

## To Misbelieve or Not to Misbelieve?

A quantitative study of the impact of market misbeliefs on product beliefs, product attitudes and purchase intentions

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## **Abstract**

The initiated study focuses on the under-researched topic of *market misbeliefs*, which the authors define as beliefs about associations between independent market concepts that are either false or at least not true in all situations. The purpose of the research is to understand the impact of market misbeliefs on three sets of consumer evaluations - product beliefs, product attitudes and purchase intentions - of high- and low-involvement products. In order to perform the analysis and draw conclusions, the authors gathered quantitative data from 572 students from institutions of higher education, using the convenience sampling method. All in all, market misbeliefs proved to have a significant impact on the product beliefs and attitudes of high-involvement goods. In the case of low involvement goods, the impact of misbeliefs was not fully proven.

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# 1 Introduction

## 1.1 Background

In the 21<sup>st</sup> century consumers are constantly exposed to a vast amount of information in the market place. When forming product beliefs, attitudes and purchase intentions in such a cluttered environment, consumers tend to rely on consumer beliefs – subjective consumer judgments about association between any two distinguishable concepts (Mitchel & Olson, 1981). Such beliefs allow the consumer to create heuristics (Bazerman & Moore, 2009) - decision-making shortcuts - that in most of the cases prove very valuable as they allow an individual to decide on a course of action based on their previous experience or possessed information (Cialdini, 2003). In such a way, decision complexity is greatly reduced, which enables a decision maker to build judgments more quickly and with less cognitive effort compared to a situation in which more thorough analysis is needed (Sherman & Corty, 1984).

However, not all of the consumer beliefs that are activated from memory and considered by a person in a given situation (Mitchel & Olson, 1981) necessarily hold true in reality. Several academic studies have found evidence that goes in disagreement with many consumer beliefs (Gurnard et al., 1999; Albert, 1993; Duncan, 1991 & 1990; Hoyer & Brown, 1990; Duncan & Olshavsky, 1982). Blackwell et al. (2006) label such beliefs as consumer misperceptions or misbeliefs. Misbeliefs come to existence either as a result of a certain breakage in the consumer's normal belief formation system (McKay & Dennett, 2009) or when the consumer accepts incorrect information (Lewandowsky et al., 2012). As correct consumer beliefs, consumer misbeliefs can be associated with specific products or alternatively they can be market beliefs focusing on more general market related topics (Duncan, 1990).

## 1.2 Problem

Studies show that as misbeliefs lead to consumer heuristics they hence result in weakened objectivity of consumer evaluations (Sanbonmatsu et al., 1998; Kardes et al., 2004) and often lead to consumer confusion (Blackwell et al., 2006). The majority of academic and professional studies have focused on building an understanding of *specific product misbeliefs* and many companies have tried to change them through marketing efforts (Blackwell et al., 2006). Nevertheless, an evident gap in research can be found in the knowledge about the potential influence of market misbeliefs on consumers' *product beliefs, attitudes* towards goods and on their *purchase intention*.

Consumers' incorrect use of "wrong market beliefs" and the impact of such misbeliefs on information processing and overall consumer behavior presents an intriguing possibility for empirical study (Duncan, 1990), which has not been initiated during the past two decades. Because consumers' product beliefs, product attitudes and purchase intentions are in correlation with the sales of that specific good (Newberry et al., 2003; Bemmaor, 1995), understanding whether misbeliefs that go beyond just the specific product in question - namely market misbeliefs - have an impact on these factors is essential for companies.

## 1.3 Purpose

### 1.3.1 Research Question

The following research was initiated in order to find out whether or not consumer market misbeliefs have an impact on the formation of product beliefs, attitudes and purchase intentions in case of low and high involvement products. In accordance with this objective, the research question was formulated as follows:

**Do consumer market misbeliefs impact consumers' product beliefs, product attitudes and purchase intentions for low and high involvement product categories?**

The involvement theory is integrated into the study to get a deeper understanding about the possible differences in consumer reactions when they are selecting different types of products – those that have high or those that have low personal relevance (Blackwell et al., 2006).

### 1.3.2 Expected Contributions

The topic of misbeliefs and their influence has so far received little attention from both researchers and companies. The current study will therefore have a significant contribution both to academia and to marketing practitioners.

First, this thesis will contribute to academia by reviewing existing studies on the topic of beliefs and misbeliefs and drawing connections between them. In addition to this, the current study will take the first step in filling an evident gap in research by investigating the influence of market misbeliefs on consumer's product beliefs, attitudes and purchase intentions – an area of research that has not gained attention before.

Secondly, the thesis will provide marketing practitioners relevant insights for understanding the impact of market misbeliefs on consumers. As previously mentioned, this knowledge is of great importance for companies since consumer attitudes and purchase intentions are correlated with sales figures (Newberry et al., 2003; Bemmaor, 1995). Moreover, while many companies do try to address and change their product-related misbeliefs through marketing efforts (Blackwell et al., 2006), there is little focus on handling more general consumer misbeliefs about the market. Based on the research findings, the authors will provide companies with insights that could be used for handling market misbeliefs.

## 1.4 Delimitations

As described above, the area of interest to the authors is the impact of market misbeliefs on consumers depending on the level of a product involvement. Due to time and resource constraints, the scope of the empirical study is limited to the specific consumer group of *university students*; thus the high and low involvement products used in the test are chosen to fit the involvement levels of the target sample. Even though this sample is chosen due to convenient access to potential respondents, students - as any other consumers - face the need to evaluate opportunities and risks, to build attitudes, to make decisions etc. and, therefore, could be legitimately used for the intended analysis.

In addition, in order to study the impact of market misbeliefs, *one specific promotion-related misbelief* is selected from the pool of market misbeliefs. Thus, the results may not be representative of all possible market misbeliefs but they do give initial insights to guide further research. The focus on promotion-related market misperceptions is supported by an increasing problem of abundance of marketing messages and overall promotion activities reaching consumers on a regular basis (Rosengren, 2008). Advertising in particular represents marketing stimulus that strongly affects the way people perceive the reality and what they believe to.

All in all, the authors focus on the specific consumer group of students, a promotion-related market misbelief they tend to hold and products they have high or low involvement with.

Finally, the thesis will focus strictly on implications of market misbeliefs for companies that operate in the *consumer market* and might hence be influenced by consumer market misbeliefs. The authors do not intend to generalize the results to business-to-business markets.



## 1.5 Disposition

In the following, the report proceeds with seven chapters. The following chapter two introduces the existing theoretical base on the topics of (1) beliefs and misbeliefs, (2) consumer attitudes and intentions, and (3) product involvement. The chapter also integrates the hypotheses the authors of this paper aim to test in order to answer to the aforementioned research question. In the third chapter, the method for performing the empirical study is discussed. The results of the study are then presented and analyzed in the fourth chapter of the paper. The fifth chapter consists of the discussion of the results. The authors draw conclusions in chapter six and present the implications of the study in chapter seven. Limitations of the research and suggestions for further research are presented in chapter eight.

## 2 Literature Review and Hypotheses Generation

In the following, the existing evidence on the topic of interest is discussed. The structure of the literature review follows the components of the research question, which focuses on how *market misbeliefs* impact consumer *product beliefs, attitudes and intentions* depending on the level of *product involvement*.

Therefore, the first three sections of the literature review introduce beliefs and misbeliefs. The topic of *beliefs* is covered in section 2.1. Section 2.2 then digs deeper into beliefs by focusing on such beliefs that are false or at least not true in all situations – namely *misbeliefs*. Finally, section 2.3 presents the specific topic of *market beliefs and misbeliefs*.

Section 2.4 thereafter focuses on consumer *attitudes and intentions*. The concepts are defined and their formation is discussed. This chapter also discusses the role of market misbeliefs and product beliefs in the creation of attitudes and purchase intentions. Subsequently, existing academic literature on *product involvement* is covered in section 2.5.

Hypotheses about the effects of market misbeliefs on consumer product beliefs, attitudes and intentions are integrated straight into the current chapter.

### 2.1 Beliefs

#### 2.1.1 Definition and Importance

When it comes to the definition of a belief, no clear consensus among researchers seems to exist (Pehkonen, 1998). According to some researchers, if a person holds a belief, his or her “*endorsement of a particular is actual*” (McKay & Dennett, 2009) implying that the belief is, by definition, true and correct in reality. Other definitions highlight the difference between knowledge and belief by acknowledging that a belief is not necessarily “true” or “correct” (Duncan & Olshavsky, 1982). According to the researchers who share this view, a belief is a state in which the individual holds a particular to be true while in reality it might actually either be **true or false** (Schwitzgebel, 2006; Blackwell et al., 2006; Duncan & Olshavsky, 1982). In addition, researchers have different views of the relationship between beliefs and other concepts. Some define beliefs as a subcategory of *knowledge* (Pajares, 1992), some as a subcategory of *attitudes* (Grigutsch, 1998), while others view beliefs as a subcategory of *conceptions* (Thompson, 1992). What seems to

combine many of the definitions is that they see beliefs as **subjective** (Pehkonen, 1998; Blackwell et al., 2006).

In this thesis, beliefs are defined according to Blackwell et al. (2006) as “subjective judgments about the relationship between two or more things”. This definition highlights the subjective nature of beliefs and does not specifically determine the object of belief as true, hence including both beliefs that are accurate and beliefs that are not. The latter subcategory of beliefs, namely misbeliefs, will be further discussed in the section 2.2.

For marketing researchers and practitioners, beliefs are **important** to understand since they play an important role in the formation of consumer attitudes and consumer intentions, which resonates into the actual actions consumers take (Blackwell et al. 2006; Fill, 2006; Kardes et al., 2004; Sanbonmatsu et al. (1998); Wilkie & Pessemier, 1973; Fishbein and Ajzen, 1963). According to Sanbonmatsu et al. (1998), and Kardes et al. (2004), beliefs lead to heuristics that people use when forming attitudes and intentions. These heuristics lead people to engage in selective information processing (Kardes et al., 2004). The conviction that two variables are related pushes people to focus their attention selectively on the evidence that supports their hypothesis and at the same time to neglect unexpected information, in particular when information processing is complex (Sanbonmatsu et al., 1998). Thus, consumer beliefs can deteriorate the objectivity of a consumer’s assessment of the environment.

At the moment, existing investigation of the impact of beliefs on consumer attitudes and intentions has focused on product-specific beliefs, which is a widely researched area. The link between consumers’ broader beliefs about the marketplace and their attitudes and intentions, on the other hand, is an area that has stimulated little research (Duncan, 1990).

### 2.1.2 Formation

Fishbein & Ajzen (1975) identified three main processes that trigger belief creation. First, a belief may be established via *direct observation*. This kind of direct interaction with the object gives rise to descriptive beliefs, which are normally held with high degree of certainty, especially at the initial stage of belief formation.

Second, a belief may be formed via a process of interference from some other *previous beliefs*, hence creating an inferential belief. Fishbein and Ajzen (1975) recognize two ways to build associations between objects, concepts, values and attributes that go beyond mere observation. One can use previously learned inferences, e.g. smoke is a sign of potential fire, or certain rules of logic

known as “formal coding systems”, e.g. the observation that Person A is taller than Person B and Person B is taller than Person C allows drawing a conclusion that Person A is taller than Person C, without factual comparison of both people..

Third, beliefs may be established by the interference of some *resource of information* hence giving rise to informational beliefs. However, it is important to mention that not all external information is necessarily accepted to be credible for personal belief formation, there are many external factors that intervene in this process (Blackwell et al., 2006). However, although people themselves might not create a belief based on some external source of information, they might still use this source for arguing about the connection between belief objects.

## 2.2 Misbeliefs

According to several researchers (Dennett, 1971 & 1987; Fodor, 1983 & 1986; Millikan, 1984 & 1993; McKay & Dennett, 2009), evolution has programmed people to form beliefs that are true. However, not all beliefs that people carry correspond to reality (Gurnard et al., 1999; Albert, 1993; Duncan, 1991 & 1990; Hoyer & Brown, 1990; Duncan & Olshavsky, 1982). This chapter focuses on the specific topic of these *misbeliefs*.

### 2.2.1 Definition and Importance

Several researchers acknowledge that beliefs can either be correct or incorrect (Schwitzgebel, 2006; Blackwell et al., 2006; Duncan & Olshavsky, 1982) and hence view misbeliefs as simply **beliefs that are incorrect**. For instance, Blackwell et al. (2006) define the concept as simply “inaccurate knowledge”. However, a broader definition describes misbeliefs as either false beliefs or as beliefs that “depart from actuality to some degree” (McKay & Dennett, 2009), hence including not only fully incorrect beliefs but also beliefs that are only **partly incorrect** into the category of misbeliefs. This paper will make use of McKay and Dennett’s (2009) definition and hence view a misbelief as a “false belief, or at least a belief that is not correct in all situations”.

Understanding misbeliefs is **important** for two reasons. First, since misbeliefs are viewed as a subcategory of beliefs (McKay & Dennett, 2009), the effects of beliefs can be assumed to hold true also for misbeliefs. Therefore, it can be assumed that misbeliefs – like correct beliefs (Sanbonmatsu et al. 1998 and Kardes et al. 2004), – *create heuristics and selective information processing and deteriorate objectivity*. Second, in addition to these effects, misbeliefs have also the power to cause *consumer confusion*, if a person’s misbeliefs are combined with conflicting information (Blackwell et al., 2006). When confused, consumers tend to base their decisions on the things that are perfectly

clear or defer product purchase (Blackwell et al., 2006). This phenomenon can have negative effects on product attitude and purchase intention.

McKay and Dennett (2009) highlight this negative impact by defining misbeliefs as "costly missteps" for the misbeliever. However, the authors acknowledge that there are in fact also situations in which the truth hurts so systematically that a person is better off in case they carry certain misbeliefs. Such situations are, nonetheless, very unusual and therefore do not challenge the fact that misbeliefs are, in general, negative for the misbeliever (Stich, 1990).

### 2.2.2 Formation

McKay and Dennett (2009) explain the formation of misbeliefs by categorizing them into those misbeliefs that arise from a breakage in the belief creation system, and those that arise from the normal belief creation.

In the first case, misbeliefs are created by a breakdown in the machinery of belief formation. This implies that the cognitive system of a person is abnormal, for instance when a person has illnesses such as schizophrenia (Frith, 1996).

In the second case, in which there is no breakdown in the normal belief formation system, a misbelief can be created when people handle the lack of time and computing resources by utilizing **heuristics** as decision strategies (Goldstein & Gigerenzer, 2002). These heuristics include for example recognition heuristic, which causes people to attach higher value to objects they recognize than to objects they do not recognize (Gigerenzer & Goldstein, 1996).

In addition to heuristics, a misbelief can also arise if a person is being **lied to** (MacKay & Dennett, 2009) or receives misinformation (Lewandowsky et al., 2012). The possible sources of misinformation can be grouped into four categories: rumors and works of fiction, governments and politicians, vested interests and the media (Lewandowsky et al., 2012).

First, in the case of rumors and works of fiction, people form misbeliefs by taking pieces of information from fictional sources and interpreting them as real facts (Lewandowsky et al 2012; Marsh et al., 2003). Second, governments and politicians, either deliberately or not, share misinformation (Lewandowsky et al 2012) as well. It has been found that a very high percentage of the beliefs guiding political conduct and rhetoric are in fact myths (Edelman, 2001 and Ekman, 1991). Third, certain companies might have vested interests that encourage them to share incorrect information to the public (Lewandowsky et al., 2012). Boush et al. (2009) argue that deception is in

fact a central and inevitable part of interactions between marketers and consumers. Finally, even though the media's task is to inform people, in reality it is also a source of incorrect information as it often oversimplifies, misrepresents, or overdramatizes facts (Lewandowsky et al., 2012). Journalists are often biased when choosing which events and stories to write about and how, which strengthens a phenomenon of media bias (Rivolta, 2011). Media's role as a source of misinformation has increased in significance in the era of Internet, as it allows the fast spreading of misinformation by eliminating conventional "gate-keepers", such as professional editors, from the process (Lewandowsky et al, 2012).

## 2.3 Market Beliefs and Misbeliefs

Beliefs and misbeliefs have been investigated in various fields of study including for instance political science (Stein, 1982) and health care (Lewandowsky et al., 2012). However, there has been limited research on beliefs and especially misbeliefs in the field of consumer behavior. This section reviews existing literature on market beliefs, with special attention to *market misbeliefs*. Their relation to the above-mentioned beliefs and misbeliefs is shown in Figure 2.3.

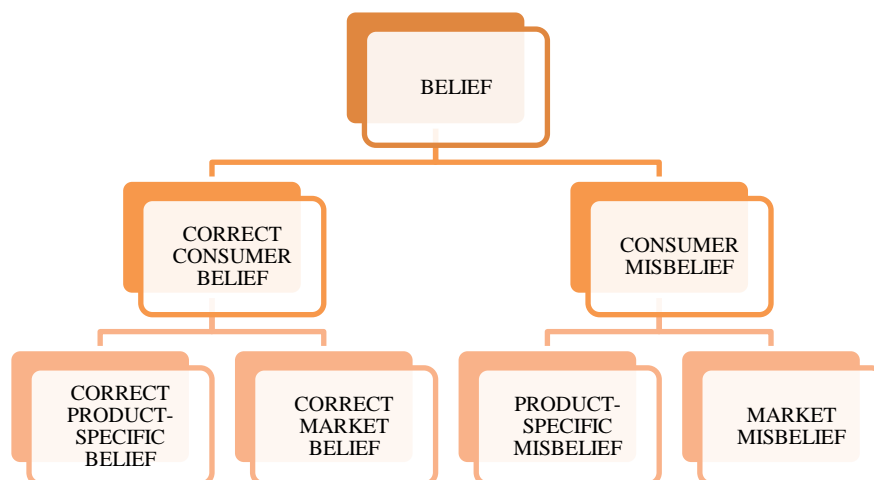


Figure 2.3: The relationship between the different belief-concepts. Compiled by Authors.

### 2.3.1 Definitions and Importance

In the field of marketing, beliefs are typically defined in a rather narrow way as linkages between specific brands or product and their certain attributes (Wilkie & Pessemier, 1973). However, in addition to these types of product-specific beliefs, there are also more general beliefs about linkages between objects, product attributes and marketplace operations (Duncan, 1982). According to Alpert (1993), product-specific beliefs have been researched to a large extent but the highest

generality of beliefs – market beliefs and misbeliefs – have been left with little research focus. Before moving into the field of market misbeliefs, it is first important to understand the essence of market beliefs.

Duncan (1990) defines **market beliefs** as “intermediate level beliefs, which convey information about the association between independent market concepts”. The author describes market beliefs as more specific than judgmental beliefs – opinions formed from experience – but more general than specific beliefs about products. What then separates market beliefs from other standard beliefs is the fact that the object of a market belief is a phenomenon in the marketplace or a marketing tactic (Duncan, 1990). The person carrying the market belief associates the object with a certain implication (Alpert, 1993). For instance, by carrying the belief “items that come in fancy packages are not a good value”, identified by Duncan (1990), the believer assigns a negative association between the object of the belief - fancy packaging - and the implication - value for money (Alpert, 1993). Market beliefs can be either simple decision rules or beliefs the person might have for instance about their own capabilities as an actor in the marketplace or characteristics needed to succeed in the marketplace - *“I am a poor judge when it comes to evaluating technical products”* - or differences between the marketplace offerings - *“Products in end-of-aisle displays are usually on sale”* (Duncan, 1990). Other examples of market beliefs include for instance: *“Smaller stores charge more for the same brands than larger stores”*, *“More heavily advertised products are more expensive to buy”*, *“Products in end-of-aisle displays are usually on sale”*, *“Sales people always push their most profitable items”*, and *“In general, warranties are worthless.”* (Duncan, 1990)

However, not all market beliefs are correct (Duncan, 1990; Alpert, 1993). Such beliefs can be called market misbeliefs. As there is no existing definition of the concept *market misbelief*, one can be created by combining Duncan’s definition of market beliefs (1990) and McKay and Dunnett’s (2009) definition of misbeliefs (2009). Market misbeliefs can hence be defined as ***beliefs about associations between independent market concepts that are either false or at least not true in all situations***. To illustrate, the belief that heavy advertising causes prices to be higher for the consumer might be correct in many cases but, on the other hand, increased costs are not always passed on to the consumer and advertising might actually lead to increased demand which in turn can result in a decrease in price per unit (Duncan, 1990).

The **importance** of market misbeliefs rises from the fact that they can be seen as a subcategory of misbeliefs and hence also beliefs. As mentioned in section 2.2, product-specific beliefs have been found to lead to heuristics, selective information processing and reduced objectivity as well as to

play an important role in the formation of consumer attitudes and intentions (Blackwell et al. 2006; Fill, 2006; Kardes et al., 2004; Sanbonmatsu et al. (1998); Wilkie & Pessemier, 1973; Fishbein and Ajzen, 1965). Misbeliefs on the other hand have been found to cause consumer confusion (Blackwell 2006). Thus, all these effects could be potentially associated with market misbeliefs as well.

Based on the definition of market beliefs and misbeliefs as beliefs that are one level higher than specific product beliefs (Duncan, 1990), the authors hypothesize that market misbeliefs have an impact on product beliefs. What supports this hypothesis is the fact that a person's beliefs can be formed based on their other previous beliefs, as discussed in section 2.2 (Fishbein & Ajzen, 1975).

### **H1: Market misbelief has an impact on product beliefs.**

#### **2.3.2 Market Beliefs and Misbeliefs Related to Marketing**

In the following, examples of market misbeliefs are discussed. The specific examples are divided into the four P's of the marketing mix – product, place, price, promotion (McCarthy, 1960) – depending on which one of the four areas they are most closely linked to. Finally, examples of other market misbeliefs are given.

**1. Promotion:** Advertising research is a field of study in which consumer beliefs have been studied quite extensively (Alpert, 1993). The focus of this research has been on finding out whether consumers view advertising as negative or positive. For instance, decades of research has shown that the majority of consumers consider advertising as often untruthful but think that it nevertheless provides valuable information (Calfee & Ringold, 1993). This stream of research has also been able to identify some market beliefs such as *"in general, advertising results in lower prices"* (Andrews, 1989).

In addition, the belief that *"advertisements you see or hear on radio, TV, in newspapers and magazines are accurate or they would not be allowed in the mainstream media"* (Horne, 2013). Horne (2013) identifies this statement to be a consumer myth as there is actually no government legislation requiring advertisements to be submitted for advance review and media channels do not typically research the truth-value of the advertisements. Second, the belief that *"advertising costs are passed on to buyers in the form of higher prices"* can also be seen as a misbelief as higher



advertising costs do not always lead to higher prices of goods as advertising can stimulate demand and hence lead to prices per unit to decrease in some cases (Duncan, 1990).

Third, another interesting misbelief about advertising is that *“products that are advertised a lot are good in quality”* (Macdonald & Sharp, 2003), which is very similar to the belief that *“the most heavily advertised brands are usually among the best brands”* believed by 34% of people (Alpert, 1993). Macdonald and Sharp (2003) explain that such beliefs result from the following reasoning: If a company spends a lot on advertising, it must be profitable, which again means that it must have satisfied customers and hence the product must be of reasonable quality. However, the statements can be seen as misbeliefs, since the best-known and the most advertised brands often do not deliver “objectively” better quality (Hoyer & Brown, 1990). In other words, more advertised products do not necessarily win in blind tests.

Fourth, the statement *“if an expert recommends a product in an advertisement, it should deliver better quality than other products”* can also be considered a misbelief for two reasons. First of all, even though people often trust expert endorsements, there are many situations in which they are used in a dishonest way in advertising and therefore should not be trusted. For instance, in toothpaste advertising, United Kingdom’s Advertising Standards Authority had to command Colgate to stop claiming that four out of five dentists recommended the brand, as the method used to justify this statement was not trustworthy (Molin, 2007). People might also be led to believe that a product is recommended by experts when it is actually not. For instance, when the National Advertising Division of the Council of Better Business Bureaus asked P&G to stop using advertising that claimed that the Colgate brand was recommended by dentists, P&G responded by stating that their use of the same symbol which the American Dental Association uses did not actually mean that dentists recommended the brand (Neff, 2007). Second, what represents quality for experts does not necessarily represent quality for consumers (Gurnard et al., 1999). Gurnard et al. (1999) found that the beer quality ratings by experts were impacted more by the absence of defects whereas consumers based their blind test evaluations more on the presence of desirable features.

When it comes to misbeliefs concerning sales, Duncan (1990) found the misbelief that *“salespeople always push for their most profitable items”*. However, Sherma and Sarel (1995) note that many firms have customer satisfaction based incentive systems for their sales staff, which has been found to lead to an increased customer service approach rather than pushing the most profitable items. For

instance, 40 percent of IBM's sales force incentives are determined by customer satisfaction levels, not by sales of the most profitable products (Sherma & Sarel 1995).

**2. Product:** Differing from the specific misbeliefs people might have about certain products or brands, these market misbeliefs can be seen as more general misbeliefs about product categories or topics such as packaging (Duncan, 1990).

The beliefs specific to certain product categories – *product class contingent beliefs* - hold true for some categories but not for others (Alpert, 1993). For example, Rizvi (2009) found that consumers believe textile products from Pakistan to be of low quality, which according to the author is a myth as importers engaged in business activities with Pakistan evaluated the products to be of good standard. Moreover, Brady (2006) identified the food and nutrition field as an area in which consumers have many misconceptions as they are continuously bombarded with new information. Such myths embrace for instance the misbeliefs that all antioxidants are vitamins and that organic food contains higher amounts of vitamins than inorganic food (Reuters, 2012).

Some of the other product-related market myths include for instance the belief that *"items that come in fancy packages are not a good value"*, *"large sized containers are almost always cheaper per unit than smaller sizes"* (Duncan, 1990) and *"I feel that brands with more information on their packaging are generally better quality"* (Alpert, 1993). Many of these beliefs are likely to actually be misbeliefs as they do not hold true in all scenarios.

**3. Place:** When it comes to consumer market beliefs concerning the place in which a product is sold, Duncan (1990) identifies the following conceptions: *"A store that offers a good value on one of its products probably offers good values on all of its items"*, *"Stores that have just opened usually charge attractive prices"* and *"Locally owned stores give the best service"*. The truth value of these statements can again be questioned.

**4. Price:** Probably the most common misbelief related to product prices is associated with the connection between price and quality. Alpert (1993) found that 32.5% of people agreed with the statement *"Better products cost more to make. That's why higher prices usually indicate better quality"*. The similar statement *"Price is a reliable indicator of quality"* is widely agreed upon by consumers as well (Duncan, 1990). The perception of a reliable link between price and quality can, however, be categorized as a misbelief. For many products, the relationship between quality and price is weak and price is hence not a trustworthy indicator of quality (Gerstner, 1985).

Mastrobuoni (2013) for instance found a strong positive price-quality correlation for Italian wines in the price range of 3-5 € but not for the price range of 5-8 €.

**5. Other Market Misbeliefs:** In addition to the market beliefs and misbeliefs related to the four P's of the marketing mix, Alpert (1993) also notes that there are other market beliefs that have to do with certain types of companies, for instance. *"Well known companies can't afford to jeopardize their reputation by introducing inferior products"* was agreed on by 61.2% of consumers, while less people believed in the statement *"Large corporations are politically corrupt and their products should be avoided"* (Duncan, 1990). The truth value of statements in this category will not be further discussed in this thesis, as the focus is on market misbeliefs related to the elements of the marketing mix.

## 2.4 Consumer Attitudes and Intentions

### 2.4.1 Definitions and Importance

When it comes to the definition of consumer **attitudes** towards brands and products, there are many differing views among researchers (Yoo & MacInnis, 2005). Most investigators agree that an attitude is *"a learned predisposition to respond in a consistently favorable or unfavorable manner with respect to a given object"* and that attitude is hence something that leads either consistently negative or consistently positive actions towards a brand (Fishbein & Ajzen, 1975). Fishbein and Ajzen (1975) offer a simple description of consumer attitude as a *"person's feelings towards and evaluation of some object, person, issue or event"*. The authors also note that there is a difference between belief and attitude: while beliefs represent the information a person has about something, attitudes show how favorable or unfavorable their evaluation of the product is (Fishbein & Ajzen, 1975). When it comes to the definition of consumer intention, Fishbein and Ajzen (1975) define behavioral **intention** as a person's *"subjective probability to perform a certain behavior"*. When discussing purchase intention, the behavior in question obviously refers to buying something.

The **relationship between consumer attitudes and intentions** has usually been assumed to be very strong (Fishbein & Ajzen, 1975). Many researchers have indeed found significant relation between attitudes and purchase intention (Green, 1972; DeFleur & Westie, 1958). However, some researchers have reported low and non-significant correlations between attitudes and intentions (Nemeth, 1970). Therefore, it can be assumed that positive attitudes often lead to higher levels of purchase intent, but this might not be the case in all scenarios.

When it comes to the **relationship between purchase intentions and actual purchase behavior**, it varies across product categories (Jamieson & Bass, 1989) and segments of people (Fazio & Zanna, 1981; Morwitz & Schmittlein, 1992). Researchers have, for instance, found a strong relationship between intent and behavior for nondurable goods (Warshaw, 1980) and a weak relationship for durable goods (McNeil, 1974). However, purchase intentions are still often and widely used in marketing research as a predictive measure of subsequent purchase behavior (Morwitz & Schmittlein, 1992).

### 2.4.2 Formation

When it comes to explaining the dynamics of attitudes and intentions, academics have created several different models to shed light on the topic and the connections between the concepts. Some of the most significant models are the variations of multi-attribute attitude model (Fishbein, 1965) and the tricomponent attitude model (Shiffman & Kanuk, 2009). In addition to these, other models include for instance the trying to consume model and the attitude toward the ad model.

***Tricomponent attitude model:*** According to the tricomponent attitude model, attitudes consist of three components (Figure 2.4.2a). The *cognitive* factor refers to the beliefs (Visser et al., 2006) and knowledge the person has about attitude object (Wright, 1980); the *affective* component refers to the consumer's attitudes towards the attitude object (Yoo & MacInnis, 2005; Brown et al., 1998). In addition to these factors, the tricomponent model also includes *conative factors*, specifying the person's behavioral factors such as actions and intentions, as components of attitudes (McGuire, 1969). The tricomponent attitude model has also been called the ABC-model, in which the three components are named as affect, behavior and cognition (Kraus, 1995). This model highlights the interrelationship between beliefs, intentions and product beliefs (Oskamp, 1991). Therefore, in case of negative thoughts and expectations about the attitude object, a person is likely to follow the same negative direction in their attitude development and purchase intention (Shiffman & Kanuk, 2009).

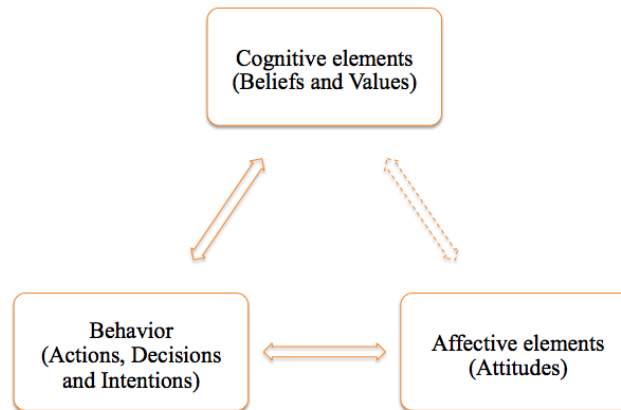


Figure 2.4.2a: Tricomponent Attitude Model (Oskamp, 1991)

**Multi-attribute attitude models:** The most well-known attitude framework is the multi-attribute attitude model presented by Fishbein in 1965. The model focuses on the power of consumer beliefs to affect product or brand attitudes and purchase intentions (Blackwell et al., 2006). There are many variations of the model, but perhaps the ones most utilized are the *attitude-towards-object* model, the *attitude-towards-behavior* model and the *theory of reasoned action* (Schiffman et al., 2008).

The *attitude-towards-object-model* (Figure 2.4.2b) views consumer attitudes as a function of a person's belief that the object has a certain attribute and the importance of that attribute for the consumer (Schiffman & Kanuk, 2008; Fishbein, 1969). In case one believes that a product or brand possesses desirable attributes, one should have a more favorable attitude with respect towards the product or brand (Fishbein & Ajzen, 1965). Hence, the model sees product beliefs as a determinant of attitudes. Further, it acknowledges that attitudes then have an impact on purchase intentions (Blackwell et al., 2006). According to Wilkie and Pessemier (1973), the multi-attribute model delivers attitude scores that are notably predictable of purchase predisposition. The model is especially effective for measuring attitudes towards product categories or specific brands (Schiffman et al., 2008).

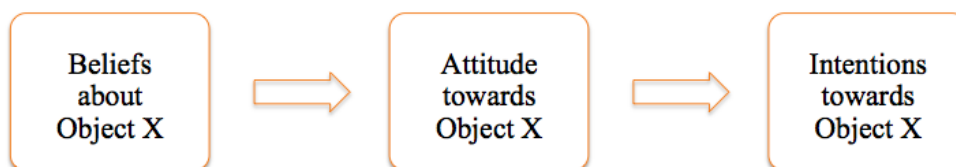


Figure 2.4.2b: Fishbein's multiattribute attitude model – attitudes towards objects (Source: Tate &amp; Evermann, 2011)

The *attitude-towards-behavior model*, on the other hand, looks closer into the actual behavior rather than attitudes towards an object (Ramdhani et al., 2012; Fishbein, 1975). Therefore, the predicted behavior is viewed as a function of the persons' evaluation of the different consequences of the alternative behaviors he or she considers (Littlejohn, 2002). People normally acknowledge that their actions will result in both positive and negative consequences and their attitude is based on the favorability of the total set (Fishbein & Ajzen, 1980).

With the *theory of reasoned action*, (Figure 2.4.2c) Fishbein and Ajzen (1975) viewed the formation of intentions to be determined by a person's attitude towards the behavior in question and social norms – the person's perception of what others think he or she should do. In addition, Fishbein and Ajzen (1975) note that any factors that have an impact on either of the two determinants or their relative weights have an impact on one's intentions.

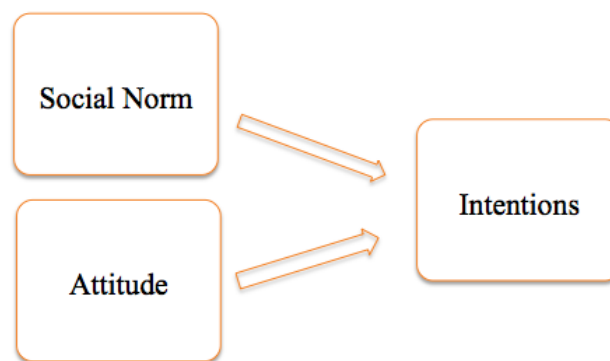


Figure 2.4.2c: Fishbein's theory of reasoned action (Source: Fishbein & Ajzen, 1980)

**The ideal point attitude model:** According to the ideal point attitude model, people form an ideal representation of a product when they start to consider buying and compare existing alternatives to that ideal (Dubois, 1975). On one hand, the model is rather similar to Fishbein's multi-attribute *attitude-towards-object* model as it assumes that the more positive the perceived product characteristics are the more positive the product beliefs and brand attitudes become, which in turn affects purchase intention in a positive way (Blackwell et. al, 2006). However, unlike other models, according to the ideal point model, it is not enough that the object satisfies the consumer's expectation but it must be as close as possible to the ideal product defined by the consumer (Blackwell et. al, 2006).

Overall, there are many models that describe and acknowledge the link among product beliefs, attitudes and intentions. Previously, the authors hypothesized that having a market misbelief has an impact on product beliefs (H1). Following most theories about attitudes and purchase intentions – multiattribute attitude models (Fishbein and Ajzen 1980) and tricomponent attitude model (Oskamp 1991) – that view product beliefs as determinant of attitudes and intentions and highlight the interconnections between the three concepts, the authors hypothesize that market misbeliefs have an impact also on attitudes and intentions through their influence on product beliefs.

**H2: Market misbelief has an impact on product attitudes.**

**H3: Market misbelief has an impact on purchase intentions.**

## 2.5 Product Involvement

In marketing and consumer research, the importance of involvement has been widely discussed and researched (Michaelidou & Dibb, 2008; Brennan & Mavondo, 2000; Cass, 2000). The concept has been connected to numerous marketing and consumer behavior constructs that have been applied to classify products and advertising messages based on the extent of involvement they stimulate in a consumer (Martin, 1998; Evrard & Aurier, 1996; Zaichkowsky, 1990, 1985; Higie & Feick). It is considered a key framework, useful for building an understanding of consumer decision-making behavior and related communications (Laurent & Kapferer 1985; Lastovicka and Gardner, 1979).

### 2.5.1 Definition and Importance

In general, there is no clear consensus about the definition of product involvement among researchers (Bian & Moutinho, 2011). The pioneers of the research area Sherif and Cantril (1947) defined involvement as the “*state of an organism when presented with any stimulus which is ego-central, or when any stimulus is either consciously or subconsciously related to the ego*”. Other highly related definitions view involvement as the “*level of perceived personal importance and interest evoked by a stimulus within a specific situation*” (Blackwell et al., 2006) or as the extent of psychological connection between a person and a stimulus object, e.g. an advertisement, product, brand or idea (Michaelidou & Dibb, 2008). A rather common definition of product involvement views the concept as a consumer’s long-term views of the **importance** of a product category based on their needs, values, and interests (Bian & Moutinho, 2011; de Wulf et al., 2001; Mittal, 1995). Hence, it can be said that most definitions view involvement as something that signals the strength of the connection between a consumer and an object (Blackwell et al., 2006; de Wulf et al., 2001;

Mittal, 1995). In addition, most researchers see involvement as the centre of the “*person-object relationship*”, predicting purchase behavior (Evrard & Aurier, 1996). When it comes to identifying a consumer’s involvement level, many unidimensional and multidimensional scales of measuring have been developed (e.g. Higie & Feick, 1989; Zaichkowsky, 1985; Laurent and Kapferer, 1985).

Based on consumers’ involvement levels, a product can be categorized as either low- or high-involvement good (Blackwell et. al, 2006). According to Zaichkowsky (1985), differentiation between low involvement and high involvement products may be drawn based on four factors – the depth of information search, the amount of comparisons among alternative brands, the perceived difference between brands and the degree of preferring one brand over others (Zaichkowsky, 1985).

Hence, understanding involvement levels is important because it shows how much time and effort the consumer is willing to invest when purchasing a certain product (Lamb et al., 2008). The involvement level reveals the level of motivation of a person to search for information in order to minimize risks and maximize the benefits of the purchase and later usage (Blackwell et al. 2006), which is valuable information for companies.

### 2.5.2 Formation

As involvement is by definition individual, different people have different levels of involvement related to a specific product category (Michaelidou & Dibb 2008, Higie & Feick, 1989, and McQuarrie and Munson 1987). Researchers have identified several sets of factors impacting the formation of a consumer’s involvement level (Blackwell et al., 2006).

First, **personal factors** imply how the product links to the person’s values and experiences (Zaichkowsky, 1986), how much direct impact the product has on the person, how it influences the person’s self-image (Blackwell et al., 2006) and the person’s ego (Fill, 2006). Second, **product factors** influencing the personal involvement levels include for instance the degree to which a product is associated with potential risks - negative self-image, bodily harm, bad performance, financial risks (Blackwell et al., 2006). Third, **situational factors**, or in other words the context in which the product is bought or consumed, often has an impact on the person’s involvement levels as well (Zaichkowsky, 1986). For instance, the consumer might get more involved if wine is purchased as a gift rather than for personal use, which shows that the involvement level can change due to social pressure (Blackwell et al., 2006). In addition to the three main sets of factors, researchers have also identified other factors that have an impact on the level of product



involvement – for instance perception of difference among alternatives, time availability and consumer's mood state (Blackwell et al., 2006).

### 2.5.3 Effect of Product Involvement on Consumer Decision-Making

As mentioned above, the level of involvement has various impacts on consumers' actions during their purchasing process (Zaichowsky, 1985), which are described in more detailed in the following.

The extensive consumer decision process can be described using a model consisting of the eight stages of decision-making with respect to a product or service: (1) need recognition, (2) search of information, (3) pre-purchase evaluation of alternatives, (4) purchase, (5) consumption, (6) consumption, (7) post-consumption evaluation, and (8) divestment (Kotler, 1997). Dependent on the degree of a customer's involvement, decision-making process might face certain transformation in terms of the sequence of activities and the intensity of problem solving (Fill, 2006).

According to Fill (2006), when the **involvement is high**, a consumer often engages in extended problem solving with higher degree of decision-making complexity. Normally, the consumer actively seeks a great deal of information from different sources and an attitude is developed before a commitment or an intention to trial is determined. People are motivated to make an effort before taking an ultimate decision mainly because of the importance of making the right choice. According to Blackwell et al. (2006), the decision making process of high involvement products is normally guided by the brand the consumer feels loyal to. The decision process consists of the following key steps (Figure 2.5.3a) – first the consumer becomes aware of a need, conducts extensive information search, forms attitudes and intentions, tries and experiments a product and finally forms long-run behavior (Fill, 2006; Blackwell et al., 2006).

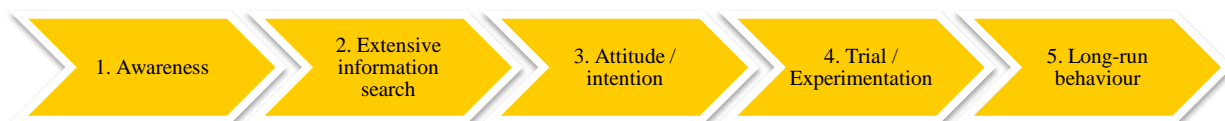


Table 2.5.3a: Key steps in the consumer decision-making process when the involvement is high (Fill 2006)

These findings lead to conclude that for the decision-making of high involvement the consumer considers many perspectives and information sources. Therefore, heuristics should play a less important role in the decision making process. Hence, one would also expect that the impact of market misbeliefs on the formation of product beliefs, attitudes and purchase intentions would not

be strong for high involvement goods. However, the impact should still hold true according to the multi-attribute *attitude-towards-object* model (Fishbein & Ajzen, 1975) that among other models highlights the connection between product beliefs, attitudes and intentions. As the model makes no distinction between low and high involvement goods, the authors of the current study assume that misbeliefs do have some impact when the involvement is high. This leads to the following sub-hypotheses:

**H1.1: Market misbelief has an impact on *product beliefs*,  
for high involvement products.**

**H2.1: Market misbelief has an impact on *product attitudes*,  
for high involvement products.**

**H3.1: Market misbelief has an impact on *purchase intention*,  
for high involvement products.**

When the **involvement is low**, consumers are poorly motivated to spend time and resources on the purchasing process and normally engage in limited problem solving. Decision making is usually simplified, the number of information sources to explore is minimal, the alternatives considered are decreased to a minimum and no one brand is preferred. A person tends to seek for quick solutions to a problem or need and is very often affected by promotion activities at the point of sale. Information about low involvement products is usually stored as brand associations, as consumers have no or little interest or motivation in obtaining information. Normally, the need recognition leads to buying behavior because the decision does not expose any strategic importance for a person (Fill, 2006; Blackwell et al., 2006). In addition, the key steps of decision-making are different for low involvement products compared to products stimulating higher involvement levels (Figure 2.5.3b) (Fill, 2006). For low involvement products, need awareness is followed by limited information search, which almost immediately results in purchase intention and factual behavior (Blackwell et al., 2006). The thorough product attitude is formed as a consequence of the consumption experience with the product (Fill, 2006). Information, associations and beliefs at hand in most of the low involvement cases are sole instruments used to evaluate the product and make a quick purchase decision (Olshavsky & Granbois, 1979).

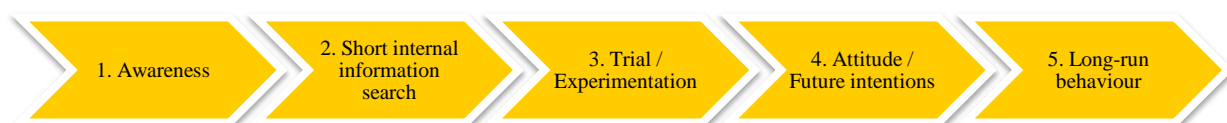


Figure 2.5.3b: Steps in the consumer decision-making process when the involvement is low (Fill 2006)

According to Blackwell et al. (2006), the decision making process of low involvement products depends on the consumers' inertia-based habits. Deshpande et al. (1982) found that when making decisions that are low in importance or involvement, consumers tend to minimize cognitive efforts and make choices that are merely satisfactory. Hence, in low involvement situations, people employ very simple choice heuristics or tactics - namely rules of thumb that allow fast decision-making (Olshavsky & Granbois, 1979). As market misbeliefs can be seen as inaccurate "rules of thumb" it can hence be assumed that when the involvement is low, market misbeliefs have a significant impact on the person's product beliefs, attitudes and intentions. Therefore, the authors create the following sub-hypotheses:

**H1.2: Market misbelief has an impact on *product beliefs*,  
*for low involvement products*.**

**H2.2: Market misbelief has an impact on *product attitudes*,  
*for low involvement products*.**

**H3.2: Market misbelief has an impact on *purchase intention*,  
*for low involvement products*.**

All in all, based on the attitude models the authors assume that market misbeliefs will have an impact on both high and low involvement products. However, the identified differences suggest that misbeliefs will at least be very influential for the low-involvement product category, which is characterized by the use of heuristics and rules of thumb in decision-making.

## 2.6 Summary of the Hypotheses

All the hypotheses and the sub-hypotheses presented in the previous sections of the Literature Review are gathered in Figure 2.6 below.

MAIN HYPOTHESES	SUB-HYPOTHESES
<b>H1</b> Market misbelief has an impact on product beliefs.	<b>H1.1</b> Market misbelief has an impact on <i>product beliefs, for high involvement products</i> .
	<b>H1.2</b> Market misbelief has an impact on <i>product beliefs, for low involvement products</i> .
<b>H2</b> Market misbelief has an impact on product attitude.	<b>H2.1</b> Market misbelief has an impact on <i>product attitudes, for high involvement products</i> .
	<b>H2.2</b> Market misbelief has an impact on <i>product attitudes, for low involvement products</i> .
<b>H3</b> Market misbelief has an impact on purchase intentions.	<b>H3.1</b> Market misbelief has an impact on <i>purchase intention, for high involvement products</i> .
	<b>H3.2</b> Market misbelief has an impact on <i>purchase intention, for low involvement products</i> .

Figure 2.6: Summary of the hypotheses

### 3 Method

In order to answer to the research question, an empirical research was designed and split into three parts. The quantitative pre-study aimed at identifying the instruments – a misbelief and products of low and high involvement - for the main research. The qualitative pre-study aimed at testing if the respondents understand the preselected misbelief the way as expected by the authors of this research. The quantitative main study aimed at finding out the impact of market misbeliefs on product beliefs, attitudes and purchase intentions of low and high involvement products.

The quantitative essence of the main study was favored in order to establish a numerical expression of empirical observations, which is widely used for the investigation of the causal associations as well as verification of the hypotheses (Bryman and Bell, 2011). Employed to quantify the data and generalize findings from a respondent sample, this research method provides a solid platform for developing recommendations for a further course of action, which is especially important for the current study as the topic is under-researched (SnapSurveys, 2012).

#### 3.1 Quantitative Pre-Study

The key intention of the first pre-study was to make an impartial selection of the instruments - valid and consistent with the expectations of the respondent sample - which could be used as tools in the main research. The objectives of the pre-study were: (1) the selection of the promotion-related consumer misbelief that would represent market misbeliefs, (2) the selection of one product of low involvement and (3) the selection of one product of high involvement, which would be used for testing the impact of market misbeliefs depending on involvement levels.

##### 3.1.1 Pre-Study Design

Following the objectives of the pre-study, the authors developed a survey with six key questions. First question asked the respondents to subjectively evaluate if five promotion-related statements are, in their opinion, true or false. The statements were such that are in fact false or at least not true in all situations, i.e. represent market misbeliefs (McKay & Dennett, 2009). The statements selected subjectively by the authors of the thesis for the pre-testing were:

1. Advertisements you see or hear on radio, TV, in newspapers and magazines are accurate or else they would not be allowed in the mainstream media (Horne, 2013)

2. Products that are advertised a lot are good in quality (Macdonald & Sharp, 2003)
3. Advertising costs are passed on to buyers in the form of higher prices (Duncan & Olshavsky, 1982)
4. Sales people usually push their most profitable items (Duncan and Olshavsky, 1982)
5. If an expert recommends a product in an advertisement, it should deliver better quality than other products (Horne, 2013)

The evaluation incorporated two possible answer choices “yes/no” to see how many people held the market misbeliefs. The ultimate objective was to find one misbelief statement that would guide the construction of the main survey. Such a statement was expected to be held true by approximately 50% of the respondents to make sure that the number of “*misbelievers*” - the people holding a misbelief - and “non-misbelievers” - the people not holding a misbelief - who would fill in the main survey would be balanced, and represented in maximally equal amount. This would help in achieving normal distribution of the main survey answers, which was important for performing parametric tests of the respondent data (Malhotra, 2004).

As a next step, the authors aimed at identifying the most suitable products of low and high involvement that could be used as instruments for testing the hypotheses. As the involvement factor might be different for different groups of people (Fill, 2006), the authors introduced three products for evaluation in each category of involvement: yoghurt, beer and toothpaste in the low involvement category and sports shoes, mobile phone and laptop in the high involvement category. The selection of the alternatives was supported by a number of previous studies on product involvement (Dahlen et al., 2010; Radde & Huang, 2007; Laurent & Kapferer, 1985; Zaichkowsky & Hill, 1985) and the authors’ personal observations of the student consumption behavior.

The method employed to measure the target sample’s involvement level with the products was extracted from a study by Zaichkowsky (1985) who proposed five statements to test the differences in involvement levels for product categories. According to Michaelidou and Dibb (2008), Zaichkowsky’s method of identifying involvement presents a widely used multidimensional construct, capturing both enduring and situational types of involvement, which imply the degree of consumer’s psychological attachment level and perceived personal risks.

Zaichkowsky’s five statements used to test the degree of involvement with the six products in the current pre-study were: (1) I would be interested in reading information about how the product is

made, (2) I would be interested in reading more information in mass media and online about this product, (3) I have compared product characteristics among brands, (4) I think there are a great deal of differences among brands and (5) I have a most-preferred brand of this product. The target sample was asked to select one of the five possible answer choices with ends “*strongly disagree / strongly agree*” for each of these statements for each product category.

### 3.1.2 Subjects

The web-based pre-study survey was distributed to students of different origins, enrolled in institutions of higher education (survey questions in Appendix). In order to maximize the proximity of the pre-test sample with the target sample of the main research, Bachelor, Master and PhD students were chosen for the pre-study. No specific method for selecting the potential respondents was developed; the authors used a convenience sample by addressing the people who incorporate the aforementioned characteristics from their close environment. The total number of respondents in the end was 44.

### 3.1.3 Results

In terms of the **statements** the respondents were asked to evaluate based on their subjective truth-status, the one that was evaluated as the most truthful was the statement “*Sales people usually push their most profitable items*” which was viewed as true by 93% respondents. The most “balanced” was the statement “*If an expert recommends a product in an advertisement, it should deliver better quality than other products*” perceived as true by 36% people and as false by 64% people. Following the aforementioned logic, in order to achieve maximum balance between the amount of misbelievers and non-misbelievers used as a basis for the analyses, this particular statement was selected as one of the instruments for the main research. The results for all the statements are presented in Figure 3.1.3a.

Statement	Respondents evaluating as "true"	Respondents evaluating as "false"	Total responses
1. Advertisements you see or hear on radio, TV, in newspapers and magazines are accurate or else they would not be allowed in the mainstream media	11	33	44
2. Products that are advertised a lot are good in quality	6	38	44
3. Advertising costs are passed on to buyers in the form of higher prices	34	10	44
4. Sales people usually push their most profitable items	41	3	44
5. If an expert recommends a product in advertisement, it should deliver better quality than other products.	16	28	44

Figure 3.1.3a: Pre-test results for students' evaluation of the tested statements. Compiled by Authors

When it comes to the **low and high involvement products** to be used for the main research, the comparison of the averages of the five values assigned to each of the five statements revealed that the mobile phone ranked the highest ( $M = 4.398$ ) in each question – signaling high involvement, while toothpaste ranked the lowest ( $M = 2.864$ ) in each question – signaling low involvement. Based on these findings, the authors decided to select mobile phone and toothpaste as the tools for the main empirical study.

	Statement 1	Statement 2	Statement 3	Statement 4	Statement 5	Average
<b>Toothpaste</b>	3.23	2.55	2.75	2.7	3.09	2.864
<b>Sport shoes</b>	3.43	2.73	3.05	3.25	3.32	3.156
<b>Beer</b>	3.45	2.8	3.05	3.73	3.36	3.278
<b>Yogurt</b>	3.61	3.57	3.98	3.91	3.7	3.754
<b>Laptop</b>	3.68	4.55	4.75	4.57	4	4.31
<b>Mobile phone</b>	3.82	4.57	4.89	4.57	4.14	4.398

Figure 3.1.3b. Pre-test results for the students' involvement with the tested products. Compiled by Authors



### 3.2 Qualitative Pre-Study

The key intention of the second pre-study was to test whether or not the selected misbelief statement - *"If an expert recommends a product in an advertisement, it should deliver better quality than other products"* - was understood by the respondents in the way expected by the authors of this research: *"The expert recommendation in an advertisement points to the fact that the product will exceed other products in terms of quality"*. As the misbelief represented one of the key instruments of the study, it was very important to be sure that it would be correctly interpreted by the sample to draw later conclusions about the misbelief effects.

The aforementioned objectives encouraged the researchers to contact 20 university students - 10 people each - in their close environment or proximity, online and in person, with a request to paraphrase the misbelief statement and briefly explain how they understood the sentence. Nine of the respondents were native English speakers and 11 non-native English speakers.

The pre-study identified that 18/20 (90%) people understood the sentence in exactly the same way it was expected originally.

*"If an expert were to recommend a product in an advertisement, it would be expected that that product would exceed other products in terms of quality."*

- Simon, 25, business student from New-Zealand

*"When an expert recommends a product in an advertisement, it signals that the product is of higher quality than its competitors."*

- Chiara, 24, law student from Italy

*"If a product is recommended by any sort of expert (no matter what kind or real), it will be superior in terms of quality than products that have not been recommended by an expert."*

- Romesh, 26, business student from Sweden, originally from Switzerland

With such a rate of opinion consistency among the respondents, the authors of the thesis felt confident to proceed with the further development of the main research design with this specific misbelief statement.

### 3.3 Main Study

#### 3.3.1 Selection of the Misbelief and the Products to be Tested

As previously mentioned, based on the findings from the quantitative and qualitative pre-studies, the misbelief “*If an expert recommends a product in an advertisement, it should deliver better quality than other products*” was selected for further tests. This misbelief can be seen as a *positive market misbelief*, a misbelief that – from a company’s point of view - is assumed to have a positive effect on the consumer’s product beliefs, attitudes and purchase intentions. In addition, two products of different involvement levels were chosen for the final survey – *toothpaste* as the low-involvement product and *mobile phone* as the high-involvement product.

#### 3.3.2 Selection of the Model to Test the Effect of Market Misbelief

After analyzing the literature on the purchase decision-making process and theories about consumer attitudes and purchase intentions, the authors came across several models that highlight the interconnections between product beliefs, attitudes and purchase intentions - tricomponent attitude model, multi-attribute attitude model, theory of reasoned action - and that could potentially be used as a model for testing the effect of market misbeliefs. The authors identified one of the variations of Fishbein’s multi-attribute attitude model - namely attitude-towards-object model - as most relevant model for this study. This is also the model used very often in consumer attitude research. As described in the literature review, the model assumes that the consumer attitudes reflect individual's beliefs about certain attributes a product may possess weighted by the importance of each of these attributes to the person; the purchase intention is in turn defined by the attitudes (Blackwell et al., 2006).

As the impact of market misbeliefs on product beliefs, attitudes and purchase intentions had not been previously analyzed, the authors made a decision to apply this model in their study process as a starting point in the research of the topic. According to the hypotheses of the authors of the current study, active market misbeliefs circulating in customers’ heads should be reflected in their perception of product characteristics, or in other words product beliefs, which in turn should build up the attitude and purchase intention towards the product. In other words, the authors were interested in the effect of market misbeliefs on the three components of the attitude-towards-objects model.

### 3.3.3 The Research Design

#### 3.3.3.1 Design of the Survey

As a result of a long discussion among the authors and the academic supervisor, it was decided that two versions of the survey had to be created for each product category, two for mobile phone and two for toothpaste. The development of the two versions of the survey for each product was guided by an intention to compare the respondents holding a misbelief when they encountered misbelief stimulus – namely the statement “*recommended by experts*” - with their counterparts who did not. This was one of the two planned comparisons imperative to draw conclusions about the impact of misbeliefs (for a more detailed presentation of the statistical tests, see Analytical Tools section). Therefore, one of the surveys incorporated the misbelief stimulus and one did not.

All four versions of the survey started with a short introduction encouraging the respondents to read the extract from an advertisement on the website of Noxel Corporation, a producer of oral care or telecommunications goods - depending on the survey - present in the market for more than 25 years and operating in 19 European countries. The company was actually fictive. Afterwards, a short descriptive text about an imaginary product FEX followed. The authors aimed at writing the texts in as neutral way as possible, trying to minimize any influence of the information beyond misbelief stimulus on product beliefs, attitudes and purchase intentions.

As mentioned before, two of the four surveys contained a misbelief stimulus “*FEX is recommended by experts!*”. It was designed to play a role of a trigger activating the market misbelief and making the respondents holding the misbelief form distinctive product beliefs that would result in corresponding product attitudes and purchase intentions. As a matter of fact, such a survey setup was developed with an intention to trace if the changes in the respondent evaluations were indeed assignable to market misbeliefs when expert recommendations were injected in the text. The same base text in all four versions of the survey was designed to control for some unexpected influence from the advertisement text on the respondent evaluations. It is important to mention that the authors chose to use imaginary products of fictive companies to eliminate any chance of existence of prior product beliefs that could cause routinised response decision-making and expose certain influence on consumer evaluations of the question statements.

After the description, the respondents were asked to rate six statements that together build up an attitude measure. One of the six elements touched upon was the quality of the product. As, according to the misbelief statement, expert recommendations in advertisement should signal better

quality of the product over its competition, the authors decided to use the quality measure as a representation of product beliefs.

To comply with the logic of Fishbein's multi-attribute attitude-towards-objects model, as the next question, the respondents were asked to evaluate the importance of quality in product selection. This was imperative to understand if the product beliefs had enough deterministic power to predict changes in product attitude once market stimulus was injected.

Afterwards, subjects were requested to evaluate how appealing the product seemed to them and how likely they were to choose FEX, if there was a need for a corresponding product. The former question aimed at complementing the pool of questions related to product attitude, while the latter one aimed at identifying the respondents purchase intention.

The questionnaire continued with an inquiry to rate the misbelief statement to allow later grouping of people based on whether or not they were misbelief holders. In the end of the study, demographic questions about the respondents' gender, age, country of origin, country of residence, student status, and employment status followed. These questions were seen as necessary for finding out which of the respondents were students and for the purpose of sample description. The same algorithm was developed for the product categories of both, low and high involvement.

### 3.3.3.2 Selection of Measuring Scales

**Product beliefs:** As the misbelief was assumed to connect "*recommendation of an expert*" with the product "*quality*", the respondents were asked to evaluate their perception of quality of the product straight after reading the advertisement text. The statement and scale used to measure the belief about quality was: "*I would describe the product as*" on a 10-point semantic differential scale in which the two opposite ends represent "*high quality/low quality*" (Wang 2005).

**Attitude:** To measure attitude towards the product, first, a scale adopted from Wang (2005) was used. The respondents were asked how they would describe the product: "*I would describe the product as*" on a 10-point scale in which the two opposite ends represent "*good / bad, pleasant / unpleasant, high quality / low quality, likeable / unlikeable, desirable / not desirable, favorable / unfavorable*." In addition to this, the respondents were asked to evaluate how appealing the product was to them by answering to the question: "*Overall, how appealing the described product is to you?*" with a value on a 10-point scale with the ends being "*extremely low appeal / extremely high appeal*". This question was adopted from Smith and Swinyard (1983) and it was added to the

survey to find out the overall attitude towards the product. This was considered important for eliminating a possible scenario in which some aspects creating one's attitude might be missing from the first multi-item question measuring attitude. Later, all the questions were tested on their internal consistency (Cronbach's alpha) to evaluate the reliability of a psychometric test for a sample of respondents (Malhotra, 2004).

**Purchase Intention:** To measure purchase intention, another scale by Wang (2005) was used. The respondents were hence asked to determine: *“How likely it is that you would purchase the described product?”*, again on a 10-point scale in which the two opposite ends represented *“very likely / very unlikely”*.

**Compliance to Market Misbelief:** In order to perform grouping of the respondents based on whether or not they were misbelief holders, the subjects were asked to rate the misbelief statement *“If an expert recommends a product in an advertisement, it should deliver better quality than other products”*. A 10-point scale with ends *“strongly disagree / strongly agree”* was provided for the statement evaluation.

The popular 7-point semantic differential scale most frequently used by the researchers (Wang 2005, Smith and Swinyard 1983) was changed to a 10-point scale in this paper. This was done in order to give the respondents more alternative points for their evaluation and hence to better detect differences across responses.

### 3.3.4 Pilot Study

To strengthen the reliability of the main study, ensure maximum quality of the questionnaire and eliminate any possible misinterpretations of the questions, the authors ran a pilot study prior to the main research. The link to the questionnaire was distributed online to ten university students of different gender, age and background. The respondents were requested to go through the questionnaire and briefly interpret how they understand each of the questions. In addition, other feedback was encouraged.

As a result of the pilot study, some suggestions to change words to make the sentences more understandable to people with more limited command of English were expressed and later taken into consideration. Apart from those comments, none of the respondents had problems in understanding the formulation of the questions, which they explicitly stated in their feedback.

### 3.3.5 Sample

The convenience sample used in the research consisted of students of Swedish and international origin, enrolled in institutions of higher education. Even though the practitioners around the world find convenience sampling rather limiting (Bryman and Bell, 2007), this type of sample was still considered justified to be used for further generalizations. Students, as any other consumers, face the same needs for evaluating opportunities and risks, building attitudes, making purchase decisions etc. Thus, understanding the impact of market misbeliefs on students could be used as a starting point in the under-researched topic of market misbeliefs.

### 3.3.6 Data Collection

In order to get enough responses to run parametric tests on the impact of market misbeliefs on product beliefs, attitudes and purchase intentions, the authors of the thesis initiated two-way data collection. First, the surveys were distributed online through Facebook and e-mail to all the students of the institutions of higher education in close proximity to the authors. Each of the requests to fill in the survey was complemented by another request to distribute the link further, thus building snowball-sampling effect.

In addition to that, as the second way of data collection, replies were gathered face-to-face by the authors at Stockholm School of Economics, Kungliga Tekniska Högskolan and Stockholms Universitet in Stockholm, Sweden. Potential respondents were randomly selected and approached with the printed versions of the questionnaires. Each of the respondents was briefly asked to devote two minutes of their time to fill in the short survey that the authors had created in the course of an academic research. If a respondent positively reacted to the request, the researchers passed one of the four surveys, stacked in the pile of 280 pieces in total, 70 copies of each version. Each respondent was then explained that they had to read a short advertisement text and *based on that* answer a couple of questions. In case several people were approached at the same time, they were also asked to stay impartial and not to discuss the questions before they had provided all the answers.

In case a respondent asked about the purpose of the study, the authors explained that it was designed for a Master Thesis and promised to provide more details once the survey was filled in.

### 3.3.7 Analytical Tools

**Statistical software used:** As one of the stages of data collection involved manual distribution of the printed versions of the surveys, the data had to be inserted into a Microsoft Excel document. While transferring the data, the authors screened it for possible deficiencies - for instance respondents who did not reply to the question about the misbelief statement or selected the exact same values to all the questions. Eventually, once all the surveys were successfully transferred to Excel and combined with the data from the online questionnaires, the file was imported to and analysed with the help of SPSS Statistics v21, software package used for statistical analysis.

**Product belief variable:** As mentioned before - in consistence with Fishbein's (1965) multi-attribute attitude-towards-objects model used as the key framework in this research - in order for product beliefs to influence product attitudes, the product characteristics that build these product beliefs should be of high importance to the consumer. In the present study, the product characteristic in question - quality - was perceived as highly important. The range of mean values of quality importance varied between 6.9 and 8.9 out of 10 for misbelievers and non-misbelievers responding to the four surveys. In addition, a strong connection between quality and product attitude was found,  $p < 0.01$ , Pearson correlation = 0.806 - just like a positive correlation between product beliefs and product attitudes is found in the Fishbein's model. Altogether, these findings prove that perceived quality is strong enough to influence product attitude. Therefore, the authors felt confident in further use of perceived quality as representative of product belief.

**Attitude variable:** In order to perform statistical tests on the impact of market misbeliefs on product attitude, an index of the multiple questions measuring product attitude was created. A Cronbach's alpha was computed to see if the numerous questions are consistent enough internally to be merged into one variable. The authors used a threshold value of 0.8, which is used as a rule of thumb to estimate the reliability of the measure (Pallant, 2010). It was then concluded that the attitude index could be successfully created as Cronbach's alpha for ranged from 0.942 to 0.948 for the product attitude measuring questions for each of the four surveys, which signals a satisfying level of internal reliability.

**Grouping the sample:** In order to answer to the research question, it was important to identify differing respondent groups that the comparisons would be based on. After a long discussion among the authors of the study and the academic supervisor, it was decided that the respondents should be split into "misbelievers" and "non-misbelievers" based on their answers to the question: "*Please*

*evaluate whether the statement is in your opinion true or false: If an expert recommends a product in an advertisement, it should deliver better quality than other products.*” If a respondent rated the question with values from 7 to 10, they were categorized as misbelievers and if they chose the values from 1 to 4, they were viewed as non-misbelievers. The data of the respondents with the middle answers 5 or 6 was filtered out as inapplicable to make sure that the misbeliever and non-misbeliever groups would consist of the respondents who strongly adhere to their opinion.

**Criteria for the “impact of misbelief”:** In order to conclude if misbeliefs exhibit significant effect on the formation of product beliefs, attitudes and purchase intentions, the authors decided to consider two perspectives (Figure 4.3.6). In order to conclude that the misbelief has an impact, two criteria must be filled:

1. There must be a significant difference in the consumer evaluation in question - namely product beliefs, attitude or purchase intention - between misbelievers and non-misbelievers when they encounter the misbelief stimulus (Test 1).
2. To be certain that the difference is in fact caused by the misbelief, there must be a significant difference between the consumer evaluation in question of misbelievers who encounter and misbelievers who do not encounter the misbelief stimulus (Test 2).

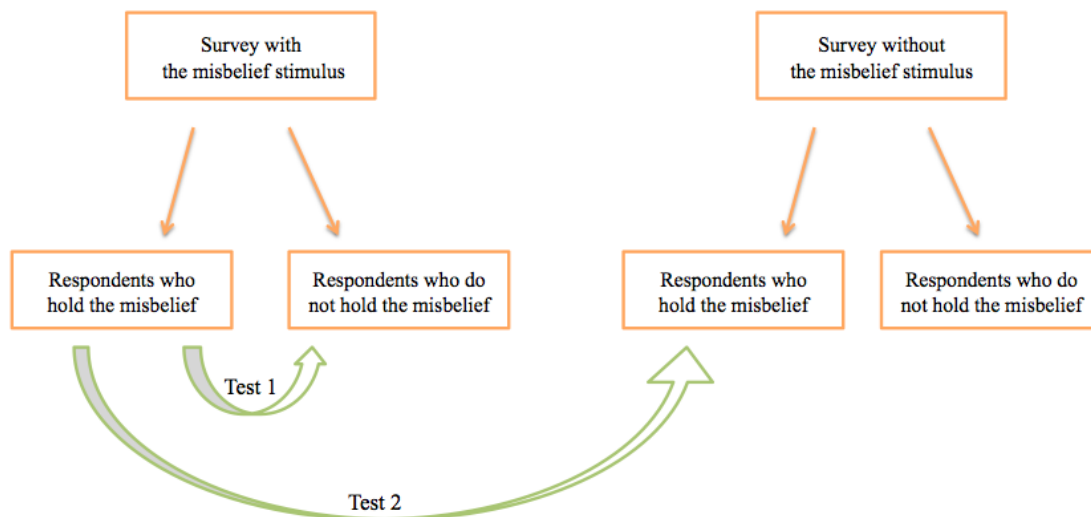


Figure 4.3.6: Tests to find out the impact of misbeliefs

In case both of these requirements were fulfilled, the authors confirmed a hypothesis and concluded that a market misbelief has an impact on the tested consumer evaluation. If only one requirement was fulfilled, the hypothesis was confirmed only partially and no 100% certain judgment about the



impact of market misbeliefs was made. If both requirements failed to be fulfilled, the hypothesis and the impact of market misbeliefs were rejected.

**Tests to check for the “impact of misbeliefs”:** In order to draw conclusions for the first of the two criteria, it was decided that the comparison of means should take place via an independent samples t-test. The analysis was run on the data from the surveys with expert recommendation, with the dependant variables of quality perception as representative of product beliefs, product attitude and purchase intention. Misbelief presence performed as an independent variable. The null hypotheses were rejected if the difference between the means was significant on a 5% significance level.

In order to draw conclusions for the second of the two criteria, the authors decided to run the three-way analysis of variance (ANOVA) test with the dependant variable of product quality and the independent variables of misbelief presence, product involvement and expert presence. The null hypotheses were rejected if the difference between the means was significant on a 5% significance level.

The same algorithm was developed for the product categories of both, low and high involvement.

**Compliance of data:** It is important to mention that the data was tested on compliance with the assumptions behind parametric tests. The following six assumptions were successfully met: (1) each group of respondents used for the comparative analyses had at least 30 members; (2) error variances were equal (Levene`s test of equality of error variances for each of the tests showed insignificant result at 5% significance level); (3) dependant variables were measured at ordinal level; (4) independent variables consisted of more than one categorical, independent group; (5) there was no relationship across the observations in every group or between the groups themselves; and (6) data panel was not associated with outliers (Pallant, 2010).

#### **List of variables used in the analysis of the results:**

1. *Expert presence* – a variable used in the analyses to split the respondents on the basis of a filled questionnaire – with and without the misbelief stimulus.
2. *Misbelief presence* - independent variable used in the analyses to split the respondents into misbelievers and non-misbelievers, based on the values assigned to the question with misbelief statement *“Please evaluate whether the following principle, often used in decision-making, is in your opinion true or false: If an expert recommends a product in an advertisement, it should deliver better quality than other products.”*

3. *Product involvement* - independent variable used in the analyses to split the respondents based on the product category they had to fill the questionnaire about – of low and high involvement.

### 3.4 Data Quality

According to Bryman and Bell (2007), along with data processing and analysis, a research should ensure proper data quality, which implicates data reliability and validity. Reliability refers “*to the consistency of a measure of a concept*”, supposing that significant results must be inherently repeatable and consistent over time (Bryman & Bell, 2007). Validity in turn refers to whether a study measures or examines what it claims to measure or examine and is used to estimate the truthfulness of the results. Reliability and validity are interrelated: validity assumes reliability (Bryman & Bell, 2007), and therefore unstable results cannot be valid.

#### 3.4.1 Reliability

Reliability of the research should be discussed from three perspectives: (1) stability - steadiness of measurement results in a retest situation; (2) internal reliability that measures the extent to which the data is consistent within itself; and (3) inter-observer consistency - consistency of the evaluations and interpretations of the data and results by two or more observers (Bryman & Bell, 2007).

**Internal reliability:** As for the secondary data research, the authors claim that the reliability of their sources is rather high as almost all the material used to support the theoretical discussions, formation of the hypotheses and the development of the research design was selected from credible academic research journals or books and was thoroughly processed by both authors to ensure maximum relevance to the studied area. Certain pieces of the secondary research that were non-attainable from academic sources were based on online sources, personal observations and discussions with the supervisor. Though, the ratio of such information to the whole pool of cited references is negligible.

Furthermore, when it comes to the empirical data, the authors are positive about its reliability as well. In order to ensure internal reliability of the study the authors selected questions previously used and tested in academia to effectively detect the effects of the misbelief. Even though some these questions were tailored to meet the objectives of the study, the essence and motives of the questions stayed untouched. To be ultimately confident in the created index of multiple questions

measuring product attitude, as mentioned before, Cronbach's alpha was calculated (Malhotra, 2004). Cronbach's alpha ranged from 0.942 to 0.948 for the questions measuring product attitude for each of four surveys - thus achieving a satisfying level of internal reliability for the attitude measurement.

**Inter-observer consistency:** In this particular thesis, the inter-observer consistency can potentially be questionable as the research was performed by two people, which might have undermined the objectivity of interpretations and judgements (Bryman & Bell, 2007). However, this was controlled for: any decision taken in the course of the project was analyzed and discussed by both parties, often in cooperation with the academic supervisor.

**Stability:** Stability was enforced via quantitative and qualitative pre-tests and pilot-study, which aimed at identifying the appropriate and sample-relevant instruments for the research and examining if the respondents understood the questions as expected. The authors acknowledge that such measures ensure stability only partially, more credibility to the study would be granted in case of a repeated research. However, this falls outside the scope of this particular work.

### 3.4.2 Validity

According to Bryman and Bell (2007), the validity measure is one of the key aspects of any research, questioning the ability of the study to draw conclusions about the whole population based on the study of a specific sample. Within the scope of validity, two main aspects should be discussed: (1) internal validity normally questioning the meaningfulness of findings that specify causal relationships and external validity, and (2) external validity questioning "*whether the cause-and-effect relationship found in the experiment can be generalized beyond the experimental situation*" (Malhotra & Birks, 2007).

**Internal validity:** In the current study, internal validity mainly concerns the extent to which the misbelief effects are caused by the presence of a misbelief stimulus (expert statement) and not by any other external elements in the advertisement text. To tackle possible distrust in internal validity, the authors launched two versions of the survey for each product category to control for possible influence of other pieces of the text rather than the stimulus. The same base text in both surveys complemented by the extra statement in one of the versions was designed to provide ground for control tests that were presented in the section 3.3.7, Analytical Tools. Moreover, as previously mentioned, the authors performed a qualitative pre-test that aimed at identifying if people understand the connection between the expert recommendation and misbelief statement. As

mentioned earlier, approximately 90% of people confirmed the intentions of the authors, which gave green light for the next stage of the research.

Apart from the potential deficiencies in the survey design, the authors also tried to minimize likely bias in the data collection process to ensure maximal internal validity. The printed versions of the survey were randomly assigned to students at the premises of different universities in Stockholm, online survey randomization setting was applied and students were asked to answer to the questionnaires individually, without any discussions with their peers. More details of the data collection stage can be found in section 3.3.6.

Moreover, according to Bryman and Bell (2007) the use of multi-item measurements in the questionnaire also increases the internal validity. Thus, the multi-question measure of product attitude positively contributed to the overall project validity. Overall, the authors are very positive about the strong internal validity of the research.

**External validity:** The authors acknowledge that external validity of the research is slightly limited due to convenience sampling – the judgments about misbelief effects on product beliefs, attitudes and intentions were built on the students of institutions of higher education. Nevertheless, the authors feel confident that students represent a trustworthy sample to make broader generalizations, because they face the same needs for evaluating opportunities and risks, building attitudes, making decisions etc. as any other consumers. However, the authors admit that a more multi-perspective view of the situation could be created if the sample group was extended and involved people of different age, background and socio-economic status.

Overall, the authors are positive about a high level of reliability and validity of the research and believe in strong data quality.

## 4 Analysis and Results

### 4.1 Description and Grouping of the Sample

To attain generalizable results, the statistical rule of thumb argues that it is compulsory to collect a sample size of at least 30 respondents in each group. In the process of data collection, the authors gathered a total of 572 responses for all four surveys. The number of respondents for each questionnaire version varied from 134 to 152. Altogether 308 questionnaires were filled online, whereas the other 264 were filled on paper. The number of people filling each of the four questionnaire versions is presented below:

Mobile phone / Misbelief stimulus	Mobile phone / No misbelief stimulus	Toothpaste / Misbelief stimulus	Toothpaste / No misbelief stimulus	Total
134	152	141	145	572

Figure 4.1a: The number of respondents filling in each of four questionnaire versions. Compiled by Authors

A total of 56 respondents were removed from the sample as they either did not provide an answer to the question about the market misbelief statement - imperative for the statistical tests - or were not representatives of target sample, namely students. The remaining 516 people were selected for the further examination.

The sample represented 55 countries of origin and 30 countries of residence. Sweden was the most mentioned country in both cases (39.5% and 59.3%, respectively). When it comes to gender, both men (48.4%) and women (51.6%) were represented in equal amounts. The average age was 24 years and almost 82% of the respondents fell into the age category of 19-26 years (born 1987-1993). 86% of the students were enrolled in either Bachelor or Master programmes. 66% indicated business or economics as their field of studies, 32% studied natural sciences, engineering, law and other subjects not related to business or economics. The remaining 2% preferred not to reply to the question. 42% of the respondents had a part-time or a full-time job, the rest were concentrated on their studies only.

An overview of the results of the question about the misbelief statement - essential for further statistical tests - revealed certain negative skewness of the data (skewness = -0.49). This demonstrated a rather widespread agreement with the misbelief statement. The number of the misbelievers (answer values 7-10) and non-misbelievers (answer values 1-4) across each of four surveys is shown in the table below.

	Mobile / Expert	Mobile / No expert	Toothpaste / Expert	Toothpaste / No expert	Total
<b>Inapplicable</b>	36	57	40	49	182
<b>Non-misbelievers</b>	37	30	34	31	132
<b>Misbelievers</b>	61	65	67	65	258
<b>Total</b>	134	152	141	145	572

Table 4.2b: Number of students filling each of four questionnaire versions, split based on their assessment of misbelief statement “*If an expert recommends a product in an advertisement, it should deliver better quality than other products*” (misbelievers, evaluation 7-10; non-misbelievers, evaluation 1-4). Compiled by Authors.

## 4.2 Analysis of the Results

As previously mentioned, in order to identify if there is an “impact of misbelief” on product beliefs, product attitudes and purchase intentions, the authors ran a series of statistical tests with the corresponding three variables as dependant variables and expert presence, misbelief presence and product involvement as independent variables. All the null hypotheses were rejected at 5% significance level.

### 4.2.1 Market Misbeliefs and High Involvement

#### 4.2.1.1 The Impact of Misbeliefs on Formation of Product Beliefs

In the following, the results of the two tests aimed at identifying if market misbeliefs have an impact on high involvement product attitude are presented and interpreted.

*Test 1:* An independent t-test was run to determine if there was difference in the evaluation of high involvement product quality - used as a representative of product belief - between misbelievers and non-misbelievers who see the misbelief stimulus of expert recommendation in the advertisement text. The test with the quality perception as dependant variable and misbelief presence as an independent variable succeeded to reveal a statistically reliable difference between the people who hold the misbelief ( $M = 6.81$ ,  $s = 1.885$ ) and those who do not ( $M = 5.32$ ,  $s = 1.902$ ),  $t(99) = -3.724$ ,  $p < 0.01$ . Only surveys with experts were considered in this test. Stemming from the finding, one can infer that the tested market misbelief has a significant effect on product beliefs if a person has a misbelief and encounters the corresponding market stimulus.

*Test 2:* When it comes to the comparison of misbelievers who saw and misbelievers who did not see the misbelief stimulus in the advertisement text, three-way ANOVA with the dependant variable of

product quality and independent variables of misbelief presence, product involvement and expert presence revealed a statistically significant difference between two means ( $p < 0.01$ ). The misbelievers who saw the expert recommendation in the advertisement text ( $M = 6.869$ ,  $s = 0.233$ ) about the mobile phone perceived quality of the product higher than misbelievers who did not see the expert recommendation ( $M = 5.938$ ,  $s = 0.225$ ). Thus, one can infer that misbelievers tend to apply their market misbeliefs when market misbelief stimulus is maneuvered, which exhibits great power to affect product beliefs.

Overall, the two findings prove the impact of market misbelief on product beliefs in the category of high involvement products. This provides enough support to confirm the hypothesis 1.1.

***H1.1 Market misbelief has an impact on product beliefs, for high involvement products.***

→ ***Confirmed***

***4.2.1.2 The Impact of Misbeliefs on Formation of Product Attitudes***

As a reminder, the seven questions used to form an understanding of how people feel about the products were merged into one variable - Cronbach's alpha was greater than 0.9 for each of four respondent groups. This variable was used as the dependant variable in the following tests aimed at identifying if market misbeliefs have an impact on high involvement product attitude.

*Test 1:* The independent t-test succeeded to reveal a statistically reliable difference between misbelievers ( $M = 6.934$ ,  $s = 1.43$ ), who have a more positive product attitude, and non-misbelievers ( $M = 4.896$ ,  $s = 1.667$ ) when expert recommendation was communicated in the advertisement,  $t(96) = -6.424$ ,  $p < 0.01$ . Thus, as the mean value for product attitude is significantly higher among misbelievers, the authors feel confident to confirm that market misbelief stimuli successfully activate the market misbeliefs and thus the misbelief affects product attitude.

*Test 2:* The interpretation of the three-way ANOVA test with the dependant variable of product attitude and the independent variables of misbelief presence, product involvement and expert presence revealed statistically significant difference as well ( $p < 0.01$ ). As a matter of fact, when facing expert recommendation in the advertisement about mobile phone, misbelievers positively and statistically significantly changed their product attitude ( $M = 6.934$ ,  $s = 0.208$  vs.  $M = 6.155$ ,  $s = 0.202$  if expert recommendation was not present),  $p < 0.01$ . Based on that, one can infer that misbeliefs matter to people holding the misbeliefs and they actively react based on those if misbelief stimuli are manipulated.

All in all, the two findings combined prove the significant impact of market misbeliefs on high involvement product attitude, which is consistent with the hypothesis 2.1.

***H2.1 Market misbelief has an impact on product attitudes, for high involvement products.***

→ ***Confirmed***

#### ***4.2.1.3 The Impact of Misbeliefs on Purchase Intention***

In the following, the results of the two tests aimed at identifying if market misbeliefs have an impact on purchase intention of high involvement products are presented and interpreted.

*Test 1:* The independent t-test revealed a statistically significant difference in the means of purchase intention between misbelievers ( $M = 4.61$ ,  $s = 2.396$ ) and non-misbelievers ( $M = 2.57$ ,  $s = 2.062$ ) when the expert recommendation was integrated into the text,  $t(67.288) = -4.459$ ,  $p < 0.01$ . The following finding showed that if misbelief stimulus is injected, market misbeliefs affect purchase intention of misbelievers.

*Test 2:* When it comes to the comparison of misbelievers who did not see and misbelievers who saw expert recommendation in the advertisement text, a three-way ANOVA test with purchase intention as the dependent variable and expert presence, misbelief presence and product involvement as independent variables revealed statistically insignificant difference between the groups (misbelievers who saw expert recommendation:  $M = 4.607$ ,  $s = 0.277$ ; misbelievers who did not see expert recommendation:  $M = 4.108$ ,  $s = 0.268$ ),  $p = 0.196$ . Hence, when forming purchase intentions, an integrated expert recommendation is ignored by misbelievers.

Based on these two tests, in the case of high involvement products, the presence of a misbelief stimulus is not fully confirmed to activate market misbeliefs and thus have an impact on purchase intention of misbelievers. Hypothesis 3.1 is therefore only partly confirmed.

***H3.1 Market misbelief has an impact on purchase intention, for high involvement products.***

→ ***Partly confirmed***

#### **4.2.2 Market Misbeliefs and Low Involvement**

##### ***4.2.2.1 The Impact of Market Misbeliefs on Product Beliefs***

In the following, the results of the two tests aimed at identifying if market misbeliefs have an impact on low involvement product beliefs are presented and interpreted.



*Test 1:* An independent t-test was run to determine if there was a difference in the evaluation of low involvement product quality between misbelievers and non-misbelievers who see the expert recommendation. The test with quality perception as the dependant variable and misbelief presence as the independent variable revealed a statistically reliable difference between the people who hold the misbelief ( $M = 6.87$ ,  $s = 1.489$ ) and those who do not ( $M = 5.08$ ,  $s = 1.831$ ),  $t(96) = -5.278$ ,  $p < 0.01$ . Only surveys with the expert recommendation were analyzed in this test. As an inference, the results of this test suggest that market misbeliefs have significant effect on product beliefs if a person has a misbelief and encounters misbelief stimulus.

*Test 2:* In turn, the three-way ANOVA test with the dependent variable of perceived quality and the independent variables of misbelief presence, product involvement and expert presence revealed that the misbelievers who saw ( $M = 6.806$ ,  $s = 0.222$ ) and misbelievers who did not see ( $M = 6.631$ ,  $s = 0.255$ ) expert recommendation in the text about the toothpaste evaluated quality of the product in statistically indifferent way ( $p = 0.58$ ). This is an unexpected result inconsistent with the original expectations of the authors. The finding provides basis to assume that misbelievers who encounter misbelief stimulus compared to their counterparts who do not encounter the stimulus are rather ignorant towards this misbelief stimulus.

Overall, the combination of the two aforementioned findings does not allow the authors to fully confirm nor reject the hypothesis 1.2. Even though misbeliefs significantly impact misbelievers compared to non-misbelievers when they see a misbelief stimulus, this impact does not prove to be significant when these misbelievers are compared with the misbelievers who do not encounter market stimulus. Hence, the authors conclude that the impact of misbelief can only be partly confirmed.

***H1.2 Market misbelief has an impact on product beliefs, for low involvement products.***

***→ Partly confirmed***

#### ***4.2.2.2 The Impact of Market Misbeliefs on Product Attitudes***

In the following, the results of the two tests aimed at identifying if market misbeliefs have an impact on low involvement product attitude are presented and interpreted.

*Test 1:* The independent t-test revealed a statistically reliable difference: misbelievers ( $M = 6.516$ ,  $s = 1.645$ ) have more positive product attitude than non-misbelievers ( $M = 5.185$ ,  $s = 1.766$ ) when expert recommendation was communicated in the advertisement,  $t(99) = -3.749$ ,  $p < 0.01$ . Thus, the

presence of the misbelief stimulus exhibits a positive influence on product attitude among misbelievers.

*Test 2:* The three-way ANOVA test with the dependent variable of product attitude and the independent variables of misbelief presence, product involvement and expert presence revealed no statistically significant difference between misbelievers who saw ( $M = 6.597$ ,  $s = 0.199$ ) and misbelievers who did not see ( $M = 6.591$ ,  $s = 0.202$ ) the expert recommendation in the advertisement,  $p = 0.791$ . This finding points to a connection between product beliefs and product attitudes due to its consistency with the corresponding finding about product beliefs. The judgment about this connection could be strengthened by the finding of high correlation between the product beliefs and product attitude (Pearson correlation = 0.855). This goes hand in hand with Fishbein's multi-attribute attitude-towards-object model (1965). All in all, the fact that misbelievers who see the expert recommendation in the advertisement are rather ignorant towards the misbelief stimulus can be seen not only in the case of product beliefs but also in the case of product attitudes.

These findings combined - similarly to the findings about product beliefs mentioned in the previous paragraph - allow no unified conclusion about the impact of the market misbeliefs on product attitude, in the category of low involvement products. One of the two tests supported the existence of the influence, while the other one challenged that. Therefore, the hypothesis 2.2 is left neither rejected nor confirmed.

***H2.2 Market misbelief has an impact on product attitudes, for low involvement products.***

***→ Partly confirmed***

***4.2.2.3 The Impact of Market Misbeliefs on Purchase Intention***

In the following, the results of the two tests aimed at identifying if market misbeliefs have an impact on the purchase intention of low involvement products are presented and interpreted.

*Test 1:* The independent t-test revealed a statistically significant difference in the means of purchase intention between misbelievers ( $M = 4.90$ ,  $s = 2.375$ ) and non-misbelievers ( $M = 3.71$ ,  $s = 2.223$ ) when the expert recommendation was integrated into the text,  $t(99) = -2.430$ ,  $p < 0.05$ . Based on this finding, one can assume that market misbeliefs have positive effect on purchase intention of misbelief holders.

*Test 2:* When it comes to misbelievers who see and do not see expert recommendation in the advertisement, three-way ANOVA test with the dependant variable of purchase intention and the

independent variables of expert presence, misbelief presence and product involvement shows that the former ( $M = 4.896$ ,  $s = 0.264$ ) do not exhibit stronger purchase intention towards the products than the latter ( $M = 5.031$ ,  $s = 0.268$ ),  $p = 0.719$ . Consistent with the flow of the multiattribute attitude-towards-object model (Fishbein, 1965), the purchase intention seems to be significantly determined by the product beliefs and attitudes. Standing alone, the presence of misbelief stimulus does not affect misbelievers' purchase intention of low involvement products.

Thus, considered together, these findings allow the authors to conclude that in the case of low involvement products, the presence of a misbelief stimulus does not necessarily activate market misbeliefs and thus does not necessarily evoke strong purchase intention in misbelievers. Hypothesis 3.2 is thus only partly confirmed.

***H3.2 Market misbelief has an impact on purchase intention, for low involvement products.***

→ ***Partly confirmed***

### 4.3 Summary of the Analysis

The authors' conclusions about the hypotheses are shown in Figure 4.3 below. The sub-hypotheses H1.1 and H2.1 were confirmed. The other sub-hypotheses were only partly confirmed. Based on that, all the main hypotheses were hence only partly confirmed as well.

Another interesting conclusion based on the findings could be drawn about the direction of influence of market misbeliefs. The authors identified that all the significant differences between misbelievers who encountered the misbelief stimulus and their counterparts in question were positive. It is important to remind that throughout the empirical research the authors worked with so defined *positive market misbelief*, a misbelief that is assumed to positively affect consumers' product beliefs, attitudes and purchase intentions *from a company's point of view*. Thus, these facts combined, one can conclude that positive market misbeliefs cause positive impact on product beliefs and attitudes, if a consumer carries the misbelief and encounters the corresponding misbelief stimulus. Though, this is only valid in case of high involvement products. Simultaneously, one can also assume that negative misbeliefs cause the opposite - negative - impact on the same issues of interest.

TOPIC	MAIN HYPOTHESIS	SUB-HYPOTHESES	TESTS TO CHECK THE HYPOTHESES
IMPACT OF MISBELIEF	<b>H1</b> Market misbelief has an impact on product beliefs. <b>/PARTLY CONFIRMED</b>	<b>H1.1</b> Market misbelief has an impact on <i>product beliefs, for high involvement products.</i> <b>/CONFIRMED</b>	<b>Test 1:</b> <i>For high-involvement products</i> , there is a difference in <i>product beliefs</i> between those who hold a market misbelief and those who do not hold a market misbelief, when misbelief stimulus is present. <b>/YES</b> <b>Test 2:</b> <i>For high-involvement products</i> , there is a difference in <i>product beliefs</i> among misbelievers depending on whether or not they encounter misbelief stimulus. <b>/YES</b>
		<b>H1.2</b> Market misbelief has an impact on <i>product beliefs, for low involvement products.</i> <b>/PARTLY CONFIRMED</b>	<b>Test 1:</b> <i>For low-involvement products</i> , there is a difference in <i>product beliefs</i> between those who hold a market misbelief and those who do not hold a market misbelief, when misbelief stimulus is present. <b>/YES</b> <b>Test 2:</b> <i>For low-involvement products</i> , there is a difference in <i>product beliefs</i> among misbelievers depending on whether or not they encounter misbelief stimulus. <b>/NO</b>
		<b>H2.1</b> Market misbelief has an impact on <i>product attitudes, for high involvement products.</i> <b>/CONFIRMED</b>	<b>Test 1:</b> <i>For high-involvement products</i> , there is a difference in <i>product attitude</i> between those who hold a market misbelief and those who do not hold a market misbelief, when misbelief stimulus is present. <b>/YES</b> <b>Test 2:</b> <i>For high-involvement products</i> , there is a difference in <i>product attitudes</i> among misbelievers depending on whether or not they encounter misbelief stimulus. <b>/YES</b>
		<b>H2.2</b> Market misbelief has an impact on <i>product attitudes, for low involvement products.</i> <b>/PARTLY CONFIRMED</b>	<b>Test 1:</b> <i>For low-involvement products</i> , there is a difference in <i>product attitude</i> between those who hold a market misbelief and those who do not hold a market misbelief, when misbelief stimulus is present. <b>/YES</b> <b>Test 2:</b> <i>For low-involvement products</i> , there is a difference in <i>product attitudes</i> among misbelievers depending on whether or not they encounter misbelief stimulus. <b>/NO</b>
	<b>H3</b> Market misbelief has an impact on purchase intentions. <b>/PARTLY CONFIRMED</b>	<b>H3.1</b> Market misbelief has an impact on <i>purchase intention, for high involvement products.</i> <b>/PARTLY CONFIRMED</b>	<b>Test 1:</b> <i>For high-involvement products</i> , there is a difference in <i>purchase intention</i> between those who hold a market misbelief and those who do not hold a market misbelief, when misbelief stimulus is present. <b>/YES</b> <b>Test 2:</b> <i>For high-involvement products</i> , there is a difference in <i>purchase intention</i> among misbelievers depending on whether or not they encounter misbelief stimulus. <b>/NO</b>
		<b>H3.2</b> Market misbelief has an impact on <i>purchase intention, for low involvement products.</i> <b>/PARTLY CONFIRMED</b>	<b>Test 1:</b> <i>For low-involvement products</i> , there is a difference in <i>purchase intention</i> between those who hold a market misbelief and those who do not hold a market misbelief, when misbelief stimulus is present. <b>/YES</b> <b>Test 2:</b> <i>For low-involvement products</i> , there is a difference in <i>purchase intention</i> among misbelievers depending on whether or not they encounter misbelief stimulus. <b>/NO</b>

Figure 4.3 Summary of the conducted tests and the confirmation status of hypotheses

## 5 Discussion

The findings of this study show that there is an impact of market misbeliefs on the product beliefs and attitudes of high involvement products. For low involvement products the impact could not be fully confirmed for any of the three concepts of interest. Moreover, the results prove that in case the market misbelief is positive, any impact it might have on these concepts is also positive. The results of the research are discussed in more detail in the following.

### 5.1 Market Misbeliefs and High Involvement

#### 5.1.1 Impact of Market Misbeliefs on Product Beliefs

As mentioned earlier, the results of the survey showed that the misbelievers and non-misbelievers form different product beliefs when they encounter misbelief stimulus and the product in question is a high involvement product. What reinforces this finding is that the misbelievers who were exposed to the misbelief stimulus had different product beliefs than the misbelievers who were not exposed to the stimulus. This is in line with the authors' expectations.

**It can hence be concluded, that for high-involvement products, market misbeliefs have an impact on a person's product beliefs in case the person holding the market misbelief encounters a misbelief stimulus.**

The finding is in line with Fishbein and Ajzen (1975) who acknowledge that a person's beliefs can be formed based on their other beliefs. The finding is also in line with Duncan's definition of market beliefs (1990): the researcher views market beliefs as beliefs that are one level higher above product specific beliefs, which suggests that market misbeliefs might have an impact on product beliefs. Thus, based on their study, the authors of this thesis conclude that market misbeliefs are one level above product beliefs as they have an impact on the more specific product beliefs.

In the existing literature correct market beliefs have been said to influence consumers' evaluation of the so called hidden product benefits such as quality, which cannot be tested or seen before purchase (Wolinsky 1983, Duncan 1991). The findings of the current research prove that market misbeliefs work in a similar way. However, it is important to mention that market misbeliefs are wrong and thus cause misleading evaluations of these hidden product benefits.

### 5.1.2 Impact of Market Misbeliefs on Product Attitudes

The results of the empirical research show that the people holding misbeliefs have a differing attitude towards products compared to the people not holding misbeliefs when they encounter misbelief stimulus when the product in question is of high involvement. Similar to that, misbelievers who are exposed to the misbelief stimulus have distinctive product attitudes than the misbelievers who are not exposed to the stimulus. These findings are in line with the authors' expectations.

**All in all, the authors hence conclude, that for high-involvement products, market misbeliefs have an impact on a person's attitudes in case the person holding the market misbelief encounters a misbelief stimulus.**

The evidence is in line with Fishbein's multi-attribute attitude-towards-object model (1975), which states that people form their attitudes about products based on their product beliefs. Therefore, as market misbeliefs have an impact on product beliefs, it is natural that it also has an impact on attitudes.

These findings are also in line with the tri-component model that highlights the interconnection between beliefs and attitudes (Shiffman & Kanuk, 2009; Oskamp, 1991). In light of the tri-component model and its three factors that were previously found to determine consumer attitudes - affective factors (Yoo and MacInnis 2005), cognitive factors (Fishbein and Ajzen 1975, Wright 1980) and behavioral factors (McGuire 1969) - the authors of this thesis view market misbeliefs as a component of the set of cognitive factors as they represent a person's beliefs and knowledge (Wright, 1980).

### 5.1.3 Impact of Market Misbeliefs on Purchase Intention

As mentioned, the results of the present research show that the misbelievers and non-misbelievers form different purchase intentions when they encounter misbelief stimulus. However, the misbelievers who are exposed to the misbelief stimulus and those who are not, are indifferent in their purchase intentions. These findings are not fully in line with the expectations of the authors.

**Based on the aforementioned evidence for high-involvement products, one can question the influence of market misbeliefs on the formation of purchase intention.**

The findings contradict Fishbein's (1965) multi-attribute attitude-towards-objects model, and the tri-component model (Oskamp, 1991; Shiffman & Kanuk, 2009) which assume strong connection between product attitude and purchase intention.

However, despite the fact that the unexpected contingency is not consistent with the pattern assumed by the attitude-towards-objects model, it seems to be consistent with its extended version that falls under the theory of reasoned action, introduced by Fishbein and Ajzen in 1975. The theory of reasoned action, as previously mentioned, predicts that a person's behavioral intention does not only depend on the person's attitudes but also on their perceptions of what other might think, i.e. subjective norms. As a matter of fact, regardless of the attitude, social environment might significantly influence a person's behavioral intentions, especially if the person's social status and identity are at stake (Fishbein and Ajzen, 1975). This reasoning can be used to explain the empirical evidence for high involvement products: even though market misbeliefs expose influence strong enough to affect people's product beliefs and attitudes, when it comes to purchase intention, the power of market misbeliefs is very likely to be decreased by subjective norms the person might hold.

## 5.2 Market Misbeliefs and Low Involvement

### 5.2.1 Impact of Market Misbeliefs on Product Beliefs

As mentioned earlier, the analysis of the data showed that misbelief stimuli evoke significant effect on low involvement product beliefs among people who hold a misbelief compared to the people who do not. This would suggest that market misbeliefs have an impact on product beliefs for low involvement products. However, the data introduced some unexpected findings in the comparison of the arisen product beliefs of misbelievers when they face misbelief stimulus and when they do not. As a matter of fact, beliefs about low involvement products are more or less the same among misbelievers no matter if they encounter the misbelief stimulus or not. This contradicts the expected impact of misbeliefs on the formation of product beliefs for low involvement products.

**All in all, one can challenge the influence of market misbeliefs on the formation of product beliefs in the case of low involvement products. Based on the evidence, it is impossible to make an ultimate conclusion about this specific research area.**

The findings of Olshavsky and Granbois (1979) of people employing simple choice heuristics and rules of thumb especially when involvement level is low made the authors of this thesis assume that

misbeliefs, which can be seen as inaccurate “rules of thumb”, would have a strong impact on product beliefs for low involvement products. However, the results were unable to certify this assumption.

The authors believe that there are two potential explanations for this deviation from expectations, partially connected to the design of the current research that used advertisement as a platform for product communication.

First, it is probable that when forming product beliefs in the case of a low involvement product, a misbeliever is influenced not only by promotion-related market misbeliefs but also market **beliefs / misbeliefs about product categories**. The latter are very likely to be of higher importance, relevance and trustworthiness for the misbeliever during the decision making process and thus overweight more general market beliefs. One example of such category beliefs might be “All toothpastes are more or less the same”. The authors assume that such beliefs could be especially significant when the involvement is low because then people normally do not spend much time on comparing product characteristics among brands (Zaichkowsky, 1985) or analysing the evidence beyond product category specific information (Blackwell et al., 2006). In fact, according to Percy (2008), when involvement is low, one does not really even have to convince the target audience but rather “make it slightly interested”.

Second, one can argue that even though **people state they have a market misbelief, it might not be activated to formulate distinctive product beliefs** in case a low involvement product is considered. This is likely to be the case for low involvement products, which are often generic, because people are neither interested in reading information about how the product is made or works nor are interested in reading more information about the product in mass media and online (Zaichkowsky, 1985; *the authors` pre-study findings*). Thus, when facing a need for a low involvement product, the misbelief stimulus might not be given enough attention and value for the misbelief to be activated. It is rather considered superficially and impulsively without deep information processing, in bulk with the other information and insights.

Moreover, the authors acknowledge that there is a certain chance that the people holding one positive promotional misbelief are in general very responsive towards product communication efforts, than non-misbelievers, and could potentially hold some other positive misbeliefs about promotion of high correlation with the one tested in this particular research. This could explain why there is a strong difference between misbelievers and non-misbelievers when they encounter



misbelief stimuli but there is no difference between misbelievers who see and do not see the misbelief stimuli.

### 5.2.2. Impact of Market Misbeliefs on Product Attitude

As in the case of product beliefs, misbelievers compared to non-misbelievers, if they encounter misbelief stimulus, form substantially different product attitude; whereas misbelievers who encounter the misbelief stimulus compared to misbelievers who do not build approximately the same attitude towards the product, when low involvement product is in question.

**Overall, based on the evidence, the authors cannot confirm the expected influence of market misbeliefs on attitude towards low involvement products. It is not possible to make an ultimate conclusion about this specific research area.**

The results contradict the reasoning of the authors who initially hypothesized towards a strong impact of misbeliefs on attitudes of misbelief holders in low involvement product category. As a reminder, such an expectation was built based on the assumption that market misbeliefs, via the heuristics they create, influence low involvement product beliefs that in turn have an important role in the formation of consumer attitudes (Blackwell et al. 2006; Fill, 2006; Kardes et al., 2004; Sanbonmatsu et al. (1998); Wilkie & Pessemier, 1970; Fishbein and Ajzen, 1963;).

The authors assume that the reasons behind such a setup are consistent with the explanations provided for the unconfirmed impact of misbeliefs on low involvement product beliefs - namely the prevalence of product category beliefs over market misbeliefs and low information processing capacity - discussed in the previous section.

However, despite the fact that the findings did not comply with the authors' expectations, the fact that the level of impact of market misbeliefs is similar for both product beliefs and attitudes seems natural in the light of Fishbein's multi-attribute attitude-towards-objects model (1965) that highlights the connection between the two concepts.

### 5.2.3. Impact of Market Misbeliefs on Purchase Intention

The analysis of the findings suggests that misbelievers compared to non-misbelievers exhibit different purchase intention if they encounter misbelief stimulus. In contrast to that, misbelievers who encounter misbelief stimulus, compared to misbelievers who do not, exhibit more or less the

same purchase intention. The findings are not in line with the original expectations of the authors of the study.

**Overall, as in the case with product beliefs and product attitudes, it is impossible to make an ultimate conclusion about the impact of market misbeliefs on purchase intention of low involvement products.**

Even though these findings are inconsistent with the initial predictions of the researchers, they again follow the logic of multi-attribute attitude-towards-objects model (Fishbein, 1965), which assumes strong correlation between purchase intention and product beliefs as well as product attitudes. As a matter of fact, misbelievers who are and who are not exposed to the misbelief stimulus are found to build the purchase intentions of low involvement products consistent with their product beliefs and attitudes.

## 6 Conclusion

The purpose of this thesis has been to understand the impact of market misbeliefs on product beliefs, product attitudes and purchase intentions of high- and low-involvement products.

The authors evaluated the topic as academically under-researched but yet very important, since consumer's product beliefs, attitudes and purchasing intentions are in high correlation with the product sales (Newberry et al., 2003; Bemmaor, 1995). Thus, any factors having an impact on consumer perceptions and evaluations are essential for companies to understand and possibly address.

To fulfill the purpose of the thesis, the authors formulated the research questions as follows:

***Do consumer market misbeliefs impact consumers' product beliefs, product attitudes and purchase intentions for low and high involvement product categories?***

To answer to the aforementioned research question, the authors first analyzed the existing literature on beliefs, misbeliefs and the specific topic of market misbeliefs to gain an understanding of the processes that determine their formation and importance. Next, the theory behind the formation of product attitude and purchase intention was reviewed. In addition to that, the pillars of the product involvement theory were presented. Altogether, the insights extracted from the secondary sources were used to develop a three-part empirical research method, which aimed to identify whether or not market misbeliefs affect product beliefs, attitudes and purchase intentions of low and high involvement products.

For high-involvement goods, the findings of this research demonstrate that market misbeliefs impact product beliefs and product attitude. In the case of purchase intention, despite the predictions of the authors, the impact of market misbeliefs did not find enough support to be fully confirmed. The authors assume that the reason behind this can be found in the theory of reasoned action (Fishbein & Ajzen, 1975), which in addition to attitudes, assigns much value to subjective norms to predict purchase intention. Overall, the authors conclude that market misbeliefs should be granted much attention in case of high involvement products, as they [market misbeliefs] are predictable and determinant of product beliefs and attitudes.

The impact of market misbeliefs for high-involvement products incorporates a new layer of factors influencing consumer evaluations into the Fishbein's multi-attribute attitude-towards-object model (1965) (Figure 6).

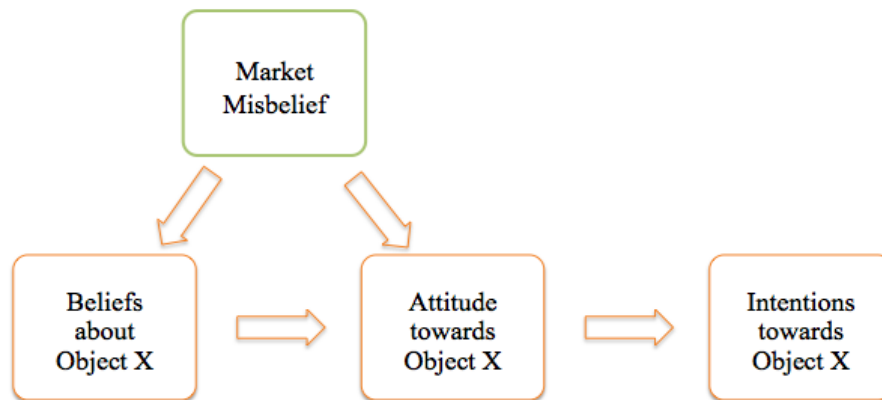


Figure 6: The contribution of the current research on Fishbein's multi-attribute attitude-towards-object model for high-involvement products

For low involvement products, the current study was unable to confirm the impact of market misbeliefs on product beliefs, attitudes and purchase intentions. This was against the authors' expectations. Two key potential explanations for this were proposed.

First, the authors reason that the unconfirmed impact of market misbeliefs could be explained by people's potential tendency to make more use of their beliefs / misbeliefs about specific product categories, not more general market misbeliefs, when forming product beliefs, attitudes and purchase intentions. Second, it can be assumed that, even though people state they hold a market misbelief, it is not activated to form corresponding product beliefs because of people's limited motivation to pay much attention to specific marketing stimuli due to their low involvement with the product. Consumers impulsively react to the product communication as one whole.

All in all, the authors conclude that market misbeliefs significantly impact consumers' product beliefs and product attitudes of high-involvement goods. Moreover, if the misbelief is positive, this impact should also be positive, from a company's point of view.

## 7 Implications

### 7.1 Managerial implications

The authors of the current research believe that the findings of the study offer valuable implications for marketing managers working in the consumer markets.

For companies selling low-involvement products, the impact of market misbeliefs on product beliefs, product attitudes and purchase intentions was not fully confirmed. Hence, the authors suggest such companies to rather continue **focusing on product beliefs** through understanding what the consumers think about their product instead of addressing the higher level market misbeliefs about place, promotion or product price. They are very likely not to expose as much influence on consumer evaluations and attitude towards the product as one can expect. Though, it might still be a value-adding idea for the companies dealing with low involvement products to dig deeper into product-category specific misbeliefs: they might be rather determinant of the consumer heuristics.

For companies selling high-involvement products, **understanding, acknowledging and dealing with the impact of market misbeliefs is important** because they have an impact on consumers' product beliefs and attitudes. At the moment, while many companies do try to address and change product-related misbeliefs through marketing efforts (Blackwell et al., 2006), there is little focus on handling more general consumer misbeliefs about the market; they often remain neglected.

The authors first recommend the companies selling high-involvement products to **find out which market misbeliefs** their target groups carry. As the present study showed that a positive misbelief has a positive impact on product beliefs and attitudes, it can be assumed that negative misbeliefs would have a negative impact. Hence, the negative misbeliefs are especially important for companies to address as they can harm sales. Once the misbeliefs that have a negative impact for the company have been identified, they should be addressed through **educating the consumers** to change their incorrect heuristics.

For instance, if a company's target group is found to hold the misbelief "*sales people always push for their most profitable items*" (Duncan, 1991), while actually the company's sales people are not compensated based on sales but customer satisfaction, the company should initiate communication to signal that the belief is in fact a misbelief. The company could then, for instance, request the sales staff to always introduce the customer a cheaper alternative to the recommended product. In

addition, the company could educate their consumers about their strong customer orientation through messages highlighting the importance of customer satisfaction in the name tags of salespeople, on the company website, in customer letters, in PR etc. Actions like this would signal the consumer that salespeople do not in fact push their most profitable items, which represents a misbelief.

## 7.2 Theoretical implications

So far, theory of beliefs and misbeliefs has not been granted as much attention as many other topics within the area of consumer behaviour in academic research. Therefore, initiating this study, the authors of the research expected to bring much theoretical value to the academia.

One of the key contributions of this thesis could be found in the literature review, where **links between theories** of beliefs, misbeliefs as well as market beliefs and misbeliefs are created. Through this, the authors provide an understanding of the connections and dynamics among these concepts.

Second, the empirical evidence of the thesis **fills a significant gap** in the research of the effects of market misbeliefs on product beliefs, product attitudes and purchase intentions, which has not previously been researched for neither high nor low involvement products. Hence, the authors contribute to existing literature by reviewing differences in the impact of market misbeliefs depending on product involvement.

The findings prove the impact of market misbeliefs on product beliefs and attitudes for high involvement products. Hence, the results applicable to high involvement products allow **adding a new layer to Fishbein's multi-attribute attitude-towards-objects model**. As market misbeliefs - in other words incorrect market beliefs - were found to have such an impact, the authors feel confident to assume that the same would hold true also for correct market beliefs.

In addition, the authors believe that the current study - as the first study on the effects of market misbeliefs - could offer a solid base for future studies. Suggestions for the further research are discussed in the following chapter.

## **8 Limitations of the Study and Suggestions for Further Research**

Despite their intention to provide a multi-perspective view on the topic of market misbeliefs and their influence on consumer evaluations, the authors acknowledge the presence of certain research limitations. These, however, can be used as a basis for further studies.

First, the current research was unable to confirm the impact of the tested promotion related market misbelief on product beliefs, attitude and purchase intention of low involvement products. The authors suggest further research to study the questioned influence using product category specific market misbeliefs. As assumed before, market misbeliefs about product categories should be of closer proximity to the product and thus more likely to cause statistically significant effects on consumer evaluations.

Second, it is important to remember that the research initiated by the authors used a positive market misbelief as a tool to explore the effects of market misbeliefs on the product beliefs, attitudes and purchase intentions. This method revealed statistical proof of certain influence of the misperception, which was the original intention of the study. However, the positive essence of the misbelief does not allow making generalizations about the universal direction of the influence. One can assume that negative misbeliefs work in exactly the opposite manner in contrast to positive misbeliefs but still the authors do not feel comfortable making such judgments without statistical proof. Therefore, it is suggested that similar tests focused on negative market misbeliefs could be initiated in future research. Apart from the aforementioned contribution by such a study, it would be interesting to find out whether positive market misbeliefs might have negative impact on the consumer evaluations of non-misbelievers.

Next, the authors believe that a research could be started to understand the exact causes behind the differences between misbelievers who encounter and do not encounter misbelief stimuli in case of low involvement products. The current research did not prove the expected difference in the evaluations, and therefore, just possible reasons behind the lack of difference were discussed. Similarly to that, a study of the exact reasons behind the difference between misbelievers who encounter misbelief stimuli those who and do not in the case of purchase intention of high involvement products could be initiated. Moreover, more precise explanation of the difference between non-misbelievers and misbelievers who encounter misbelief stimuli could be searched for as well.

Another proposition for further research concerns the composition of the survey sample. The design of the current study focused on the product beliefs, attitudes and intentions of students of institutions of higher education due to the convenience of accessing this sample. However, a more multi-perspective view of the situation could be created if respondents of different age and socio-economic behaviour were analyzed. These people are associated with financial independence, responsibility for their partners and children, more long-term and risk-averse future planning patterns (Sewell & Shah, 1967), which altogether is likely to affect the perception of the communicated information and formation of the attitudes and beliefs in some different way. Moreover, as this research omitted gender differences, certain focus could be granted to this topic, as many products in low and high categories are consumed by men or women only.

Despite strong trust in the high validity of the present research, another retest of the hypotheses would be helpful in creating more objective view of the problem of misbeliefs and their impact on consumer behaviour.



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## 10 Appendix

### Appendix 1: Quantitative Pre-study Questionnaire

Dear respondents,

Thank you for your time and effort in completing this survey which represents the first step of the empirical study of our Master thesis. We ensure complete confidentiality; moreover, the results will be used at an aggregate level only. In case of any questions, please do not hesitate to contact Jelena (40295@student.hhs.se) or Susanna (40283@student.hhs.se).

Please evaluate whether the statements are - in your opinion - true or false:

	True	False
1. Advertisements you see or hear on radio, TV, in newspapers and magazines are accurate or else they would not be allowed in the mainstream media	<input type="radio"/>	<input type="radio"/>
2. Products that are advertised a lot are good in quality	<input type="radio"/>	<input type="radio"/>
3. Advertising costs are passed on to buyers in the form of higher prices	<input type="radio"/>	<input type="radio"/>
4. Sales people usually push their most profitable items	<input type="radio"/>	<input type="radio"/>
5. If an expert recommends a product in an advertisement, it should deliver better quality than other products	<input type="radio"/>	<input type="radio"/>



Q2 Please state whether you agree with the following statements for the different products mentioned:

1. I would be interested in reading information about how the product is made or how it works.

	Strongly disagree	Slightly disagree	Neither Agree nor Disagree	Slightly agree	Strongly agree
Toothpaste	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Laptop	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Yogurt	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Sport shoes	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Mobile phone	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Beer	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

2. Before selecting the product, I would be interested in reading more information about it in mass media and online.

	Strongly disagree	Slightly disagree	Neither Agree nor Disagree	Slightly agree	Strongly agree
Toothpaste	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Laptop	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Yogurt	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Sport shoes	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Mobile phone	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Beer	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

3. Before selecting the product, I take time to compare product characteristics among brands.

	Strongly disagree	Slightly disagree	Neither Agree nor Disagree	Slightly agree	Strongly agree
Toothpaste	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Laptop	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Yogurt	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Sport shoes	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Mobile phone	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Beer	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

4. I think there are a lot of differences among brands in this product category.

	Strongly disagree	Slightly disagree	Neither Agree nor Disagree	Slightly agree	Strongly agree
Toothpaste	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Laptop	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Yogurt	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Sport shoes	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Mobile phone	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Beer	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

5. I have a most-preferred brand of this product.

	Strongly disagree	Slightly disagree	Neither Agree nor Disagree	Slightly agree	Strongly agree
Toothpaste	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Laptop	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Yogurt	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Sport shoes	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Mobile phone	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Beer	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

Q3 Your gender:

- ☐ Male  
☐ Female

Q4 Which degree are you currently pursuing?

- ☐ Bachelor  
☐ Master  
☐ PhD  
☐ Other  
☐ I am not a student

## Appendix 2: Main study questionnaires

### Survey 1 - Mobile phone / Misbelief stimulus

Dear respondent,

Please read the following extract from an advertisement by Noxel Corporation a producer of telecommunication goods. The company has been in the market for more than 25 years and is currently present in 19 European countries.

**“We at Noxel Corporation are proud to present our new mobile phone FEX. FEX is inspired by You – it offers an innovative solution for Your daily needs. FEX features the latest developments in the field of telecommunications. Its compact and user-friendly design is created to deliver a pleasant usage experience that will make every day an adventure for You! FEX is recommended by experts!”**

Q1. Based on this information, I would describe product FEX as:

	1	2	3	4	5	6	7	8	9	10	
Low quality	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	High quality
Bad	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	Good
Unpleasant	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	Pleasant
Unlikeable	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	Likeable
Undesirable	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	Desirable
Unfavorable	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	Favorable

Q2. How important is quality for you when selecting a mobile phone?

	1	2	3	4	5	6	7	8	9	10	
Very unimportant	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	Very important

Q3. Overall, how appealing is product FEX to you?

	1	2	3	4	5	6	7	8	9	10	
Very low appeal	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	Very high appeal

Q4. If you were to buy a mobile phone, how likely is it that you would purchase product FEX?

	1	2	3	4	5	6	7	8	9	10	
Very unlikely	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	Very likely

Please, continue answering the remaining questions on the other side of the sheet.

## Survey 2: Mobile phone / No misbelief stimulus

Dear respondent,

Please read the following extract from an advertisement by Noxel Corporation a producer of telecommunication goods. The company has been in the market for more than 25 years and is currently present in 19 European countries.

**“We at Noxel Corporation are proud to present our new mobile phone FEX. FEX is inspired by You – it offers an innovative solution for Your daily needs. FEX features the latest developments in the field of telecommunications. Its compact and user-friendly design is created to deliver a pleasant usage experience that will make every day an adventure for You!”**

Q1. Based on this information, I would describe product FEX as:

	1	2	3	4	5	6	7	8	9	10	
Low quality	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	High quality
Bad	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	Good
Unpleasant	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	Pleasant
Unlikeable	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	Likeable
Undesirable	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	Desirable
Unfavorable	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	Favorable

Q2. How important is quality for you when selecting a mobile phone?

	1	2	3	4	5	6	7	8	9	10	
Very unimportant	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	Very important

Q3. Overall, how appealing is product FEX to you?

	1	2	3	4	5	6	7	8	9	10	
Very low appeal	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	Very high appeal

Q4. If you were to buy a mobile phone, how likely is it that you would purchase product FEX?

	1	2	3	4	5	6	7	8	9	10	
Very unlikely	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	Very likely

Please, continue answering the remaining questions on the other side of the sheet.

## Survey 3: Toothpaste / Misbelief Stimulus

Dear respondent,

Please read the following extract from an advertisement by Noxel Corporation a producer of oral care goods. The company has been in the market for more than 25 years and is currently present in 19 European countries.

**“We at Noxel Corporation are proud to present our new toothpaste FEX. FEX is inspired by You – it offers an innovative solution for Your daily needs. FEX features the latest developments in the field of oral care. Its compact and user-friendly design is created to deliver a pleasant usage experience that will make every day an adventure for You! FEX is recommended by experts!”**

Q1. Based on this information, I would describe product FEX as:

	1	2	3	4	5	6	7	8	9	10	
Low quality	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	High quality
Bad	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	Good
Unpleasant	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	Pleasant
Unlikeable	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	Likeable
Undesirable	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	Desirable
Unfavorable	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	Favorable

Q2. How important is quality for you when selecting a toothpaste?

	1	2	3	4	5	6	7	8	9	10	
Very unimportant	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	Very important

Q3. Overall, how appealing is product FEX to you?

	1	2	3	4	5	6	7	8	9	10	
Very low appeal	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	Very high appeal

Q4. If you were to buy a toothpaste, how likely is it that you would purchase product FEX?

	1	2	3	4	5	6	7	8	9	10	
Very unlikely	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	Very likely

Please, continue answering the remaining questions on the other side of the sheet.

## Survey 4: Toothpaste / No misbelief stimulus

## + Demographic questions applicable to all questionnaires

Dear respondent,

Please read the following extract from an advertisement by Noxel Corporation a producer of oral care goods. The company has been in the market for more than 25 years and is currently present in 19 European countries.

**“We at Noxel Corporation are proud to present our new toothpaste FEX. FEX is inspired by You – it offers an innovative solution for Your daily needs. FEX features the latest developments in the field of oral care. Its compact and user-friendly design is created to deliver a pleasant usage experience that will make every day an adventure for You!”**

Q1. Based on this information, I would describe product FEX as:

	1	2	3	4	5	6	7	8	9	10	
Low quality	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	High quality
Bad	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	Good
Unpleasant	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	Pleasant
Unlikeable	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	Likeable
Undesirable	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	Desirable
Unfavorable	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	Favorable

Q2. How important is quality for you when selecting a toothpaste?

	1	2	3	4	5	6	7	8	9	10	
Very unimportant	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	Very important

Q3. Overall, how appealing is product FEX to you?

	1	2	3	4	5	6	7	8	9	10	
Very low appeal	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	Very high appeal

Q4. If you were to buy a toothpaste, how likely is it that you would purchase product FEX?

	1	2	3	4	5	6	7	8	9	10	
Very unlikely	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	Very likely

Please, continue answering the remaining questions on the other side of the sheet.

Q5. Please evaluate whether the statement is in your opinion true or false.

**If an expert recommends a product in an advertisement, it should deliver better quality than other products.**

	1	2	3	4	5	6	7	8	9	10	
Completely false	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	Completely true

Q6. What is your year of birth? \_\_\_\_\_

Q7. What is your gender?

- ☐ Female
- ☐ Male

Q8. What is your country of origin?

\_\_\_\_\_

Q9. What is your current country of residence?

\_\_\_\_\_

Q10. Which degree are you currently pursuing?

- ☐ BSc
- ☐ MSc
- ☐ PhD
- ☐ Other
- ☐ I am not a student

Q11. What is your field of studies?

\_\_\_\_\_

Q12. Are you currently working?

- ☐ Yes
- ☐ No

Thank you for taking part in this survey! Have a nice day!