sports (24%). Sporting activities such as bodyweight training (20%), mountain biking or racing (20%), Yoga/Pilates (19%), Cross Fit (10%) or other sports (18%) were less frequent. Further information such as education, personal net income and additional knowledge about the purchase behavior can be found in Appendix 2.
Table 3: Distribution Demographic Data

<table>
<thead>
<tr>
<th>Age</th>
<th>Males</th>
<th>Females</th>
<th>Total</th>
<th>Sport activity</th>
<th>Sport Spending last 12 months</th>
</tr>
</thead>
<tbody>
<tr>
<td>18-29</td>
<td>67 (13.4%)</td>
<td>61 (12.2%)</td>
<td>114 (26%)</td>
<td>Running (56 %)</td>
<td>Up to 50€ (14%)</td>
</tr>
<tr>
<td>30-39</td>
<td>52 (10.4%)</td>
<td>50 (10.0%)</td>
<td>102 (20%)</td>
<td>Fitness training (35%)</td>
<td>Up to 100€ (22%)</td>
</tr>
<tr>
<td>40-49</td>
<td>65 (13.0%)</td>
<td>50 (10.0%)</td>
<td>115 (23%)</td>
<td>Bodyweight training (20%)</td>
<td>Up to 150€ (20%)</td>
</tr>
<tr>
<td>50-59</td>
<td>56 (11.2%)</td>
<td>46 (9.2%)</td>
<td>102 (20%)</td>
<td>Cross Fit (10%)</td>
<td>Up to 200€ (20%)</td>
</tr>
<tr>
<td>60-69</td>
<td>30 (6.0%)</td>
<td>24 (4.8%)</td>
<td>54 (11%)</td>
<td>Ball sports (24%)</td>
<td>Up to 500€ (12%)</td>
</tr>
<tr>
<td></td>
<td>270 (54%)</td>
<td>231 (46%)</td>
<td>501 (100%)</td>
<td>Swimming (34%)</td>
<td>Over 500€ (3%)</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td>Biking (20%)</td>
<td>No spending (10%)</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td>Yoga, Pilates etc. (19%)</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td>Other (18%)</td>
<td></td>
</tr>
</tbody>
</table>

6.2 Descriptive Statistics, Reliability and Validity

The descriptive analysis, which can be found in Table 4, presents the minimum, maximum and mean per variable as well as the standard deviation. All values for skewness were within ±1 and all values for kurtosis where within ±3. Moreover, this table provides Pearson correlations coefficients for all variables which are highly significant (\(p < 0.001\)). No correlation above 0.9 could be found, which indicated that there is no effect of multi-collinearity (Bryman and Bell 2011). Cronbach’s alpha was further tested to ensure the reliability of the measured constructs; the results can be found in Appendix 3. The lowest value was for purchase intention (0.885) and the highest for brand innovativeness (0.958), therefore all values were above the recommended value of 0.7 (Bryman and Bell 2011; Pallant 2010).

Table 4: Descriptive Statistics and Pearson Correlations Coefficients

<table>
<thead>
<tr>
<th>Variables</th>
<th>Minimum</th>
<th>Maximum</th>
<th>Mean</th>
<th>SD</th>
<th>1</th>
<th>2</th>
<th>3</th>
<th>4</th>
<th>5</th>
</tr>
</thead>
<tbody>
<tr>
<td>Brand Innovativeness</td>
<td>1.00</td>
<td>7.00</td>
<td>5.2750</td>
<td>1.12264</td>
<td>1</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Brand Attitude</td>
<td>1.00</td>
<td>7.00</td>
<td>5.7798</td>
<td>1.14720</td>
<td>.815**</td>
<td>1</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Purchase Intention</td>
<td>1.00</td>
<td>7.00</td>
<td>5.2262</td>
<td>1.34175</td>
<td>.786**</td>
<td>.800**</td>
<td>1</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Consumer Satisfaction</td>
<td>1.00</td>
<td>7.00</td>
<td>5.7791</td>
<td>1.12091</td>
<td>.724**</td>
<td>.806**</td>
<td>.753**</td>
<td>1</td>
<td></td>
</tr>
<tr>
<td>Consumer Excitement</td>
<td>1.00</td>
<td>7.00</td>
<td>4.9022</td>
<td>1.31852</td>
<td>.764**</td>
<td>.702**</td>
<td>.735**</td>
<td>.626**</td>
<td>1</td>
</tr>
</tbody>
</table>

Notes: n = 501; *p < 0.05 (two-tailed); **p < 0.01 (two-tailed)

The first EFA, which was conducted to validate the CPBI scale within the contextual framework of this research, showed no correlation above 0.9 or below 0.3, the Kaiser-Meyer-Olkin Measure (KMO) was at 0.954, above the recommended value of 0.5 (Yong and Pearce 2013) and Bartlett’s Test of Sphericity was significant (\(p < 0.001\)). Further, the MSA index, which indicates if a variable fits to the others, was over 0.9 meeting the required value of 0.5 as well (Yong and Pearce 2013), indicating that the data was suitable for EFA. PCA extracted a one component structure (eigenvalue > 1), which was supported by the generated scree plot and confirmed Shams et al.’s (2015) findings of the uni-
dimensionality of CPBI. All values found were over 0.6 and therefore had a significant loading. The second EFA revealed no correlation over 0.9 or under 0.3, Bartlett’s Test of Sphericity was significant at a level of $p < 0.001$, further KMO was above 0.5 with a value of 0.952 and the MSA index was over 0.5 as well. The results of the unrotated PCA and the Varimax and Quartimax Rotation (presented in Appendix 4) showed that there are several cross-loadings among the different concepts. Based on the results of the Equamax Rotation, an item of consumer excitement (CE2) was excluded from further analysis, leading to a better loading of the variables of consumer satisfaction, purchase intention and consumer excitement (see Appendix 4). However, although the final Equamax Rotation still showed a cross-loading for brand attitude with three values over 0.4, the researchers followed the rule of the practical significance, based on a value of 0.5 (Hair et al. 2014) and kept all items. The new KMO was 0.944. Afterwards Cronbach’s alpha for consumer excitement was still appropriate with 0.920, the coefficients of Pearson Correlation remained the same.

6.3 Linear Regression Analysis

In order to test the hypotheses, the analysis was split in three major parts. The first analysis was aiming to test the direct, linear impact of CPBI on the dependent variables (brand attitude, excitement, satisfaction and purchase intention), therefore a linear regression analysis was applied. Table 5 presents the results of this analysis, firstly showing the impact of the control variables (age, gender, education, personal net income, sport frequency, PPE) for each dependent variable and a combined measurement with CPBI. For all measured constructs the beta coefficient showed a highly significant effect of CPBI ($p < 0.001$), therefore all hypotheses H1, H2, H3 and H4 were fully supported. CPBI had the greatest effect on brand attitude with a $\beta$ of 0.791 and the highest $R^2$ of 0.688, indicating that it explains 69% of the variance. However, also the other models showed a strong influence of CPBI for purchase intention (0.752), consumer excitement (0.722) and consumer satisfaction (0.685), with an $R^2$ of 0.55 or higher, presenting a good level of fit to predict the variance.

Concerning the control variables, PPE showed a highly significant ($p < 0.001$) effect for all relations, except for the simultaneous measurement with CPBI on consumer excitement. Further, sport frequency seemed to have a slight ($p < 0.05$) effect on brand attitude (0.093) and consumer satisfaction (0.110), when being measured alone. Finally, age and education had a moderate ($p < 0.05$) impact on consumer excitement for both the control model and on the CPBI measurement, while personal net income only takes meaning for the control model.
Table 5: Linear Regression to measure the effect of CPBI on the dependent variables

<table>
<thead>
<tr>
<th>Direct Effect</th>
<th>Brand Attitude</th>
<th>Purchase Intention</th>
<th>Consumer Satisfaction</th>
<th>Consumer Excitement</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Model 1 (Control)</td>
<td>Model 2</td>
<td>Model 3 (Control)</td>
<td>Model 4</td>
</tr>
<tr>
<td>Intercept</td>
<td>2.682 (0.000)</td>
<td>0.056 (0.869)</td>
<td>1.910 (0.003)</td>
<td>-1.011 (0.016)</td>
</tr>
<tr>
<td>Sig.</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Control variables</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Gender</td>
<td>0.002 (0.102)</td>
<td>0.022 (0.060)</td>
<td>-0.033 (0.118)</td>
<td>-0.014 (0.075)</td>
</tr>
<tr>
<td>Age</td>
<td>0.029 (0.029)</td>
<td>0.044 (0.021)</td>
<td>-0.057 (0.042)</td>
<td>-0.042 (0.027)</td>
</tr>
<tr>
<td>Education</td>
<td>-0.085 (0.030)</td>
<td>-0.018 (0.018)</td>
<td>-0.083 (0.035)</td>
<td>-0.020 (0.022)</td>
</tr>
<tr>
<td>Personal Net Income</td>
<td>0.012 (0.038)</td>
<td>-0.044 (0.022)</td>
<td>0.086 (0.044)</td>
<td>0.033 (0.028)</td>
</tr>
<tr>
<td>Sport Frequency</td>
<td>0.093* (0.059)</td>
<td>0.016 (0.035)</td>
<td>0.064 (0.068)</td>
<td>-0.010 (0.043)</td>
</tr>
<tr>
<td>Previous purchase experience</td>
<td>0.275** (0.206)</td>
<td>0.139** (0.123)</td>
<td>0.295** (0.238)</td>
<td>0.165** (0.153)</td>
</tr>
</tbody>
</table>

Independent variable

| Perceived Brand Innovativeness | 0.791** (0.026) | 0.752** (0.033) | 0.685** (0.031) | 0.722** (0.038) |
| R²                          | 0.095            | 0.688            | 0.111            | 0.646            |
| Adjusted R²                 | 0.084            | 0.683            | 0.100            | 0.641            |
| Change in R²                | 0.583**          | 0.535**          | 0.444**          | 0.494**          |

Notes: n = 501; *p < 0.05; **p < 0.001

6.4 Brand Comparison

In the interest of the industry the researchers compared the findings for those two brands, most frequently chosen within the questionnaire, and most known within Germany – Adidas and Nike (Statista 2018f). Out of the five possible sporting good brands, 281 (56%) participants chose Adidas as the brand they are most familiar with, followed by Nike (125/25%), and with wide clearance Asics (39/7.8%), Puma (38/7.6%) and Reebok (18/4%). Table 6 shows the results of the linear regression analysis for Nike and Adidas, presenting a highly significant influence (p < 0.001) of CPBI on all dependent variables. However, all standardized coefficients for Nike were slightly higher than the ones for Adidas and even higher as the overall coefficients (Table 5), despite consumer excitement, whereas Adidas was only above the overall coefficients for consumer satisfaction. For Nike there is only a slight effect of PPE on the overall impact of CPBI on purchase intention and consumer satisfaction, whereas for Adidas it is highly significant (p < 0.001) for all variables, besides consumer excitement, which is just moderately effected (p < 0.05). Further age has a minor negative impact on consumer excitement for Adidas.
Table 6: Comparison of Nike and Adidas

<table>
<thead>
<tr>
<th>Brands</th>
<th>Nike</th>
<th>Adidas</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Brand Attitude</td>
<td>Purchase Intention</td>
</tr>
<tr>
<td>Intercept</td>
<td>0.409</td>
<td>-1.142</td>
</tr>
<tr>
<td>Sig.</td>
<td>(0.635)</td>
<td>(0.302)</td>
</tr>
<tr>
<td>Control variables</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Gender</td>
<td>0.081</td>
<td>-0.015</td>
</tr>
<tr>
<td>(0.131)</td>
<td>(0.168)</td>
<td>(0.146)</td>
</tr>
<tr>
<td>Age</td>
<td>0.048</td>
<td>-0.041</td>
</tr>
<tr>
<td>(0.047)</td>
<td>(0.061)</td>
<td>(0.053)</td>
</tr>
<tr>
<td>Education</td>
<td>-0.026</td>
<td>-0.110</td>
</tr>
<tr>
<td>(0.039)</td>
<td>(0.050)</td>
<td>(0.044)</td>
</tr>
<tr>
<td>Personal Net Income</td>
<td>-0.026</td>
<td>0.093</td>
</tr>
<tr>
<td>(0.039)</td>
<td>(0.059)</td>
<td>(0.051)</td>
</tr>
<tr>
<td>Sport Frequency</td>
<td>-0.044</td>
<td>-0.011</td>
</tr>
<tr>
<td>(0.070)</td>
<td>(0.089)</td>
<td>(0.078)</td>
</tr>
<tr>
<td>Previous purchase experience</td>
<td>0.048</td>
<td>0.135*</td>
</tr>
<tr>
<td>(0.353)</td>
<td>(0.453)</td>
<td>(0.394)</td>
</tr>
<tr>
<td>Independent variables</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Perceived Brand Innovativeness</td>
<td>0.842**</td>
<td>0.763**</td>
</tr>
<tr>
<td>(0.055)</td>
<td>(0.070)</td>
<td>(0.061)</td>
</tr>
<tr>
<td>R²</td>
<td>0.698</td>
<td>0.607</td>
</tr>
<tr>
<td>Adjusted R²</td>
<td>0.680</td>
<td>0.584</td>
</tr>
</tbody>
</table>

6.5 Mediation Analysis

Then, the mediating effect of brand attitude on the relationship between CPBI and the three remaining variables was tested. As 6.3 shows, there is a significant effect of CPBI on brand attitude, therefore, the necessary requirement for testing the mediation has been given (Hair et al. 2014). To test the hypotheses H5(a-c), a multiple regression analysis was conducted, measuring the effect of both CPBI and brand attitude on the dependent variables (see Table 7). The analysis revealed a positive and highly significant (p < 0.001) effect for the mediation of purchase intention (0.178) and consumer satisfaction (0.125). The impact of CPBI on consumer excitement was also highly significant while brand attitude only had a moderate influence (0.100; p < 0.05). Conclusively, H5a and H5b were fully supported, while H5c was only partially supported. Purchase intention and consumer satisfaction were further influenced by previous purchases (p < 0.001) and age (p < 0.05), whereas consumer excitement was strongly influenced (p < 0.001) by age and slightly by education (p < 0.05). The goodness of fit for all models was higher compared to the individual testing of CPBI, the first model explaining up to 71%, with adjusted R² being 0.064 higher than for CPBI alone. Model 2 had an explanatory power of 67%, with a higher adjusted R² of 0.114, while model 3 was comparable low, having a higher adjusted R² of 0.08 than CPBI measured alone.
Table 7: Mediation Analysis for Brand Attitude

<table>
<thead>
<tr>
<th>Indirect Effect</th>
<th>Purchase Intention</th>
<th>Consumer Satisfaction</th>
<th>Consumer Excitement</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Model 1</td>
<td>Model 2</td>
<td>Model 3</td>
</tr>
<tr>
<td>Intercept</td>
<td>-1.040</td>
<td>0.077</td>
<td>0.134</td>
</tr>
<tr>
<td>Sig.</td>
<td>(0.006)</td>
<td>(0.819)</td>
<td>(0.782)</td>
</tr>
<tr>
<td>Control variables</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Gender</td>
<td>-0.024</td>
<td>0.010</td>
<td>0.039</td>
</tr>
<tr>
<td></td>
<td>(0.068)</td>
<td>(0.060)</td>
<td>(0.086)</td>
</tr>
<tr>
<td>Age</td>
<td>-0.062*</td>
<td>-0.012*</td>
<td>-0.108**</td>
</tr>
<tr>
<td></td>
<td>(0.024)</td>
<td>(0.657)</td>
<td>(0.031)</td>
</tr>
<tr>
<td>Education</td>
<td>-0.012</td>
<td>-0.007</td>
<td>-0.064*</td>
</tr>
<tr>
<td></td>
<td>(0.020)</td>
<td>(0.018)</td>
<td>(0.026)</td>
</tr>
<tr>
<td>Personal Net Income</td>
<td>0.053</td>
<td>0.019</td>
<td>0.052</td>
</tr>
<tr>
<td></td>
<td>(0.025)</td>
<td>(0.022)</td>
<td>(0.032)</td>
</tr>
<tr>
<td>Sport Frequency</td>
<td>-0.017</td>
<td>0.033</td>
<td>-0.021</td>
</tr>
<tr>
<td></td>
<td>(0.039)</td>
<td>(0.035)</td>
<td>(0.050)</td>
</tr>
<tr>
<td>Previous Purchase Experience</td>
<td>0.103**</td>
<td>0.104**</td>
<td>0.015</td>
</tr>
<tr>
<td></td>
<td>(0.143)</td>
<td>(0.126)</td>
<td>(0.181)</td>
</tr>
<tr>
<td>Independent variables</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Perceived Brand Innovativeness</td>
<td>0.396**</td>
<td>0.208**</td>
<td>0.587**</td>
</tr>
<tr>
<td></td>
<td>(0.051)</td>
<td>(0.045)</td>
<td>(0.065)</td>
</tr>
<tr>
<td>Brand Attitude</td>
<td>0.450**</td>
<td>0.603**</td>
<td>0.171*</td>
</tr>
<tr>
<td></td>
<td>(0.051)</td>
<td>(0.045)</td>
<td>(0.065)</td>
</tr>
<tr>
<td>B Coefficient Mediation</td>
<td>0.178**</td>
<td>0.125**</td>
<td>0.100*</td>
</tr>
<tr>
<td>R²</td>
<td>0.710</td>
<td>0.674</td>
<td>0.559</td>
</tr>
<tr>
<td>Adjusted R²</td>
<td>0.705</td>
<td>0.669</td>
<td>0.552</td>
</tr>
<tr>
<td>Change in R²</td>
<td>0.599**</td>
<td>0.557**</td>
<td>0.503**</td>
</tr>
</tbody>
</table>

Notes: n = 501; *p < 0.05; **p < 0.001

6.6 Moderation Analysis

As the last step of the analysis, the moderation effect of consumer involvement and consumer innovativeness on the relations displayed in Table 5 was examined. The results are presented in Table 8. Consumer innovativeness influences negatively (p < 0.001) the effect of CPBI on brand attitude, but only moderate (p < 0.05) on the other variables. Whereas consumer involvement has a negative and strong effect (p < 0.001) on the relation between CPBI and brand attitude as well as purchase intention and consumer satisfaction. While consumer involvement has only a slight effect (p < 0.05) on consumer excitement. Moreover, education alters slightly both moderating effects on brand attitude. The same effect can be found for purchase intention, moderated by consumer innovativeness, even though income has a slight positive effect on both moderations. While the effect on consumer satisfaction is only influenced by sport frequency (p < 0.05), have age, education and income be identified as altering the impact on consumer excitement. Finally, all relationships are considerably influenced by prior purchase activities, despite model 7 were it only represents a moderate effect (p < 0.05). All R² were by comparison to the previous concepts very low, although the change in R² was slightly above the control models.
Table 8: Moderation Analysis for Consumer Innovativeness and Involvement

<table>
<thead>
<tr>
<th>Moderation</th>
<th>Brand Attitude</th>
<th>Purchase Intention</th>
<th>Consumer Satisfaction</th>
<th>Consumer Excitement</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Model 1</td>
<td>Model 2</td>
<td>Model 3</td>
<td>Model 4</td>
</tr>
<tr>
<td>Intercept</td>
<td>2.900</td>
<td>3.001</td>
<td>2.114</td>
<td>2.194</td>
</tr>
<tr>
<td>Sig.</td>
<td>(0.000)</td>
<td>(0.000)</td>
<td>(0.001)</td>
<td>(0.001)</td>
</tr>
</tbody>
</table>

Control variables

<table>
<thead>
<tr>
<th></th>
<th>Brand Attitude</th>
<th>Purchase Intention</th>
<th>Consumer Satisfaction</th>
<th>Consumer Excitement</th>
</tr>
</thead>
<tbody>
<tr>
<td>Gender</td>
<td>0.014</td>
<td>0.005</td>
<td>-0.023</td>
<td>-0.031</td>
</tr>
<tr>
<td></td>
<td>(0.098)</td>
<td>(0.100)</td>
<td>(0.115)</td>
<td>(0.117)</td>
</tr>
<tr>
<td>Age</td>
<td>0.024</td>
<td>0.021</td>
<td>-0.060</td>
<td>-0.062</td>
</tr>
<tr>
<td></td>
<td>(0.035)</td>
<td>(0.036)</td>
<td>(0.041)</td>
<td>(0.042)</td>
</tr>
<tr>
<td>Education</td>
<td>-0.086*</td>
<td>-0.092*</td>
<td>-0.084</td>
<td>-0.088*</td>
</tr>
<tr>
<td></td>
<td>(0.029)</td>
<td>(0.030)</td>
<td>(0.034)</td>
<td>(0.035)</td>
</tr>
<tr>
<td>Personal Net Income</td>
<td>0.054</td>
<td>0.023</td>
<td>0.120*</td>
<td>0.094*</td>
</tr>
<tr>
<td></td>
<td>(0.037)</td>
<td>(0.037)</td>
<td>(0.043)</td>
<td>(0.043)</td>
</tr>
<tr>
<td>Sport Frequency</td>
<td>0.093</td>
<td>0.089</td>
<td>0.064</td>
<td>0.061</td>
</tr>
<tr>
<td></td>
<td>(0.070)</td>
<td>(0.058)</td>
<td>(0.067)</td>
<td>(0.067)</td>
</tr>
<tr>
<td>Previous Purchase Experience</td>
<td>0.253**</td>
<td>0.254**</td>
<td>0.277**</td>
<td>0.279**</td>
</tr>
<tr>
<td></td>
<td>(0.198)</td>
<td>(0.203)</td>
<td>(0.233)</td>
<td>(0.237)</td>
</tr>
</tbody>
</table>

Moderators

<table>
<thead>
<tr>
<th></th>
<th>Brand Attitude</th>
<th>Purchase Intention</th>
<th>Consumer Satisfaction</th>
<th>Consumer Excitement</th>
</tr>
</thead>
<tbody>
<tr>
<td>Consumer Innovativeness</td>
<td>-0.193**</td>
<td>-0.147*</td>
<td>-0.133*</td>
<td>-0.039*</td>
</tr>
<tr>
<td></td>
<td>(0.040)</td>
<td>(0.047)</td>
<td>(0.039)</td>
<td>(0.051)</td>
</tr>
<tr>
<td>Consumer Involvement</td>
<td>-0.269**</td>
<td>-0.215**</td>
<td>-0.149**</td>
<td>-0.133*</td>
</tr>
<tr>
<td></td>
<td>(0.040)</td>
<td>(0.047)</td>
<td>(0.040)</td>
<td>(0.051)</td>
</tr>
<tr>
<td>R²</td>
<td>0.165</td>
<td>0.132</td>
<td>0.156</td>
<td>0.132</td>
</tr>
<tr>
<td></td>
<td>0.132</td>
<td>0.156</td>
<td>0.132</td>
<td>0.134</td>
</tr>
<tr>
<td>Adjusted R²</td>
<td>0.153</td>
<td>0.119</td>
<td>0.144</td>
<td>0.119</td>
</tr>
<tr>
<td></td>
<td>0.144</td>
<td>0.126</td>
<td>0.122</td>
<td>0.060</td>
</tr>
<tr>
<td>Change in R²</td>
<td>0.070**</td>
<td>0.037**</td>
<td>0.045**</td>
<td>0.015**</td>
</tr>
<tr>
<td></td>
<td>0.045**</td>
<td>0.021**</td>
<td>0.017**</td>
<td>0.018**</td>
</tr>
</tbody>
</table>

Notes: n = 501; *p < 0.05; **p < 0.001

In the tables presented during this chapter it can be seen that the intercept was not significant for the majority of the regression analysis. The intercept is the value of the dependent variable Y, when all values for X (independent variables) are statistical zero (Saunders et al. 2016). This could be a possible indicator for multi-collinearity, the degree of correlation between two or more independent variables (Saunders et al. 2016). However, the results also show that two antecedents, a correlation coefficient over 0.90 or higher or a variance inflation factor (VIF) over 10 (Hair et al. 2014), are not fulfilled. Further, the sample size is appropriate for the measured concept and as the sample is homogeneous, consisting of only physically active Germans (see Chapter 5.3), an excessively high level of cultural diversity can be ruled out as the cause. Finally, a R² between 0.556 and 0.710 for all
constructs with an insignificant intercept indicates that the level of goodness of fit is high, as 55-71% of the variance within the dependent variable can be explained through the regression model.

6.7 Hypotheses testing

Summarizing the findings gathered within this chapter, all hypotheses developed within the conceptual framework have been at least partially supported. Figure 3 and 4 present the conceptual model including the identified relations as well as the level of significance.

Figure 3: Results Testing Conceptual Model Direct Effect

Figure 4: Results Testing Conceptual Model Indirect Effect
An overview of these tested hypotheses and their evaluation can be found in the table below.

Table 9: Summary of Hypotheses Testing

<table>
<thead>
<tr>
<th>Hypotheses</th>
<th>Sig.</th>
<th>Finding</th>
</tr>
</thead>
<tbody>
<tr>
<td>H1  CPBI positively influences brand attitude.</td>
<td>p &lt; 0.001</td>
<td>Accepted</td>
</tr>
<tr>
<td>H2  CPBI positively influences purchase intention.</td>
<td>p &lt; 0.001</td>
<td>Accepted</td>
</tr>
<tr>
<td>H3  CPBI positively influences consumer satisfaction.</td>
<td>p &lt; 0.001</td>
<td>Accepted</td>
</tr>
<tr>
<td>H4  CPBI positively influences consumer excitement.</td>
<td>p &lt; 0.001</td>
<td>Accepted</td>
</tr>
<tr>
<td>H5a Brand attitude mediates the positive effect of CPBI on purchase intention.</td>
<td>p &lt; 0.001</td>
<td>Accepted</td>
</tr>
<tr>
<td>H5b Brand attitude mediates the positive effect of CPBI on consumer excitement.</td>
<td>p &lt; 0.001</td>
<td>Accepted</td>
</tr>
<tr>
<td>H5c Brand attitude mediates the positive effect of CPBI on consumer excitement.</td>
<td>p &lt; 0.05</td>
<td>Partial Accepted</td>
</tr>
<tr>
<td>H6a Consumer innovativeness moderates the relation between CPBI and brand attitude.</td>
<td>p &lt; 0.001</td>
<td>Accepted</td>
</tr>
<tr>
<td>H6b Consumer innovativeness moderates the relation between CPBI and purchase intention.</td>
<td>p &lt; 0.05</td>
<td>Partial Accepted</td>
</tr>
<tr>
<td>H6c Consumer innovativeness moderates the relation between CPBI and consumer satisfaction.</td>
<td>p &lt; 0.05</td>
<td>Partial Accepted</td>
</tr>
<tr>
<td>H6d Consumer innovativeness moderates the relation between CPBI and consumer excitement.</td>
<td>p &lt; 0.05</td>
<td>Partial Accepted</td>
</tr>
<tr>
<td>H7a Consumer involvement moderates the relation between CPBI and brand attitude.</td>
<td>p &lt; 0.001</td>
<td>Accepted</td>
</tr>
<tr>
<td>H7b Consumer involvement moderates the relation between CPBI and purchase intention.</td>
<td>p &lt; 0.001</td>
<td>Accepted</td>
</tr>
<tr>
<td>H7c Consumer involvement moderates the relation between CPBI and consumer satisfaction.</td>
<td>p &lt; 0.001</td>
<td>Accepted</td>
</tr>
<tr>
<td>H7d Consumer involvement moderates the relation between CPBI and consumer excitement.</td>
<td>p &lt; 0.05</td>
<td>Partial Accepted</td>
</tr>
</tbody>
</table>

7. Discussion

This chapter discusses the results of the direct effect of CPBI on consumers’ outcomes, followed by the interpretation for the brand comparison. Thereafter, the results of the mediating effect of brand attitude is explained as well as the influence of the moderators and control variables.

When testing the model provided by Shams et al. (2015) in the sporting goods context, all four hypotheses were fully supported and the scale maintained its position within the validity and reliability tests. In line with previous research (Aaker 2007; Eisingerich and Rubera 2010; Keller 1993; Quellet 2006), CPBI had the greatest effect on brand attitude, which implies that a brand’s creativity and its feasibility to create innovative products has a strong positive effect on the overall evaluation of a brand. A higher level of CPBI was further found to lead to a greater likelihood that a consumer buys the products of this brand. This finding is crucial, as purchase intention is an important antecedent for actual purchase behavior (Martins et al. 2018; Morwitz et al. 2007), indicating that CPBI does not only influence the brand’s evaluation, but also outcomes important for the brand’s profitability. Another vital factor for a business’ success is consumer satisfaction (Oliver 1997). Although Kunz et al. (2011) found only an indirect effect of perceived firm innovativeness, mediated through functional competence and positive effect, the results of this study show a significant direct effect of CPBI on consumer satisfaction. However, from all relations CPBI had the lowest effect on
consumer satisfaction. It can be assumed that a higher level of CPBI leads to higher expectations and that especially not all sporting goods are able to keep what the brand has promised. Finally, CPBI does also effect consumer excitement. The excitement a consumer holds towards a brand can lead to inspiration and the motivation to seek the products of this brand, but also to a higher willingness to engage with the brand (Henard and Dacin 2010).

The findings suggest, that the scale developed by Shams et al. (2015) seems to be appropriate to measure CPBI. However, the explanatory power of the proposed constructs indicates that it might be reasonable to combine the measurement of CPBI with other important antecedents for consumer behavior, such as further brand attributes (e.g. perceived quality) or price effects. This becomes obvious when looking at the comparison of the two major competitors for sporting goods in Germany.

When comparing the findings for Nike and Adidas separately, it could be found that for Nike CPBI seems to have a greater impact on consumer outcomes than for Adidas and even for the overall findings (except consumer excitement). Also the effect of previous buying experience was less strong for Nike. As a consequence, Nike seems to be already perceived as more innovative as the other presented brands, even from participants who have no own experience with the products. This is in line with the share of handed in applications (77%) to the European Patent Office compared with the direct competitor Adidas (15%) (Statista 2018c), indicating that Nike works purposefully on developing new innovations. Although Adidas is currently ahead of Nike within the German market (Statista 2018e, f), this difference could on the long run lead to a competitive advantage within the German sport goods market (Danneels and Kleinschmidt 2001). Nevertheless, the perceived innovativeness of Adidas seems to lead to the highest level of satisfaction for the consumer, which implies that Adidas is able to adjust their communication in a way that consumers’ have realistic expectations and consequently are more satisfied with the level of innovativeness the products deliver.

Although the results indicate that CPBI has a stronger effect on all consumer outcomes for Nike, Adidas is the market leader within Germany (Statista 2018c) and also over twice as much participants have chosen Adidas over Nike within this research. Consequently, CPBI seems not to be the only factor influencing consumer behavior and should therefore be examined in a more comprehensive model. The brand comparison further illustrates that equal brands can be perceived divergent and points out the importance for brands to consider their branding strategies in regards to their whole offer. Since how innovative Nike might be perceived, Adidas still managed to have the highest value
for satisfaction, an important antecedent for brand loyalty (Espejel et al. 2008; Olsen et al. 2005; Pappu and Quester 2016).

The measurement of the mediating effect of brand attitude revealed a highly significant mediation for the relation between CPBI and purchase intention, and the one between CPBI and consumer satisfaction. Further, brand attitude was found to have a partial mediating effect on consumer excitement. CPBI has therefore either a positive direct as well as indirect impact on all three variables. The existence of the indirect effects implies that the condition of a positive brand attitude has to be given to effect all three variables. This is in line with previous research, suggesting a strong direct impact of consumers’ perceived innovativeness on brand attitude (Aaker 2007; Barone and Jewell 2013; Keller 1993; Quellet 2006; Shams et al. 2015). Further, literature suggests brand attitude to be an antecedent for purchase intention (Keller and Lehmann 2003; Folse et al. 2012; Schivinski and Dabrowski 2014) and as consumer satisfaction is strongly linked to purchasing experience (Anderson et al. 1994; Giese and Cotte 2000; Oliver 1997; Olsen et al. 2005) a similar result for this variable seems to be reasonable. Moreover, the explanatory power of the mediated relations for both variables was above the linear measurement of CPBI, suggesting that the incorporation of brand attitude as a mediator should be the preferred conceptual model for future research. However, the explanatory power for the mediation of CPBI on consumer excitement was only marginal higher and since the mediating effect on consumer excitement is only partial the measured effect is limited and thus, negligible. Summarizing, adding brand attitude as a mediator might lead to more accurate descriptions of the relations between CPBI and consumer outcomes.

The moderation analysis revealed negative and moderately to highly significant effects of consumer innovativeness and consumer involvement for all measured constructs. In line with previous literature (Steenkamp et al. 1999), which suggests that innovative consumers’ evaluation of a brand differs from less innovative consumers, the strongest moderation of consumer innovativeness found was on the relation between CPBI and brand attitude. As innovative consumers are actively seeking for information about new products (Cotte and Wood 2004; Robinson and Leonhardt 2018; Xie 2008), it can be implied that they are rather aware of innovative products and therefore are more critical towards innovative promoted offers. The current research was aiming to have a more generalizable approach and therefore well-known brands where chosen, which are also prominent for their lifestyle and leisure apparel product lines. Therefore, it can be assumed that innovative consumers could have evaluated those brands as average innovative, missing the “wow”-effect described by Shams et al. (2015), when comparing them to more specialized sporting goods brands focusing on the production of innovations for specific sport disciplines. If innovative consumers do not perceive a brand as very
innovative they are less attracted and have less desire towards the brand’s products, which impacts their purchase intention and consequently their satisfaction. Further, as innovative consumers perceive the presented brands as less innovative feelings of anticipation and expected satisfaction (Henard and Dacin 2010) are quite low as well.

In a similar manner, the impacts of consumer involvement are behaving towards the measured constructs. High involved consumers are more interested in the desired product and seek for information about it, which leads to a better knowledge of the competitive brands and their products present on the market (Bloch 1982). The more consumers are involved with the product, the more they perceive differences between brands or product features and thus, pay attention to the actual innovativeness of the products and less to stimuli promoting the brand’s innovativeness. Compared to an innovative consumer, the involved consumer might have less knowledge about innovations in general, but might be an expert in the sporting goods market. Accordingly, it seems reasonable that all values for the moderation of consumer involvement are even higher and more significant than for the innovativeness. However, the results of the moderation analysis provide evidence that CPBI cannot be equated with a brand actually being innovative, but only as the overall perception of innovativeness by the average consumer.

In general, the analysis yielded that PPE with the chosen brand has a strong effect on nearly all measured constructs, however, the effect on the relation towards consumer excitement is not existent for all models. The highest value was found for consumer satisfaction, followed by purchase intention and brand attitude. Neither for the linear or mediated effect on consumer excitement PPE showed an effect, indicating that consumers’ do not need to have bought something to feel excited about a brand they perceive as innovative. A possible explanation could be that excitement as a concept is rather linked to the brand personality, as defined by Aaker (1997), and if consumers perceive this personality as exciting (Henard and Dacin 2010) and less on an own experience with the brand’s products. Based on the results of the effect of CPBI on the other three variables (consumer satisfaction, purchase intention and brand attitude) it can be implied that the consumers’ perceived their PPE as positive. According to Giese and Cote (2000), consumer satisfaction is usually developed in direct relation with a purchase situation, however, a former positive satisfaction can also influence current satisfaction towards a brand or product. Further, literature suggests that a positive experience, leading to satisfaction in the past can lead to repurchase intention (Espejel et al. 2008), which is in accordance with the findings of this study. Although brand attitude can be developed based on indirect experiences such as advertising (Ivens and Valta 2012; Schivinski and Dabrowski 2014), a direct
buying experience can help consumers to evaluate a brand’s attributes and therefore its evaluation (Keller 1993).

The control variables age and education are found to be mainly important for consumer excitement, indicating that the younger a consumer the more excited he feels about the perceived innovativeness of a brand, which is in accordance with the education distribution. A similar effect can be found for the other consumer outcomes as well, however, not significant.

Finally, the frequency of physical activity turned out to be mainly relevant for consumer satisfaction. Thus, the more often a consumer is physically active, the higher is his satisfaction with the brand he perceives as innovative.

8. Conclusion and Contributions

This chapter resumes the important points of the discussion and highlights the theoretical implications brought by the study. Further, it answers the research questions presented in the introduction chapter.

The purpose of this research is to extend the knowledge and understanding of consumers’ perceived brand innovativeness. In order to fulfill this purpose, this research tested the scale explicitly tailored to measure CPBI developed by Shams et al. (2015) within the context of sporting goods brands, supporting it as a valid and adequate measurement for CPBI. Further, this research corroborates the results of previous findings, revealing a highly significant effect of CPBI on the dependent variables: brand attitude, purchase intention, consumer satisfaction and consumer excitement.

Moreover, the present research contributes to existing literature through the incorporation of brand attitude as a mediator for the previous measured relations. The findings reveal a full (purchase intention, consumer satisfaction) and partial (consumer excitement) mediating effect for this measurement and suggest a more accurate examination of the associations between CPBI and possible consumer outcomes through the consideration of brand attitude as a mediator.

Furthermore, the present study highlights the importance of the consideration of consumer individual traits, namely consumer innovativeness and consumer involvement, as the results reveal that both moderators have a negative significant effect on the measured constructs. For both interactions, the highest effect could be found on brand attitude, followed by purchase intention, consumer satisfaction and consumer excitement.
Finally, previous purchase experience was found to be the most influencing control variable especially for brand attitude, purchase intention and consumer satisfaction, while younger consumers with a lower level of education are more likely to be excited about a brands perceived innovativeness.

9. Implications, limitations and further research

Within this chapter, the managerial implications of the study are presented followed by the limitations identified in the discussion. Finally, the chapter ends with recommendations for future research, suggesting new directions to extend the knowledge of CPBI.

9.1 Managerial Implications

The present research has several implications for managers. The findings of the first analysis indicate that CPBI has a significant effect on several important consumer outcomes, crucial for a company’s success. Therefore, companies should consider their brand positioning and take a repositioning into account. However, the brand comparison indicates that not all brands have to expect the same positive effects of CPBI, thus, companies might do an own examination to test the hypotheses for their own situation in the related market segment. Further, the moderation analysis reveals that the consumers’ individual innovativeness and involvement can have a significant influence on the evaluation of a brand’s innovativeness and the expected outcomes and thereby be a vital factor to keep in mind. Thus, companies should be mindful of their own actual level of innovativeness, their communication strategy in terms of consumers’ innovativeness and their desired target group. As the context of this research reveals, involved or innovative consumers might judge a disproportionate presentation of innovativeness negatively and influence others with their opinion. This could be crucial for companies as consumers’ tend to gather their information increasingly from user generated content such as bloggers and vloggers.

9.2 Limitations

This research also comprises several limitations. First, when translating the original English questions into German the researchers ascertained that several of the used English phrases are not one-to-one translatable into German. This might have caused slightly different results compared to the original questionnaire. Second, as the survey was only conducted in Germany and therefore Adidas’ country of origin, this might have influenced the evaluation of the brand and thus, the results. Third, as the Norstat panel was used it could be implied that the membership acquisition or offer of rewards does effect which persons are listed in this data base. Fourth, the use of quota sampling as a subcategory of non-probability sampling can restrict the generalizability of the findings, as physical active persons
could have a different opinion than the rest of the population. Fifth, it could be difficult for the average customer to identify innovations in sporting goods, as a specific material might be recognized rather as good quality, while an expert would acknowledge the innovativeness. Finally, as the majority of the participants had already bought a product of the chosen brand in the past, the answers might be biased, however, a certain degree of contact with the brand’s products is necessary for the evaluation.

9.3 Recommendation for future research

Although this research has contributed to previous literature, extending the understanding of CPBI, the researchers identified several interesting areas for future research. Even though the chosen constructs within this research can be critical for a company’s success, the analysis showed a cross-loading for several of the variables. Therefore, it might be reasonable to examine the effect of CPBI on consumer outcomes, which are less connected to each other. Moreover, as mentioned in the limitations, the effect of perceived innovativeness might be limited when examining the sporting goods market. In order to test this assumption and compare the outcomes, the effect should be measured for different product categories at the same time with the same setup. Furthermore, as CPBI seems to affect brand attitude, researchers should investigate it simultaneously with other brand attributes such as perceived quality, to be able to evaluate the proportionate share CPBI has on the overall evaluation of a brand. In addition, as Apple seems to be able to utilize a price premium strategy based on its CPBI, an investigation of the effect on pricing would further be recommended for the future. Finally, as the results of this research indicate that involved and innovative consumers are not necessarily attracted by a brand’s perceived innovativeness such as their counterparts, it would be interesting to analyze which factors are relevant for those consumers to evaluate a company as innovative.
References


Sta**t**ista (2018c). *Sporting goods in Germany*. Available at: https://www.statista.com/study/26656/sporting-goods-market-in-germany-statista-dossier/ [Accessed on the 15.05.2018].


Appendix

Appendix 1: Questionnaire items

Which gender are you from? (Quota)
   GEN_1: Male
   GEN_2: Female
   GEN_3: Other

How old are you? (Quota)
   AGE_1: 15-24
   AGE_2: 25-34
   AGE_3: 35-44
   AGE_4: 45-54
   AGE_5: 55-64
   AGE_7: 65-74
   AGE_8: 75+

How often do you do sports? (Quota)
   SF_1: Not at all. (Screenout)
   SF_2: Every here and then. (Screenout)
   SF_3: Once a month
   SF_4: Twice a month
   SF_5: I do sports 1-2 times a week
   SF_6: I do sports 3-4 times a week
   SF_7: I do sports even more often.

Which kind of sport are you doing regularly?
   SA_1: Running
   SA_2: Fitness with weight
   SA_3: Bodyweight fitness
   SA_4: Cross Fit
   SA_5: Group sports such as Football, Basketball
   SA_6: Swimming
   SA_7: Mountain biking or racing bike
   SA_8: Yoga, Pilates or something similar
   SA_9: Other__________

Sporting Goods Spending
   How high where your spending for sporting goods within the last year?
   SS_1: I haven’t bought sporting goods
   SS_2: Up to 50€
   SS_3: Up to 100€
   SS_4: Up to 150€
   SS_5: Up to 200€

48
SS_6: Up to 500€
SS_7: Over 500€

Consumer Involvement
CV_1: I am interested in reading about sporting goods.
CV_2: I would read consumer review articles about sporting goods.
CV_3: I usually pay attention to ads for sporting goods.
CV_4: I usually talk about sporting goods with other people.
CV_5: I usually take many factors into account before purchasing sporting goods.
CV_6: I usually spend a lot of time choosing what kind of sporting goods to use or to buy.

Consumer Innovativeness
CN_1: I like to learn about new ideas.
CN_2: I am interested in news stories that deal with new inventions or discoveries.
CN_3: I like to keep up with new technologies.
CN_4: I am willing to take risks in order to try new things.

Brand Choice
Please choose one of the following brands, which you feel most familiar with their product pallet, considering new products. The following questions will then refer to the chosen brand.
BC_1: Nike
BC_2: Adidas
BC_3: Puma
BC_4: Reebok
BC_5: Asics

Brand Innovativeness
BI_1. [Brand name] sets itself apart from the other brands in the same product category when it comes to sporting goods.
BI_2. With regard to sporting goods, [brand name] is dynamic.
BI_3. [Brand name] is a cutting-edge sporting goods brand.
BI_4. [Brand name] sporting goods make me feel “Wow!”
BI_5. [Brand name] launches new sporting goods and creates market trends all the time.
BI_6. [Brand name] is an innovative brand when it comes to sporting goods.
BI_7. [Brand name] makes new sporting goods with superior Design.
BI_8. With regard to sporting goods, [brand name] constantly generates new ideas.
BI_9. [Brand name] is a new product leader in the sporting goods market.
BI_10. [Brand name] has changed the market with its sporting goods.

Brand Attitude
BA_1: I have a pleasant idea of [brand name].
BA_2: [Brand name] has a good reputation.
BA_3: I associate positive characteristics with [brand name].
**Consumer Excitement**

When I think about the brand [brand name], I feel:

- CE_1: enthusiastic
- CE_2: interested
- CE_3: excited
- CE_4: inspired
- CE_5: motivated

**Purchase Intention**

- PI_1: I would buy sporting goods from [brand name] rather than from any other brand available.
- PI_2: I would recommend that others buy sporting goods from [brand name].
- PI_3: I intend to purchase sporting goods from [brand name] in the future.
- PI_4: When are you planning to purchase sporting goods from [brand name]?
  - Never
  - In more than 6 months
  - In the next 4-6 months
  - In the next 2-3 months
  - In less than one month

**Previous Purchase Experience**

- PP_1: Have you already bought sporting goods of [brand name]? YES/NO
- PP_2: Which sporting goods do you already have from this brand? (if $PP_1 = Yes$)
  - Shoes
  - Clothes
  - Accessories
  - Tracking Apps
  - Tracking Wearables
  - Other__________

**Consumer Satisfaction**

- CS_1. I am very pleased with the sporting goods which [brand name] delivers.
- CS_2. The sporting goods of [brand name] fulfill my expectations.
- CS_3. On an overall basis I am satisfied with [brand name].

**Personal Information**

What is your highest level of education?

- EDU_1: Haven’t finished school yet
- EDU_2: Secondary modern school qualification
- EDU_3: Secondary school certificate or equivalent
- EDU_4: Up to A levels or equivalent
- EDU_5: Undergraduate (not a Bachelor’s degree)
- EDU_6: Graduate (Bachelor’s degree)
- EDU_7: Postgraduate (master, PhD)
- EDU_8: Other educational attainment
How high is your personal monthly net income?
IC_1: Less than 1,499 EUR
IC_2: 1,500 – 2,499 EUR
IC_3: 2,500 – 3,499 EUR
IC_4: 3,500 – 4,499 EUR
IC_5: 4,500 – 5,499 EUR
IC_6: More than 5,500 EUR

Appendix 2: Distribution Education and Personal Net Income

<table>
<thead>
<tr>
<th>Education</th>
<th>Personal Net Income</th>
</tr>
</thead>
<tbody>
<tr>
<td>Haven’t finished school yet (1%)</td>
<td>Less than 1,499 EUR (29%)</td>
</tr>
<tr>
<td>Secondary modern school qualification (7%)</td>
<td>1,500 – 2,499 EUR (29%)</td>
</tr>
<tr>
<td>Secondary school certificate or equivalent (32%)</td>
<td>2,500 – 3,499 EUR (21%)</td>
</tr>
<tr>
<td>Up to A levels or equivalent (23%)</td>
<td>3,500 – 4,499 EUR (10%)</td>
</tr>
<tr>
<td>Undergraduate (not a Bachelor’s degree) (1%)</td>
<td>4,500 – 5,499 EUR (5%)</td>
</tr>
<tr>
<td>Graduate (Bachelor’s degree) (13%)</td>
<td>More than 5,500 EUR (6%)</td>
</tr>
<tr>
<td>Postgraduate (master, PhD) (18%)</td>
<td></td>
</tr>
<tr>
<td>Other educational attainment (1%)</td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Previous acquired sport goods*</th>
<th>Expected period until the next purchase</th>
</tr>
</thead>
<tbody>
<tr>
<td>Shoes (81%)</td>
<td>Never (3%)</td>
</tr>
<tr>
<td>Clothes (76%)</td>
<td>In more than 6 months (23%)</td>
</tr>
<tr>
<td>Accessories (27%)</td>
<td>In the next 4-6 months (30%)</td>
</tr>
<tr>
<td>Tracking Apps /Wearables (5%)</td>
<td>In the next 2-3 months (30%)</td>
</tr>
<tr>
<td>Other (1%)</td>
<td>In less than one month (15%)</td>
</tr>
</tbody>
</table>

*This question was only asked if the participant had already bought sporting goods from the chosen brand in the past

Appendix 3: Cronbach’s alpha

<table>
<thead>
<tr>
<th>Variable</th>
<th>Cronbach’s alpha</th>
<th>Number of items</th>
</tr>
</thead>
<tbody>
<tr>
<td>Perceived Brand Innovativeness</td>
<td>0.958</td>
<td>10</td>
</tr>
<tr>
<td>Brand Attitude</td>
<td>0.885</td>
<td>3</td>
</tr>
<tr>
<td>Purchase Intention</td>
<td>0.927</td>
<td>3</td>
</tr>
<tr>
<td>Consumer Satisfaction</td>
<td>0.947</td>
<td>3</td>
</tr>
<tr>
<td>Consumer Excitement</td>
<td>0.926</td>
<td>5</td>
</tr>
</tbody>
</table>

Appendix 4: Exploratory Factor Analysis

PCM Perceived Brand Innovativeness (unrotated)

<table>
<thead>
<tr>
<th>Single Items Perceived Brand Innovativeness</th>
<th>Component 1</th>
</tr>
</thead>
<tbody>
<tr>
<td>BI1</td>
<td>0.792</td>
</tr>
<tr>
<td>BI2</td>
<td>0.871</td>
</tr>
<tr>
<td>BI3</td>
<td>0.847</td>
</tr>
<tr>
<td>BI4</td>
<td>0.844</td>
</tr>
<tr>
<td>BI5</td>
<td>0.877</td>
</tr>
</tbody>
</table>
### PCM Dependent Variables

<table>
<thead>
<tr>
<th>Single Items</th>
<th>Component</th>
<th>Component</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>1</td>
<td>2</td>
</tr>
<tr>
<td>BA1</td>
<td>0.880</td>
<td></td>
</tr>
<tr>
<td>BA2</td>
<td>0.802</td>
<td>-0.433</td>
</tr>
<tr>
<td>BA3</td>
<td>0.882</td>
<td></td>
</tr>
<tr>
<td>BE1</td>
<td>0.744</td>
<td>0.503</td>
</tr>
<tr>
<td>BE2</td>
<td>0.865</td>
<td></td>
</tr>
<tr>
<td>BE3</td>
<td>0.663</td>
<td>0.614</td>
</tr>
<tr>
<td>BE4</td>
<td>0.818</td>
<td></td>
</tr>
<tr>
<td>BE5</td>
<td>0.810</td>
<td></td>
</tr>
<tr>
<td>PI1</td>
<td>0.805</td>
<td></td>
</tr>
<tr>
<td>PI2</td>
<td>0.852</td>
<td></td>
</tr>
<tr>
<td>PI3</td>
<td>0.802</td>
<td></td>
</tr>
<tr>
<td>BS1</td>
<td>0.822</td>
<td></td>
</tr>
<tr>
<td>BS2</td>
<td>0.835</td>
<td></td>
</tr>
<tr>
<td>BS3</td>
<td>0.840</td>
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Extraction Method: Principal Component Analysis (unrotated)

### Single Items Component

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Extraction Method: Principal Component Analysis.
Rotation Method: Equamax with Kaiser Normalization.