

NHH

Norwegian School of Economics

Bergen, Spring 2017



The Influence of Price Colour on Price Perception

A Master Thesis on Behavioural Pricing

Dorian Alexander Petrich

Supervisor: Prof. Mark Pasquine

Master of Science in Economics and Business Administration

Marketing and Brand Management

NORWEGIAN SCHOOL OF ECONOMICS

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Abstract

It is well known in marketing that colour imposes an important influence on human behaviour. However, only little research has been dedicated to the influence of price colour on price judgement for non-discounted prices. Within the framework of this master thesis, two experiments are conducted and analysed, one with a focus on offline distribution (retail store setting) and one paying special attention to online channels. The influence of red or blue coloured prices is evaluated with regards to perceived price, perceived value, and purchase intention. Price and value are shown to be perceived significantly better if coloured prices are used. This fact holds true for the offline and, frequently, the online setting as well as for red and for blue price colour. The effects are more common for low involvement products compared to high involvement offerings. Furthermore, the results indicate that priming the respective colour enhances the influence of coloured prices. Limitations as well as theoretical and practical implications are discussed and further research directions are suggested.

Executive Summary

The influence of coloured, non-discounted prices (rather than coloured price tags) onto consumers is investigated within the framework of this master thesis. The research has been conducted using a questionnaire and statistical analyses.

Price colour leads to significantly better price perception as well as to a higher perceived value compared to black prices. Those results hold true for both red and blue price colour. For red prices, this is likely to result from an avoidance motivation (consumer's fear of overpaying) whereas for blue prices an approach motivation tends to be the underlying driver (consumer's joy of saving). While purchase intention is not significantly influenced by price colour, the results indicate that price colour could help practitioners to facilitate a product's inclusion into the consumer's consideration set.

Priming red or blue may enhance the impact that price colour can have on price perception and on the subsequent buying process. Priming tends to lead to a higher effect size of the influence of colour as is indicated by an increase in the number of significant comparisons of coloured prices versus black, non-coloured prices.

There are differences among individuals with respect to the influence price colour has on perceived price, perceived value, and purchase intention. Contrary to suggestions made by some researchers, in this master thesis it is argued that gender is rather unlikely to (fully) explain those individual differences. It is found that personality rather than gender is an appropriate characteristic to describe the differences among consumers and to explain which consumers might be more likely to be influenced by price colour. However, it has to be noted that the results regarding personality are merely indicative in terms of the statistical evaluation.

The findings within this master thesis extend the tested product categories to consumer electronics as well as groceries (in addition to home appliances known from previous literature). It is established that colouring prices is an applicable tool in an offline retail as well as an online shop setting. Consequently, managers of both channels could direct consumers towards considering (or even choosing) a specific product or service.

Contents

ABSTRACT	I
EXECUTIVE SUMMARY	II
CONTENTS	III
LIST OF TABLES	V
LIST OF ABBREVIATIONS.....	VI
1. INTRODUCTION	1
2. THEORETICAL REVIEW	4
2.1 RESEARCH ON PRICING	4
2.2 THE PSYCHOLOGY OF COLOURS.....	7
2.3 THE USE OF COLOUR IN MARKETING	10
2.3.1 <i>Previous Research on Coloured Prices.....</i>	<i>11</i>
2.3.2 <i>The Focus of This Master Thesis.....</i>	<i>13</i>
2.3.3 <i>The Influence of Specific Colours</i>	<i>14</i>
2.3.4 <i>Involvement and the Use of Heuristics.....</i>	<i>19</i>
2.3.5 <i>Colour in the Context of Priming.....</i>	<i>22</i>
2.3.6 <i>Individual Differences.....</i>	<i>26</i>
2.3.7 <i>Coloured Prices in an Offline versus Online Setting</i>	<i>29</i>
3. EXPERIMENT 1	32
3.1 RESEARCH DESIGN AND DATA COLLECTION PROCEDURE.....	32
3.1.1 <i>Research Design.....</i>	<i>32</i>
3.1.2 <i>Questionnaire Design and Method of Data Collection.....</i>	<i>33</i>
3.2 ANALYSIS AND RESULTS	46
3.2.1 <i>Initial Data Analysis.....</i>	<i>46</i>

3.2.2	<i>Methods for Main Data Analysis</i>	52
3.2.3	<i>Main Data Analysis and Results of the Statistical Tests</i>	54
3.3	RESULT DISCUSSION	66
4.	EXPERIMENT 2	72
4.1	RESEARCH DESIGN AND DATA COLLECTION PROCEDURE.....	72
4.1.1	<i>Research Design</i>	72
4.1.2	<i>Questionnaire Design and Method of Data Collection</i>	72
4.2	ANALYSIS AND RESULTS	73
4.2.1	<i>Initial Data Analysis</i>	73
4.2.2	<i>Methods for Main Data Analysis</i>	74
4.2.3	<i>Main Data Analysis and Results of the Statistical Tests</i>	75
4.3	RESULT DISCUSSION	79
5.	GENERAL DISCUSSION	84
5.1	THEORETICAL IMPLICATIONS	84
5.2	MANAGERIAL IMPLICATIONS	86
5.3	LIMITATIONS AND DIRECTIONS FOR FURTHER RESEARCH	87
5.3.1	<i>Immediate Suggestions</i>	87
5.3.2	<i>Further Conceivable Research Directions</i>	89
	APPENDIX	VII
	REFERENCES	CXCIX

List of Tables

Table 1: Results of Statistical Tests for Experiment 1: p-values	55
Table 2: Analysis of Hypotheses (Experiment 1)	67
Table 3: Results of Statistical Tests for Experiment 2: p-values	76

Tables 4 to 214 are presented in the Appendix and included in the List of Appendix Tables.

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List of Abbreviations

ELM	Elaboration likelihood model
HSM	Heuristic-systematic model
FFM	Five-factor model
WMW	Wilcoxon-Mann-Whitney or Mann-Whitney test
ANOVA	Analysis of variance
ANCOVA	Analysis of covariance
IIC	Inter-item correlation
ITTC	Item-to-total correlation
B2C	Business-to-consumer
B2B	Business-to-business

1. Introduction

The importance of marketing for a company's success is often – and wrongly – undermined. The American Marketing Association (2013, para. 2) defined marketing as “*the activity, set of institutions, and processes for creating, communicating, delivering, and exchanging offerings that have value for customers, clients, partners, and society at large*”¹. Researchers have provided evidence that a strong marketing department and strategic marketing operations significantly enhance firm performance. Successful marketing strategies enhance long-term customer equity for the organisation (Abdullah Saif, 2015; Feng, Morgan, & Rego, 2015; O'Sullivan & Abela, 2007). The scope of marketing includes (but is not limited to) consumer behaviour and pricing, which constitute the subject areas addressed in this master thesis (Hunt, 1976).

Consumer behaviour research is primarily concerned with the behaviour towards a product or service. A stimulus – in this case the product and its attributes – paired with the situational environment is perceived by the consumer² and, after processing, results in a specific behaviour (Belk, 1975). It has been suggested that a considerable part of consumer behaviour is a result of unconscious³ processing rather than of a thorough evaluation of information. Consequently, researchers are interested in the (latent) influencing factors during the buying process (Dijksterhuis, Smith, van Baaren, & Wigboldus, 2005). Research has shown that consumer behaviour is especially influenced by the environment and how prices are perceived (Adaval & Monroe, 2002; Singh, 2006)

¹ For further definitions of marketing see, for example, Hunt (1976) and Bagozzi (1975).

² For simplicity, this master thesis will consider the consumer and the customer to be the same person (unless otherwise indicated) although, for example, Engel, Blackwell, and Miniard (1995) suggested that they can be different persons.

³ In this master thesis, the terms “unconscious” and “subconscious” are used interchangeably to describe a state outside an individual's conscious awareness.

Pricing entails all activities related to setting the price for the products and services offered by a firm. Typically, the goal of pricing is the optimisation of profits (Kotler & Armstrong, 2006). Managers often tend to attribute only low importance to pricing as contributor to marketing, and ultimately, firm success (Udell, 1964). However, pricing is one of the most important and fundamental functions of management: A firm's price setting behaviour can make the difference between failing and outperforming competitors (Besanko, Dranove, Shanley, & Schaefer, 2013; Marn, Roegner, & Zawada, 2003; Marn & Rosiello, 1992).

It has been shown that there is not only an objective, numerical price but also a subjectively perceived price (Monroe, 1973). The differences between the objective price and the subjective interpretation of the same price can be explained using the concept of internal reference price (Helson, 1964; Janiszewski & Lichtenstein, 1999; Rao, 2010). There is evidence that consumers are not aware of the influence which an internal standard (used to form product evaluations) has in the buying process. Scholars and practitioners are, hence, concerned with possible ways of influencing this internal standard (e.g. through price presentation) as well as with how encountered stimuli are perceived (Adaval & Monroe, 2002; Rao, 2010).

In addition to the importance of price for consumer behaviour, it has been suggested that environmental cues influence consumers to buy certain products or to make use of certain services. For example, colour can influence decisions in a retail environment (Bellizzi & Hite, 1992). Chandrashekar, Suri, Grewal, and Upton (2009) have outlined the existence of a research gap regarding the influence of coloured, non-sale prices on consumer behaviour.

From an academic point of view the intersection of colour, pricing, and consumer behaviour is important for advancing the understanding of how consumers perceive price and use this perception during the subsequent buying process. The assessment of the combination of colour and price can enrich the understanding as represented by academic literature for both psychology and business. More specifically, it would add to the research body on behavioural pricing which can be explained as *“subset of pricing research wherein prices and pricing are examined with respect to their human elements—that is, with respect to how humans attend to, perceive, process, and evaluate price information as well as how they go about determining the price at which a particular item should be sold or purchased”* (Miyazaki, 2003, p. 471).

Brewer (2000) pointed out that effects measured in academic research are also of relevance to the real world because research aims at understanding real world phenomena. Findings have to

be applicable to a practical context and entail managerial implications. Coloured prices frequently indicate sale prices and are common in a retail environment. Consequently, it is of practical importance for retailers and marketers in terms of a better understanding of consumer behaviour whether and how colours can influence the perception of non-sale prices.

Consequently, the following research question arises: Does price font colour for non-sale prices influence consumers during the buying process? The research presented within this master thesis therefore aims at providing evidence for the influence of price front colour on price perception and price judgement. Existing literature on colour and pricing is reviewed, several hypotheses and research propositions are developed, the statistical tests used are described, and the respective results are outlined in the following chapters. The research question is answered in separate experiments for a retail (offline) setting⁴ and an online-shop like setting.

Previous literature on colour, pricing, and consumer behaviour is discussed in chapter 2. Seven sets of research hypotheses and two research propositions are outlined in the same chapter. To be able to answer the defined research question methodological choices are made for the two experiments (chapter 3 and chapter 4). Research methodology can be defined as “*a way to systematically resolve the research problem*” (Kothari, 2009, p. 8), thus it refers to the means to collect (section 3.1 and section 4.1), analyse (section 3.2 and section 4.2), and interpret (section 3.3 and section 4.3) information or data. Because research problems differ, scholars have to design the methodology specifically for the questions at hand. In the following not only the research methods used will be outlined but also the logic behind the decisions for a specific method or technique and the respective questionnaire design will be explained. This is important since other researchers can then analyse the research methodology of this master thesis and adapt certain parts for their own research, if the logic of their problem is similar (Iacobucci & Churchill, 2010; Kothari, 2009).

Finally, theoretical and managerial implications are outlined, limitations are discussed, and suggestions for further research are presented (chapter 5).

⁴ In a following, the terms “retail” and “offline” will be used to describe a conventional, brick and mortar store.

2. Theoretical Review

2.1 Research on Pricing

There is a broad range of definitions on what price is, including both monetary and non-monetary points of view. Following Fetter (1912) the term price can be explained as what has to be given up in order to obtain something in return. Zeithaml (1988, p. 10) defined the price “*from the consumer’s perspective [as] [...] what is given up or sacrificed to obtain a product*”. Challenging Ahtola’s (1984) understanding that money should not be included in the definition, Homburg, Kuester, and Krohmer (2013) later defined price as the amount of money a buyer will have to trade with an organisation for its products or services. Like above, several researchers suggested that price is linked to sacrifice (Dodds & Monroe, 1985; Dodds, Monroe, & Grewal, 1991; Grewal, Monroe, & Krishnan, 1998).

Some researchers argue that when evaluating a product prior to a buying decision the value of that product is based on the benefits derived from the product attributes minus the displeasure of the sacrifice. The sacrifice in turn is a function of the actual price of the good and an internal reference used for evaluating the actual price. This internal reference dramatically affects the outcome of a buying process (Thaler, 1985; Urbany, Bearden, & Weilbaker, 1988). A buying process is often described in five stages: need recognition, information search, evaluation, purchase, and post-purchase stages. Price tends to be especially important in the third and fourth stage (Puccinelli et al., 2009). Since price is not only associated with product cost but also with the value consumers assign to a product, the price is not simply an objective figure (Monroe, Della Bitta, & Downey, 1977). In fact, Monroe’s (1973) review on previous pricing research highlights that buyers perceive prices subjectively. Consequently, there is an objective price and a perceived, or subjective, price for products. Monroe also points out that there may be a difference between the price as perceived by the price setter and the price as perceived by the buyer. The notion that there is a subjectively perceived price that consumers use during product evaluation is of utmost importance also because the perceived price positively influences both the perceived quality and the perceived sacrifice. The perceived quality positively influences perceived value, whereas perceived sacrifice negatively influences perceived value. The perceived value then positively influences a consumer’s willingness to buy. Consequently, a low perceived price is associated with a lower perceived sacrifice, thus a higher perceived value

(Dodds et al., 1991)⁵. The difference in objectively and subjectively perceived price can be due to psychological and contextual factors: When processing price information buyers transform objective prices into psychological, subjective representations of those prices (Monroe, 1973). However, the objective price is not the only factor that influences subjective price judgement. For example, customer satisfaction and perceived fairness influence how price increases are interpreted, hence how the price is evaluated and how the increases influence repurchase intention (Homburg, Hoyer, & Koschate, 2005).

In the absence of concrete price information (which could be used to compare offers), customers tend to make purchase decisions based on implicit price knowledge (Roediger & McDermott, 1993). Research shows that a consumer's buying behaviour is very likely to be influenced by reference prices. This is, the consumer evaluates the attractiveness of a price against an internal reference price in many situations (even if concrete price information is available). Those reference prices can be based on other prices encountered in the immediate environment⁶, the last price paid, a price frequently paid, or on residual cues such as quality perception and expectation. Thus, a consumer's reference price is not only derived from his/her (explicit and implicit) price knowledge but also influenced by available market information. Consequently, price judgement is not only based on the actual price but also on how it is presented and on how it relates to the internal reference price. Reference prices can determine the demand for a product (or service) because consumers consider their internal reference price(s) when evaluating alternatives. There are different studies that suggest consumers do not necessarily remember a single price point but rather a range of prices against which they evaluate an objective price and which serve as a basis for forming the subjective representation of that price. The bounds of the reference price range thus serve as anchors for subsequent judgement (Coulter & Norberg, 2009; Garbarino & Slonim, 2015; Grewal et al., 1998; Helson, 1964;

⁵ According to Gardner (1971), McConnell (1968), Scitovszky (1944), as well as Stafford and Enis (1969), consumers sometimes base their perception of quality on the price of a product. Hence (for those products), the perceived value is also negatively affected by the lower perceived quality.

⁶ For a discussion on what constitutes an environment and how the concepts situation, behaviour, and environment are related see Belk (1975).

Janiszewski & Lichtenstein, 1999; Mazumdar, Raj, & Sinha, 2005; Niedrich, Sharma, & Wedell, 2001; Volkmann, 1951).

Reference prices can be based on intentionally or incidentally learned prices. When customers engage in intentional price learning they actively search and memorize price information. The price stored in the memory is explicitly compared to a price encountered. When customers do not put effort into actively remembering prices they might still engage in incidental price learning when comparing prices during the buying process (Rajendran & Tellis, 1994). In fact, Monroe and Lee (1999) argue that reference prices can have an unconscious influence on a consumer's evaluation of products (or services). Consumers have implicit price knowledge which is not explicitly remembered but might be used in the price judgement process. As an efficient way of making decisions, consumers sometimes consider prices in the environment to evaluate a specific price instead of actively remembering exact prices for various product categories over time. Hence, price evaluation is often not based on exact values but on an assessment of whether a price is, for example, low or high. This suggests that for reference prices and the subsequent price judgement the temporal dimension could be less important than the contextual (Rajendran & Tellis, 1994; Roediger & McDermott, 1993).

Besides the nominal value of a price, other contextual stimuli can influence how consumers evaluate that price. Coulter and Norberg (2009) outline that changes in the presentation of prices influence how those prices are perceived and interpreted. A greater horizontal price separation results in larger price-discount perceptions, which in turn are connected to a higher likelihood to buy and a higher perceived value. In four experiments, Coulter and Norberg show that the physical distance between prices influences how consumers evaluate a sale price and subsequently act after encountering a special offer. The processes in a consumer's memory are based on an idea which is similar to the concept of reference prices (because only one dimension – the discounted price – is actively perceived): The discount-distance congruency effect incorporates the notion that the physical distance of prices influences price processing. To be able to make a decision, the consumer tends to compare the sale price to a reference price stored in his/her memory. This process does not occur consciously. Findings like this suggest that the processing of prices is often based on the use of heuristic cues (Puccinelli, Chandrashekar, Grewal, & Suri, 2013). Heuristics are learned associations that provide information for decisions based on previously encountered similar situations. Heuristic cues are used when superficial consideration plays a major role in an evaluation process. The rather simple

judgement process only requires low cognitive effort (Chaiken, 1980; Maheswaran, Mackie, & Chaiken, 1992; Pearl, 1984).

All in all, the above findings outline that the subjective price judgement is not only based on the numerical value of the price but is also influenced by other factors such as the internal reference price. The internal reference price in turn can be influenced by the presentation of prices or other contextual factors. Additionally, consumers might consider heuristic cues when processing encountered price information and when making decisions. Therefore, the perception of a price depends on the internal reference price and on the environment (which in turn influences the internal reference price and subsequently how other prices in the environment are evaluated).

Cues in the environment such as layout or context can influence consumer behaviour during the buying process. Colour constitutes a further heuristic cue which customers frequently tend to use for evaluations. Studies have shown that store colour, for example, can influence a consumer's evaluation of products, the perception of price fairness, and his/her purchase intentions (Babin, Hardesty, & Suter, 2003; Dijksterhuis et al., 2005; Grewal, Marmorstein, & Sharma, 1996; Meyers-Levy & Peracchio, 1995; Nunes & Boatwright, 2004).

2.2 The Psychology of Colours

Scholars from various areas including physics, psychology, linguistics, and neuroscience contribute to a large body of research on colour (Elliot & Maier, 2014). Colour, as opposed to temperature or weight, is not a physical quantity. Colour is a sensation that is created through light with different wavelengths (Niedrig & Eichler, 2004)⁷. Since colour cannot be physically measured, specific wavelengths are often associated with names such as red (longest wavelength of the visible spectrum), orange, yellow, green, blue, and purple (shortest wavelength of the visible spectrum) (Fraunhofer, 1817; Kirchhoff, 1860; Kirchhoff & Bunsen, 1860).

⁷ For further information on the physical properties of light and colour see *appendix A*.

Kosslyn (1994) argues that of all the stimuli which reach the brain two-thirds do so through the visual system. The colours perceived by the eye only develop a meaning when the signals are processed by the brain because it interprets them as specific colour. This process involves the visual cortex (Boynton, 1988)⁸.

Different persons experience colours differently and, consequently, their interpretation of coloured objects in their environment might differ (Singh, 2006). Given the demand for a standardized description of colour, the Commission Internationale de l'Éclairage has defined several standards including the CIE 1931 colour spaces (the first quantitative connection of wavelength and human colour vision). The colour spaces link the physical dimension of colour to physiological perceived colours (Guild, 1932; Smith & Guild, 1932). In practical terms colour is often described by comparison to agreed-upon colour panels such as the RAL colour tables (RAL gGmbH, 2016).

Colour influences psychological functioning (Elliot & Maier, 2012). It is possible that the same colour induces different emotions, feelings, or moods for different individuals or also for the same individual in different situations (Goldstein, 1942). However, some similar characteristics for specific coloured are outlined in multiple studies. In 1810, Goethe explained how colours can influence human emotion. He split colours into two categories – plus and minus colours – with different influences on feelings: For example, positive colours are more warm, whereas negative colours tend to be rather cold. Later, Goldstein (1942) found that colours have an influence on people's cognition, behaviour, and emotions. He observed reactions on different colours in a clinical environment. Red and yellow encouraged a stronger reaction than green and blue. In one experiment subjects were asked to stretch out their arms and then to look at a coloured sheet. The experiment revealed that green and blue coloured sheets stimulated individuals to bring the stretched-out arms closer to the body. Yellow and red in turn induced the opposite behaviour. In another experiment, subjects with a specific disease (which made them under- or overestimate object size) showed very strong symptoms when red light was used and almost normal behaviour when green light was used. The opposing effects of red and yellow compared to green and blue held for various experiments. In fact, Goethe's descriptions of

⁸ For further information on colour perception and processing see *appendix B*.

colours match the feelings subjects in Goldstein's study stated as well as the reactions they showed. Clearly, colours – consciously or unconsciously – influence how humans behave.

More researchers focused on the connection between colour and psychology after Goldstein's study. Some scholars found a connection between wavelength and arousal as well as wavelength and the ability to solve complex tasks, thus showing that different colours lead to different reactions (Nakshian, 1964; Stone & English, 1998). Colour has an influence on activation-related affect, which is a contributor to consumer behaviour during the buying process. However, different colours do not exert a similar influence: Extreme wavelengths, either very short wavelength colours such as violet or blue or very long wavelength colours such as orange or red, result in strong reactions whereas other colours do so to a lesser extent. This suggests a U-shaped relation between wavelength and arousal. One possible explanation is that individuals, as a result of instinct or learning, connect extreme wavelengths to danger which in turn explains the higher activation (Babin et al., 2003; Wilson, 1966).

Some researchers have looked at how colours influence emotion. Emotion is different from affect because the term affect encompasses not only emotions but also feelings and moods. Feelings are an individual's subjective embodiment of emotions while moods tend to be less intense compared to emotions and tend to last longer (Fox, 2008). It has been argued that humans have learned associations to colour and that those associations influence emotional, cognitive, and behavioural responses to colour stimuli (Elliot & Maier, 2014). For example, Jacobs and Sues (1975) outline that red and yellow colours lead to significantly higher states of anxiety than the colours blue and green.

Colours can also have an influence on people's physical abilities. For example, Ott (1979) argues that blue strengthens muscles, whereas orange and pink weaken muscle functioning. In an experiment, red light led to significantly higher degree of hand tremor than green light (James & Domingos, 1953).

Further research suggests that light with long wavelengths, namely red, orange, and yellow colours, has an exciting or arousing influence on humans in terms of bright states of mood and faster motor reactions. It also reduces the efficiency of tasks involving precision, judgement, and fine psychomotor coordination. Red and yellow can be linked to a higher state of aggression, whereas blue and green are rather calming. Blue and green, also show opposite performance in the aforementioned activities (resulting in higher efficiency). However, some

of these findings have also been challenged in terms of their applicability to a wide range of the population because Goldstein's experiments included participants with brain damage (Goldstein, 1942; Nakshian, 1964).

Other studies underline that differences in colours are not only present for humans but also for animals. For example, red is seen as an aggressive colour (which is in line with the behaviour and nature of many animals). Red is a signal for dominance in males with the alpha male having the most prominent colouring. Similarly, for humans, in aggressive situations or situations involving anger the level of testosterone as well as blood flow increases which results in reddening skin, while fear results in pallor (Drummond, 1997; Hill & Barton, 2005; Setchell & Jean Wickings, 2005). Some research also suggests that in the animal world the signalling colour red dominates orange, which in turn dominates blue and brown (Pryke, 2002).

A large body of research contributes to understanding how colour influences psychological functioning, cognition, judgement, emotion, and behaviour. More specifically some researchers argue that the extent to which colours determine processing and the resulting behaviours follows a U-shaped relation to wavelength.

2.3 The Use of Colour in Marketing

Scholars have noted that there is a close link between perception and behaviour, meaning that an individual's perception can directly and unconsciously influence what the individual does. The perception-behaviour link applies to simple reactions and to more complex behaviour. There is a low route, responsible for rather simple behaviour such as copying face expressions, and a high route, responsible for perceiving concepts such as stereotypes. Although the two routes differ in the way processing functions and subsequently influences behaviour, the reasoning that there is a link between perception and behaviour holds for both routes. This concept bears important suggestions for consumer behaviour: The unconscious influence of environmental cues on behaviour is also observed in a consumer behaviour context, especially during the buying process (Dijksterhuis et al., 2005; Dijksterhuis & Bargh, 2001; James, 1980; Lotze, 1852).

The environment in which prices are experienced influences how consumers evaluate the respective price (Adaval & Monroe, 2002). Marketers frequently use colours to influence

customers since 65% to 90% of an individual's evaluation originates from colour perception (Singh, 2006). Consequently, academic findings on colour are of utmost importance for research on consumer behaviour.

Marketers tend to use colours frequently. For example, red may be used to highlight discounted prices in retail outlets in order to direct attention towards the special offer (Chandrashekar et al., 2009). Meyers-Levy and Peracchio (1995) argue that consumers tend to be more easily persuaded by a coloured advertisement compared to a black-and-white advertisement. This is because consumers use colour as a heuristic cue in judgement. This effect holds for full-colour ads as well as colour-highlighted ads. Chandrashekar et al. (2009) point out that, in a pricing context, colour might influence perceived value, perceived savings, and willingness to pay also if the coloured price is a non-sale figure.

The research within this master thesis aims to extend the body of research on the influence of coloured non-sale prices on evaluations during the buying process.

2.3.1 Previous Research on Coloured Prices

Although evidence suggests that customers can be influenced by colours when it comes to packaging, brand, and store design, there is comparably little research on the role colour plays with respect to pricing (Aaker, 1997; Labrecque & Milne, 2012; Puccinelli et al., 2013; Wexner, 1954). Thus, Chandrashekar et al. (2009) have investigated the effects of the colours red, blue, green, and yellow on the processing of price information: In the first study, the influence of a coloured price and a coloured background on price judgement has been tested. The font colour, that is the colour of the price itself, has been chosen from one of the four colours red, blue, green, and yellow (with one of the remaining colours as the background colour). In the second experiment, combinations of colour and specific shapes and the respective effects on price perception have been studied.

Findings provide evidence that colours, in general, have a significant influence on affect as well as the evaluation of encountered prices. More specifically, the influence on price judgement is mediated by affect which in turn is influenced differently by different colours. The finding that colours influence affect is important because affect not only influences price perception but also all steps during a buying process. For example, affect during the need recognition and the information search stage can determine channel or even shop choice. Positive affect in the

product evaluation stage can be linked to higher perceived value of the product (Puccinelli et al., 2009). Chandrashekaran et al. (2009) further argue that price presentation tactics with respect to both shape and colour have an effect on price perceptions. This holds for font and for background colour. The experiments only take colour and colour-shape combinations into account but the article published does not clearly outline differences between the respective colours. Furthermore, the influence of different levels of involvement and different channels are not considered. Since other researchers have reported differences in how consumers process information in different involvement situations, there is a clear research gap when it comes to the influence of colour on price perception with respect to different levels of involvement. Additionally, the results have been obtained using advertisements for toasters and microwaves. Further research could validate the results for other product categories and verify the results in an online setting of price presentation – in contrast to the offline-setting used in the studies.

Puccinelli et al. (2013) report that the colour red influences price perception and that this effect is mediated by gender. They have conducted four experiments to assess how the colour red influences perception of price reductions. For their studies, they have used retail ads including toasters and microwaves at different prices, which have been presented either in red or black. For the single-ad as well as the multi-ad context, the authors argue that with red colour men perceive savings to be larger than women do and larger than in the scenario with black prices. The authors suggest that the differences arise because men apply less thorough processing when encountering prices because they have a higher threshold for elaboration. Therefore, involvement was included in one of the studies: Findings show that under high involvement the influence of colour on price judgement is not significant. Although the authors have considered the importance of involvement, they have not examined other colours than red. Hence, currently there is no study of behavioural pricing that has analysed the influence of other colours than red in depth and has taken involvement into account. As pointed out by the authors, different retailers apply different colours to highlight prices. This emphasises the practical interest in research that compares the effect of additional colours on price perception. Furthermore, the authors suggest taking the increasing importance of an online setting into account, especially with respect to the differences among online and offline channels.

2.3.2 The Focus of This Master Thesis

Blue prices (in addition to red and black price font colour) as well as different levels of involvement are considered within the scope of this master thesis. The influence of colour on price judgement in terms of perceived price, perceived value and purchase intention for both an offline and an online setting is evaluated. Perceived price is the customer's subjective perception of a price (Chang & Wildt, 1994). Zeithaml (1988, p. 14) defines the term value as "*the consumer's overall assessment of the utility of a product based on perceptions of what is received and what is given*". Perceived value has been established to be multidimensional and to be influenced by perceived price, sacrifice, and the benefits associated with the product (Sanchez-Fernandez & Iniesta-Bonillo, 2007)⁹. Purchase intention is "*the possibility that consumers will plan or be willing to purchase a certain product or service in the future*" (Wu, Yeh, & Hsiao, 2011, p. 32). Because the influence of colour on behaviour often occurs subconsciously, associations with different colours could serve as prime (Elliot, Maier, Moller, Friedman, & Meinhardt, 2007). Thus, it is also reviewed to which extend priming can affect the influence of colour on price judgement. Previous research argues that gender could explain individual differences in the extent to which consumers are influenced by price colour. However, since gender is a rather poor proxy, the following also suggests that personality plays a role with respect to the effects of price colour.

The focus of this master thesis lies on the influence of price font colour on price judgement since price font and price background colour tend to have similar effects. This allows for a comparison of the findings outlined within this master thesis and those reported by Puccinelli et al. (2013). In the following sections (2.3.3 to 2.3.6), the theoretical background for the development of the hypotheses **H1-H7** and the two research propositions **P1** and **P2** is described with focus on a retail setup (experiment 1). The respective hypotheses and propositions are considered again for experiment 2, which aims at comparing an offline and an online setting. The theoretical rationale for experiment 2 is outlined in section 2.3.7.

⁹ For a further discussion on the definition of perceived price see Sanchez-Fernandez and Iniesta-Bonillo (2007) and Sweeney and Soutar (2001).

In order to ensure that findings in this master thesis are not merely based on a different methodological setup, previous findings have to be verified in the first step. This verification of results also provides the opportunity to ensure that previous findings are applicable to other product categories. Furthermore, the effects of involvement (hypotheses outlined in section 2.3.4), priming (hypotheses outlined in section 2.3.5), and personality traits (as an underlying factor for differences in price colour evaluation among individuals; research propositions outlined in section 2.3.6) are considered. An overview on the hypotheses and research proposals is given in *appendix C*.

2.3.3 The Influence of Specific Colours

Colour conveys information that can have both aesthetic and functional value (for a list of studies see e.g. Amsteus, Al-Shaabab, Wallin, & Sjöqvist, 2015). Although the specific reactions to colour depend on the context, there are several characteristics that are more likely to be associated with one colour than with another (Elliot & Maier, 2012; Elliot & Maier, 2014). Priluck Grossman and Wisenblit (1999) note that colour-linked choices might not be based on preference for a certain colour but rather on the emotions that are associated with specific colours. Subsequent information processing and the resulting behaviour is likely to be in line with those emotions (Soldat, Sinclair, & Mark, 1997). Consequently, it is important to further elaborate on the different influences specific colours tend to have on individuals and to outline common characteristics which scholars assign to specific colours. Because there is a large body of research on the similarities and differences of red and blue and because these two colours may be considered the two extremes at the opposing ends of the wavelength spectrum, this research focuses on red and blue price font colour.

Red and Blue as Opposing Ends of a Spectrum

Some researchers have hypothesized that the feeling happiness can be associated with the colour red and that it induces heuristic processing while discouraging thorough cognitive processing (Soldat et al., 1997). However, other research could, for example, not find a connection between red and happiness nor provide evidence that red evokes heuristic processing but rather suggests that red is physically arousing and perceived as negative (Bellizzi & Hite, 1992; Valdez & Mehrabian, 1994). Other scholars associate different attributes with red: Depending on various factors, such as the situation the colour is encountered in, red can also be connected to excitement, stimulation, protection, defiantness, contrariness, hostility,

powerfulness, strength, and masterfulness (Murray & Deabler, 1957; Wexner, 1954). Red sometimes is referred to as a highly emotional colour linked to love, anger, and passion (Clarke & Costall, 2008).

It has been proposed that blue induces systematic processing which in turn positively influences cognitive performance (Soldat et al., 1997). Furthermore, the colour blue is perceived as cool, calm, and rather positive. Researchers report that in a retail context, blue leads to better results than red in terms of more purchases and fewer postponements of purchases. Further research associates blue with aspects such as tenderness, security, comfort, intelligence, trust, efficiency, duty, communication, and logic (Fraser & Banks, 2004; Mahnke, 1996; Murray & Deabler, 1957; Wexner, 1954; Wright, 1988).

Based on the various attributes ascribed to blue and red it has been suggested that affect is responsible for behaviour. More specifically, the positive perception of blue and the negative effects of red might be more influential (in a marketing context) than arousal (Bellizzi & Hite, 1992).

A large part of research on colour focuses on red versus blue since they are on the opposite sites of the colour spectrum. Some studies suggest that blue enhances performance, whereas others report the same for red but not for blue (Mehta & Zhu, 2009). One study has found that if exposed to blue, individuals show higher impulsive buying behaviour than if exposed to red. This finding provides evidence that blue can serve as an environmental cue in a retail setting since colours influence consumer behaviour or, more broadly speaking, that environmental cues can consumers (Wang, Pirouz, & Zhang, 2011). Wang et al. have conducted two experiments to investigate the hypothesis that blue leads to more impulsive buying behaviour. In the first experiment, they have asked participants to choose one out of five alternatives (each connected to a different level of impulsiveness). Participants have then been asked to fill out a survey measuring the impulsive purchase decision (either printed on blue paper or on red paper). As predicted, individuals exposed to the blue paper show higher impulsiveness than those that are provided a red survey. The second experiment has verified the findings in an online survey with the survey having either a blue or a red background colour on the computer screen. Those findings not only contribute to literature on the intersection between colour and consumer behaviour but also have implications for retail stores on how to trigger impulsive decisions.

Red Induces an Avoidance Motivation, Blue an Approach Motivation

Colours can also influence an individual's motivation, especially in terms of whether individuals show an approach or an avoidance motivation (Elliot & Maier, 2014; Krieglmeier, Houwer, & Deutsch, 2013). An approach motivation results in a behaviour that is directed towards a positive stimulus whereas an avoidance motivation induces behaviour directed away from a negative stimulus. An approach motivation encompasses both maintaining a current positive state or striving for a more positive state. Avoidance includes the prevention of negative situations as well as the escape from them. The approach-avoidance distinction can be used to explain and predict behaviour. Both, avoidance- and approach-motivated behaviour, are important for human survival with avoidance motivation facilitating survival and approach motivation thriving. Approach motivation enables more flexible cognitive activities and increases attention. Avoidance motivation increases cautious processing and narrows attention. Humans automatically classify stimuli as positive or as negative resulting in an immediate approach or avoidance reaction. Krieglmeier et al. (2013) points out that those evaluations induce approach or avoidance reactions, which are flexible and aim at achieving situational goals within the respective circumstances. The approach-avoidance principle of behaviour has been shown to lie at the bottom of emotional reactions. Running away, for example, can be based on fear, which in turn is a result of an automatic avoidance behaviour to a stimulus (Bargh, 1997; Derryberry & Tucker, 1994; Elliot, 2006; Elliot & Maier, 2014; Lang, 1995; Lewin, 1935; van Steenbergen, Band, & Hommel, 2011).

Subtle stimuli can induce an approach or an avoidance motivation. For example, the colour red has been shown to produce an avoidance motivation (Elliot & Maier, 2014; Krieglmeier et al., 2013). This is because red limits perceptual attention – a typical sign of avoidance. Evidence shows that red, as opposed to grey, in an achievement task results in rather local than global processing (Maier, Elliot, & Lichtenfeld, 2008; Thorstenson, 2015). Additionally, some studies outline that the colour red can influence performance in achievement contexts. This might be due to red being used to mark mistakes during an individual's education as well as the association with blood, threat, and danger. Those associations result in a motivation directed towards avoiding failure and this avoidance motivation in turn negatively influences performance in situations for which flexible cognitive processing is required (Derryberry & Tucker, 1994; Elliot et al., 2007; Spielberger & Vagg, 1995). Different underlying motivations might lead to different methods of processing, which then could influence decision making. Mehta and Zhu (2009) argue that red encourages avoidance motivated reactions

whereas blue encourages the opposite – an approach motivation. Red supports detail-oriented cognitive tasks while blue supports creative cognition with both resulting from unconscious processing based on the colour encountered. The notion of a subconscious influence of colour is supported by the finding that individuals tend to choose blue for both types of tasks when asked to select a colour they believe enhances their performance. Nevertheless, the performance enhancing influence of both, red and blue, persists (depending on the nature of the task). Mehta and Zhu also point out that their findings can be applied to a consumer behaviour context as colours influence consumption.

Studies show that for some products consumers engage in shopping behaviour because of an underlying approach motivation like fun or an avoidance motivation like escaping problems. Furthermore, an approach motivation can induce a consumer to spend more money. An avoidance motivation might lead to a consumer spending less money or even leaving a store (Arnold & Reynolds, 2012; Beatty & Ferrell, 1998; Donovan & Rossiter, 1982; Patrick & Park, 2006).

Black, in contrast to red and blue, is associated with sadness, unhappiness, distress, inactiveness, upset, disturbance, despondence, dejectedness, and melancholiness as well as power and strength. Black is a symbol of sophistication, glamour, status, richness, dignity, and elegance as well as evil, death, and malice (Clarke & Costall, 2008; Labrecque & Milne, 2012; Mahnke, 1996; Murray & Deabler, 1957; Wexner, 1954; Wright, 1988).

In a first step, the master thesis aims at establishing that colour, meaning any colour in contrast to black and white, influences consumers when evaluating prices. Thus, the influence of red or blue price colour on judgement are jointly compared to the influence of black prices:

H1a: Price font colour negatively influences perceived price.

H1b: Price font colour positively influences perceived value.

H1c: Price font colour positively influences purchase intention.

These hypotheses therefore investigate whether there are significant differences between blue or red prices versus non-coloured, black prices in terms of perceived price, perceived value, and purchase intention. A negative influence on perceived price means that the price encountered is perceived lower. A positive influence on perceived value and purchase intention means that the perceived value is higher and consumers show higher purchase intention.

The Different Motivations Might Lead to the Same Outcome

Since reactions to colour follow a U-shaped curve it is likely that colours at either end of the wavelength spectrum (such as blue and red) will produce similarly strong effects: These colours typically lead to higher activation and, consequently, might attract a consumer's attention towards the respective product. Nevertheless, it has been proposed that activation is not the only factor determining the effect of colour. The underlying (approach or avoidance) motivation can also influence shopping behaviour (Elliot & Maier, 2014; Krieglmeier et al., 2013). It is possible that blue and red prices produce similar outcomes even though the underlying processes and motivations differ.

Blue is typically associated with an approach motivation, thus tends to have an (unconscious) positive influence. Therefore, it can be suggested that blue price colour leads to consumers perceiving a price more favourably. More specifically, the benefit and joy of saving money could be in the focus of a customer's perception when encountering blue prices. Additionally, consumers tend to spend more if an approach motivation influences their behaviour. As a result of that underlying positive connection between blue price colour and saving as well as the (presumably) higher willingness to pay it can be hypothesised that consumers perceive price significantly lower and value significantly higher as well as demonstrate a higher purchase intention for blue coloured prices compared to black, non-coloured prices:

H2a: Blue price font colour has a negative influence on perceived price.

H2b: Blue price font colour has a positive influence on perceived value.

H2c: Blue price font colour has a positive influence on purchase intention.

Furthermore, it could be argued that consumers are more likely to judge a price as low, perceived value as high, and show a higher purchase intention if they encounter red price colours. This argument is mainly based on two ideas: Firstly, red has been shown to elicit heuristic processing. Consequently, consumers might be more easily influenced by red price colour compared to black prices since cues (such as colour) play a larger role in the buying process under heuristic processing. Secondly, it could be argued that price colour influences price perception because consumers want to avoid the negative outcome of overpaying for a product. The red price colour is likely to induce an avoidance motivation, i.e. prices are judged

comparably low as a result of the consumer's fear of missing out on what is perceived as an offer. Therefore, the following hypotheses are developed:

H3a: Red price font colour has a negative influence on perceived price.

H3b: Red price font colour has a positive influence on perceived value.

H3c: Red price font colour has a positive influence on purchase intention.

2.3.4 Involvement and the Use of Heuristics

During the buying process, consumers engage in information processing. The extent to which information is processed and whether this occurs consciously or subconsciously depends, at least partly, on the level of involvement (Chaiken, 1980; Fazio, 1990; Krugman, 1965; Petty, Cacioppo, & Schumann, 1983). As suggested by Puccinelli et al. (2013) the influence of colour on price judgement varies with involvement. Involvement can be defined as “*a situation of personal relevance to an individual*” (Priluck Grossman & Wisenblit, 1999, p. 85). A high level of involvement, for example, can change a consumer's perceived importance of a product category or brand and induce a more thorough evaluation of alternatives (Zaichkowsky, 1986). Involvement is an important concept with respect for the first three stages of the buying process: The level of involvement especially influences the outcomes of the need recognition, information search, and evaluation stage (Puccinelli et al., 2009). When it comes to processing, the elaboration likelihood model (ELM) distinguishes two routes of processing, based on an individual's involvement. The central route requires thorough processing, careful consideration, and high levels of elaboration before persuasion can take place. Changes in attitude as a result of elaboration are rather persistent and stable over time. The peripheral route however does not involve complex cognitive tasks and persuasion is mainly a result of cues or the application of simple heuristic rules. Changes in attitude will not persist over time. The level of involvement determines which route is applied. For low involvement situations peripheral processing is common, whereas for high involvement situations the central route plays a larger role (Petty & Cacioppo, 1986). Another concept, the heuristic-systematic model (HSM) of information processing, shows many similarities to the ELM (Albarracín, Johnson, & Zanna, 2005).

Heuristic Processing Dominates under Low Involvement

Under low involvement, heuristic persuasion attempts are likely to affect opinions. However, under high involvement the quality of arguments tends to affect persuasion whereas the influence of heuristic cues is comparably low. People that have low need for cognition tend to be especially likely to be responsive to manipulation under low involvement (Axsom, Yates, & Chaiken, 1987).

Heuristic processing can be explained as using rather simple judgemental rules and requiring minimum cognitive effort. Judgements reflect easily processed information, based on superficial, heuristic cues rather than information. Consequently, non-content cues are more persuasive than the characteristics of the message. There is no detailed information processing and the focus of decision making is on simple rules. Heuristic processing is very common, since most decisions humans make are based on routine and the multitude of (daily) decisions limits the cognitive capacity devoted to each decision (Chaiken, 1980; Chen, Duckworth, & Chaiken, 1999).

Systematic Processing Dominates under High Involvement

In contrast, systematic processing is rather an exception and comprises in-depth analytical processing of relevant information. Individuals focus on the quality of the message, rather than heuristic cues. Systematic processing requires more detailed message processing, thus more cognitive ability and capacity as well as a higher willingness to provide resources for thorough processing (Chaiken, 1980; Chen et al., 1999).

Chaiken (1980) argues that individuals tend to apply a more systematic strategy to process information under high involvement. Thus, persuasion is mediated by cognitions based on the received message. In contrast, low involvement supports a heuristic processing strategy and the application of simple decision rules. Those rather simple ways of processing mediate persuasion. Chaiken has developed the HSM of information processing which states that individuals can apply heuristic or systematic processing when making decisions. Involvement (among other factors) influences whether heuristic or systematic processing is dominant in a specific situation. In high involvement situations individuals tend to put a more conscious effort into understanding, evaluating, and assessing the arguments presented. The processing is more detailed than in low involvement situations, in which less demanding ways of processing and elaboration are prevalent. This is because individuals that are less involved show a lower

motivation to process information deliberately. Consequently, individuals prefer using shortcuts or heuristic cues (in low involvement situations). Nevertheless, systematic and heuristic processing can occur simultaneously or independently. It is possible that one form of processing influences the results of the other form (Chaiken, 1980; Chaiken & Maheswaran, 1994; Chaiken & Trope, 1999; Chen et al., 1999).

Heuristic Processing Prevails in Most Situations

Research suggests, that the use of heuristic cues dominates thorough and systematic processing in the pricing context. In other words, judgement is likely to be based on heuristic processing, especially in situations involving economic decisions (Chaiken, 1980; Coulter & Coulter, 2005; 2010; Coulter & Norberg, 2009; Thomas & Morwitz, 2005; Thomas & Morwitz, 2009). For example, Coulter and Coulter (2010) propose that phonetic symbolism¹⁰ influences price perception and that the higher discount might be perceived less favourably than the lower discount if prices with small phonemes result in an overestimation of the discounts. These subconscious effects might be caused by the customers engaging in ways of processing that use shortcuts. The phonetic symbolism could serve as a heuristic cue. Other studies show evidence for the left-digit effect: Prices that end with a nine (“just-below prices”) are perceived significantly smaller than prices one cent higher (“even prices”) (Stiving & Winer, 1997; Thomas & Morwitz, 2005).

Because processing is less thorough under low involvement, it is more likely that a rather unimportant attribute such as colour influences a customer’s decision. In an experiment conducted by Middlestadt (1990) individuals were more likely to use colour as a heuristic cue in their purchase decision under low than under high involvement. Subjects were more likely to choose a pen, a product connected to low levels of involvement, that was presented with a blue background compared to a red background. For a high involvement product, in this case perfume, there was no significant influence of colour on attitude towards buying the product.

¹⁰ Phonetic symbolism refers to the symbolic connotations consonants or vowels have regardless of their purpose within a linguistic context. For example, o and u are described as heavier than i and e (Newman, 1933; Sapir, 1929).

These previous findings further outline how processing under high and low involvement differs. Whereas, under high involvement, individuals tend to engage in more central processing and more elaboration of perceived information, lower involvement leads to a greater use of simple heuristics. Simple heuristics in turn can trigger an approach or avoidance motivation, which increases the influence colours have on price judgement. This shows that non-content cues are more persuasive under low involvement. Thus, it may be speculated that there is little to no influence of colour on price judgement under high involvement whereas, under low involvement, price colour significantly influences price evaluation:

H4a: For low involvement products, price font colour has a negative influence on perceived price.

H4b: For low involvement products, price font colour has a positive influence on perceived value.

H4c: For low involvement products, price font colour has a positive influence on purchase intention.

H5a: For high involvement products, there is no differential effect of price font colour on perceived price.

H5b: For high involvement products, there is no differential effect of price font colour on perceived value.

H5c: For high involvement products, there is no differential effect of price font colour on purchase intention.

2.3.5 Colour in the Context of Priming

Retailers constantly make efforts to improve their stores in attempts to influence the consumer during the buying process. Consequently, if there is an influence of price font colour on evaluations there is justified interest in possible ways to manage that influence. Individuals' price judgements can be a result of both conscious and unconscious processing (Homburg et al., 2013; Kotler & Armstrong, 2006).

Priming Influences Subsequent Behaviour

Priming refers to presenting an individual with a stimulus so that the memory linked to the respective category becomes more accessible. In this context, category refers to a structure in the memory that entails data about a group of events, properties, or objects. Because this category is more present after the stimulus, the prime is likely to influence subsequent processing of new information. This influence tends to occur passively, automatically, and unconsciously with individuals barely recognising that the respective category has been activated. In fact, even short-lasting exposure to a stimulus (i.e. a short-lasting activation of the category) can influence subsequent evaluations since the category temporarily serves as reference for judgements. Research in psychology has shown that the prime activates the semantic memory which in turn provides evidence that a stimulus increases the action potential of a cell. When encountering new information, the cell with the highest activation is likely to engage in processing through linking the prime to the new information¹¹. Effects of priming diminish with time. Nevertheless, priming – at least for a short period – influences how new information is processed. Priming can result in assimilation or contrast effects. Assimilation is defined as the judgement's displacement towards the reference point, contrast as the displacement away from the anchor (Bargh & Pietromonaco, 1982; Della Bitta, Monroe, & McGinnis, 1981; Helson, 1964; Herr, Sherman, & Fazio, 1983; Higgins & King, 1981; Higgins, Rholes, & Jones, 1977; Lichtenstein & Burton, 1989; Monroe et al., 1977; Sherif & Hovland, 1961).

Research Links Priming and Pricing

Priming is one of the psychological concepts that is applicable to influencing customers in a pricing context (Baker, Levy, & Grewal, 1992; Herr, 1989; Monroe & Lee, 1999; Xia, 2003). Effects observed during this master thesis with respect to **H1** to **H3** could be associated with the low road for imitation described for the perception-behaviour link by Dijksterhuis et al. (2005). For example, reactions to specific colours could be a result of previously observed

¹¹ There are other approaches to explaining priming than cell activation. However, the basic reasoning tends to be similar and the discussion of the various approaches is not within the scope of this thesis. For other possible explanations of priming see Wyer and Srull (1980a), Wyer and Srull (1980b), and Meyer and Schvaneveldt (1971).

behaviour of others, thus simply an unconscious mimicry. However, the perception of behaviour can also activate specific behavioural patterns, similarly to priming in social cognition contexts. Thus, the use of priming can be linked to the high road to imitation (Dijksterhuis, 2005). *Appendix D* outlines how priming can influence reference prices and suggests that priming therefore could influence price perception.

Research shows that consumers can be distracted from or directed towards price as important attribute for product choice by priming. When evaluating cars online, the website background design (green with dollar signs or red and orange with flames) influences car choice. For the website with green background, customers place more weight on price during their evaluation process. Consequently, they choose a less expensive car in the setting with the green background compared to the choice in the red background setting (Mandel & Johnson, 2002). The green background serves as prime for price, whereas the red background aims at priming safety. Similarly, with a different product category, namely sofas, a blue-sky background with clouds primes comfort, whereas a green background with penny coins serves as prime for price. For both product categories, the influence of the prime on accessibility of respective attributes is significant. If priming occurs with respect to price, individuals are more likely to choose price as an important attribute when buying a car or a sofa, respectively. If priming aims at either comfort or safety, individuals tend to assign higher importance to the comfort of a sofa or the safety of a car.

Based on findings from a pre-test, Mandel and Johnson conducted an experiment to test the influence of priming on both preference and choice as well as the mediating effect of expertise, that is prior knowledge about the product category. The initial web shop description included the different backgrounds as prime but the actual shop in which the purchase was simulated was the same neutral shopping environment. Results reveal that priming does affect both preference and choice similarly for all levels of expertise. Subjects who experienced priming with respect to price showed a stronger preference for the lower priced car or sofa and a higher likelihood to select the lower priced item. Because the level of expertise do not have a significant influence on the effect of priming, Mandel and Johnson (2002) presented a second experiment.

Their second study confirmed that priming indeed influences individuals with low, moderate, and high levels of expertise. However, the effect results from different mechanisms for the three groups. Information search increases as a function of the prime for novices, whereas experts

might engage in other forms of dealing with a lack of information. For example, one possible explanation could be that experts infer product attributes based on previously encountered information stored in their memory. The interferences serve as substitute for further information search. However, since experts as well as novices are influenced by priming it can be suggested that the unconscious processes priming elicits will show similar results even if the detailed mechanisms differ. It is of note that priming tends to be unlikely to influence pre-existing perceptions of attribute importance in the long run (Alba & Hutchinson, 1987; Bizer & Krosnick, 2001; Mandel & Johnson, 2002).

Research has shown that priming can influence the interpretation of ambiguous stimuli (Higgins et al., 1977; Srull & Wyer, 1979, 1980). Therefore, priming could be very effective if individuals are not certain whether a price is high or low. After having encountered a prime, individuals can be inclined to judge a price based on the primed category. This means that priming can induce individuals to evaluate an ambiguous stimulus (in this context the uncertain price level) differently. Thus, depending on the prime, the encountered price is judged as either high or low.

Based on the findings described above, it is conceivable that colour can serve as a prime in terms of stimulating memory associations connected to the respective colour. It is possible that the evoked category (i.e. the associations with the colour) influences how a price is interpreted irrespective of an individual's level of expertise. This master thesis does not control for different levels of expertise since (according to previous studies) the level of expertise does not have a significant influence on priming results and since respondents are only willing to answer a limited amount of questions (expectations on the length of a questionnaire negatively influence a subject's initial willingness to participate) (Bogen, 1996; Chudoba, 2010; Galesic & Bosnjak, 2009; Harrison, 2007; Podsakoff, MacKenzie, & Podsakoff, 2012; Tarran, 2010). The colour serves as situational cue and a coloured price is likely to be evaluated not only with respect to the numerical dimension but also with respect to the colour associations in the semantic memory. Consequently, colour as prime in a pricing context should influence the evaluation of the encountered prices if coloured prices are present. Because priming influences processing, there should be effects for all tested colours and they should be similarly strong. Two sets of hypotheses are developed. The first set aims at establishing that coloured, primed prices are perceived significantly better than black prices:

H6a: Coloured, primed prices have a negative influence on perceived price.

H6b: Coloured, primed prices have a negative influence on perceived value.

H6c: Coloured, primed prices have a negative influence on purchase intention.

Furthermore, priming should lead to a higher effect size of the influence of price colour on price judgement. Thus, the second set of hypotheses compares coloured, non-primed prices to coloured, primed prices:

H7a: Priming the respective colour leads to a higher effect size for price font colour on perceived price.

H7b: Priming the respective colour leads to a higher effect size for price font colour on perceived value.

H7c: Priming the respective colour leads to a higher effect size for price font colour on purchase intention.

2.3.6 Individual Differences

Colour meanings and the effect of colour is said to emerge from biological as well as from learned sources. Learned meanings are associations that have been established at some point during an individual's life and may have been encountered repeatedly. For example, girls are likely to be dressed in pink, which in turn gives pink a feminine meaning (Elliot & Maier, 2012). Since individuals differ in various ways, there could be differences in how colours are interpreted. In fact, Puccinelli et al. (2013) report that men are more likely to be influenced by red prices, that is men perceive greater savings for prices coloured in red than women do. The authors argue that this arises because men have a higher threshold for elaboration, thus tend to apply heuristic processing in most stages of the buying process.

Explaining Individual Differences with Personality Not Gender

However, there is evidence that suggests that gender is a rather poor proxy for individual differences. There are men that tend to have rather female traits as well as women with rather male personality characteristics. This implies that masculinity and femininity are not two mutually exclusive dimensions but rather separate dimensions on a spectrum. Each individual can be described using both dimensions to varying degrees. This implies that certain characteristics and the perception of one's self could be a better explanation for individual

differences than gender (Bem, 1974; Block, 1973; Constantinople, 1973; Spence, Helmreich, & Stapp, 1975).

Consequently, the influence of colour on an individual's price perception might be linked to certain characteristics (i.e. personality traits) rather than to gender. A link between price font colour and personality traits would further expand on the idea that both the low and the high route of imitation in the perception-behaviour construct (developed by Dijksterhuis et al. (2005) and Dijksterhuis (2005)) are applicable in the context of price font colour and its influence on the buying process: An individual's perception, which is (at least partly) based on personality, can directly and unconsciously affect what the individual does and, hence, the extent to which the individual is influenced by price colour. Personality could have an effect on whether the low or the high route of imitation is prevalent in a specific situation.

The Five Factor Model of Personality Dimensions

Goldberg (1993) outlines how scholars have identified various personality traits that could be assigned to several dimensions. For example, Thurstone (1934) asked 1,300 individuals to describe another person using adjectives from a list of 60 words. Multiple factor analysis revealed dimensions that accounted for the respective traits. However, researchers initially struggled with agreeing on how to cluster the traits appropriately (Barrick & Mount, 1991; Norman, 1963). After years of struggling to find adequate categories, scholars have come to conclude that personality can be described using five dimensions of personality: The five factor model (FFM) consists of five broad dimensions, namely Neuroticism, Extraversion, Intellect/Imagination, Agreeableness, and Conscientiousness (Barrick & Mount, 1991; Donnellan, Oswald, Baird, & Lucas, 2006; Toegel & Barsoux, 2012).

Neuroticism, also sometimes referred to as Emotional Stability, is the tendency to be worried, insecure, and emotional as well as experience anxiety, depression, and anger. Extraversion in an individual's personality is associated with being sociable, talkative, energetic, and assertive. People with low levels of Extraversion tend to be rather reserved. Intellect/Imagination, also sometimes called Openness, means how open an individual is for experiences and it includes traits such as being cultured, curious, imaginative, intelligent, showing an appreciation for art, and being adventurous. Agreeableness is the extent to which an individual is cooperative, compassionate, friendly, tolerant, soft-hearted, trusting, and forgiving. Conscientiousness can be explained as being organised, acting dutifully, and efficient as well as showing self-

discipline. The dimension is also associated with the degree of striving for achievement (Barrick & Mount, 1991; Costa & McCrae, 1988; Donnellan et al., 2006; McCrae & Costa, 1985; Norman, 1963; Toegel & Barsoux, 2012).

Based on the descriptions of each of the five dimensions and the literature on different colours (including adjectives that describe colours and how they are perceived) it might be possible to link each of the dimensions to a specific colour or vice versa. For example, blue is associated with logic, efficiency, and intelligence, which might be linked to higher levels of Intellect/Imagination. This example outlines that there is literature that justifies explorative research on the idea of linking personality to colour (Birren, 1973; Chandrashekar et al., 2009; Clarke & Costall, 2008; Fraser & Banks, 2004; Mahnke, 1996; Murray & Deabler, 1957; Soldat et al., 1997; Wexner, 1954; Wright, 1988).

However, besides the possible link between certain colours and dimensions of the FFM, there might be certain personality traits which increase the likelihood that coloured prices influence subsequent evaluation. For example, given that people who score high in the Consciousness dimension are rather organised and show self-discipline, it might be reasonable to argue that those individuals evaluate alternatives more carefully, thus coloured prices would be more unlikely to influence price judgement. It has been shown that, in a learning environment, people who process more thoroughly are rather conscientious, extraverted, and emotionally stable (Furnham, 1992; Geisler-Brenstein, Schmeck, & Hetherington, 1996; Komarraju, Karau, Schmeck, & Avdic, 2011; Zhang, 2003). If those findings are also applicable to a consumer behaviour context, high scores in the respective dimensions of the FFM might also decrease the influence of coloured prices.

All in all, there might be two possible influences of personality on the link between colour and price judgement. On the one hand, the personality traits themselves could be responsible for different levels of evaluation or different perceptions of coloured prices (which in turn influence subsequent evaluations). On the other hand, there might be a specific perception for certain colours because they relate to personality traits and this perception could be responsible for different levels in perceived price, perceived value, and purchase intention.

Consequently, there is the need for an (explorative) analysis which outlines personality traits that might influence the effect of coloured price tags on price judgements. Thus, the following research propositions are developed:

P1: Specific (favourite) colours can be associated with certain personality traits.

P2: Personality traits influence the effect of coloured price tags on price judgement¹².

2.3.7 Coloured Prices in an Offline versus Online Setting

Consumers increasingly use online channels when making purchases. However, online environments have different characteristics than (offline) retail stores. Online shopping can be defined as “*a shopping activity performed by a consumer via a computer-based interface, where the consumer’s computer is connected to, and can interact with, a retailer’s digital storefront (implemented on some computer) through a network (e.g. the WWW)*” (Häubl & Trifts, 2000, p. 5). This definition entails that the products are not physically present during the online shopping process and salespersons are not physically available either. Often, consumers use online channels during the information search part within their buying process (Häubl & Trifts, 2000). Because of the differences between retail and online channels it cannot be assumed that price colour also influence price perception on an online channel simply because it might do so in an offline environment.

Differences between Retail (Offline) and Online Channels

Literature suggests that there are differences between retail and online channels (Alba et al., 1997). For example, consumers are said to have more control over the type of information they receive and experience reduced search costs in an online setting compared to the offline buying process (Mandel & Johnson, 2002). This might be caused by the smaller role of sensory attributes of products in online channels, possibly due to the nature of the online channel. Especially visual cues (at least according to some studies) have a lower influence on decisions, whereas factual information has a higher influence than in a retail environment. Furthermore, online channels face a higher price sensitivity due to the strong influence of discounts. Nevertheless, customer decision is less influenced by promotion and price in an online setting than it is for an offline channel (Brynjolfsson & Smith, 2000; Degeratu, Rangaswamy, & Wu, 2000). Arce-Urriza, Cebollada, and Tarira (2017) show that price promotions do not have a

¹² Price judgement (in this context) refers to price perception and/or perceived value, meaning that at least one of the measures is significantly influenced by personality.

significant influence on buying behaviour in an online channel, whereas in retail outlets the effect is significant. A price promotion is defined as “*a mark down on a product’s recommended retail price*” (Arce-Urriza et al., 2017, p. 85). The authors suggest several underlying reasons for their findings: Firstly, consumers rarely spend time on screening products and comparing information online but rather buy the same products as before. This decreases the possible influence of price promotions. Secondly, time pressure and convenience are the prevailing reasons to shop online. Thus, consumers tend not to engage in extensive search online but switch to a retail outlet if they have sufficient time. With sufficient time the effect of price promotion increases. Consequently, there is a larger influence of promotions in a retail settings than in an online setting.

Other scholars also argue that the price sensitivity is lower for online channels (Chu, Chintagunta, & Cebollada, 2008). Chu et al. (2008) provide possible explanations for their findings: For example, customers that are subject to higher time pressure might use an online channel instead of a retail store, thus search less and engage in fewer price comparisons. Also, there is more information available online which might decrease the importance of price in the decision-making process.

However, Brynjolfsson and Smith (2000) outline that prices in an online setting tend to be lower than offline, which implies more price competition online. Additionally, Arce-Urriza et al. (2017) note that their findings regarding higher price sensitivity in an offline setting might only hold true for the tested product categories (i.e. groceries, namely orange juice). The authors point out that the opposite could be true for an online electronics market. That is because in a grocery market customers first decide on a store and then on their purchases whereas in an online electronics market the two steps are reversed.

Furthermore, a lower ability (which sometimes is a result of time pressure) or motivation to process information increases the use of cues such as price to infer product quality. Furthermore, consumers might make decisions that are satisfactory but not optimal because large number of alternatives or difficulties in comparing the alternatives increases search costs (Kardes, Cronley, Kellaris, & Posavac, 2004; Payne, Bettman, & Johnson, 1993; Suri & Monroe, 2003). For example, some products can be inspected prior to purchase in a retail outlet, whereas in an online setting this is rather unlikely. Thus, the same product can be classified as a search good offline and an experience good online. This means that information about product attributes which is available prior to the offline purchase might only be available after the

purchase online. This especially applies to physical cues of the product (Alba et al., 1997; Moore & Andradi, 1996; Nelson, 1974). Consequently, consumers will have to find other criteria to evaluate the product. Consumers tend to be willing to accept imperfect decision accuracy as a trade-off for a reduction in cognitive effort (that is required within the decision process). Sometimes, consumers try to infer product quality from product price, which means that price judgement will influence perceived quality and consequently product evaluation. Consumers do so even though comparison of the objective price-quality relationship to subjective evaluations show that the subjective perception has limited accuracy. However, the lack of pre-purchase evaluation of some attributes might force customers to use other available information for their purchase decision. Consequently, consumers might use price to infer quality attributes even if they know that this is not an optimal indicator (Bettman, Johnson, & Payne, 1990; Bornemann & Homburg, 2011; Johnson & Payne, 1985; Lichtenstein & Burton, 1989; Rao & Monroe, 1989).

Price Colour in an Online Setting

Since visual information has a different level of importance in an online setting (compared to a retail outlet) it has to be evaluated whether price font colour influences a customer's judgement in an online setting as well. Indeed, Puccinelli et al. (2013) point out that further research on coloured prices could also evaluate the influence of price colour in an online setting. This is especially interesting as consumers in an online setting might decide using only imperfect information (due to time constraints or the limited ability to evaluate physical product characteristics). The lack of time and the need for other decision criteria than only product attributes could increase the use of heuristic cues such as colour.

Given the differences among offline and online channels – and, even more so, in the light of the contradicting literature – a second experiment is conducted within the scope of this master thesis. This experiment evaluates the hypotheses **H1-H7** and research propositions **P1** and **P2** in an online shop-like environment. The aim of experiment 2 is to provide further clarification in case of ambiguous results from experiment 1 as well as to establish whether the previously outlined effects are also present in an online setting.

3. Experiment 1

Experiment 1 focuses on the influence price colour has on price perception in a retail setting. The situation of a retail setting was simulated by means of an online questionnaire in that the subjects were exposed to a stimulus that resembles a traditional newspaper advertisement.

3.1 Research Design and Data Collection Procedure

The following focuses on outlining the research design, the research methods, and techniques used during the research as well as describe how the data were collected (Iacobucci & Churchill, 2010; Kothari, 2009).

3.1.1 Research Design

Firstly, it had to be established how the research question (and the hypotheses derived from it) should be answered (Iacobucci & Churchill, 2010). The research design is the conceptual structure for conducting the actual research. This structure depends on the purpose of the research which can be explorative or formulative (gather information to gain familiarity with the topic or define problems), descriptive (describe characteristics of an individual, a group, or a situation), diagnostic (determine frequency of occurrence), or explanatory (test hypotheses about cause-and-effect relationships). The aim of this master thesis is to accurately describe the causal relationship of variables. The design had to make sure that errors and biases are minimised and reliability and validity are ensured. This allowed for conclusions with respect to potential cause-and-effect relationships (Kothari, 2009; Kotler & Armstrong, 2006; Saunders, Lewis, & Thornhill, 2009)¹³.

In this master thesis, the influence of price font colour on perceived price, perceived value, and purchase intention was evaluated in form of an online questionnaire. Subjects were either primed or not primed and all respondents were given one low and one high involvement stimulus. The colours used for the prices were blue, red, and black. Finally, subjects stated the

¹³ For further classifications and a more detailed description of research types see *appendix E*.

affect associated with the colours, completed a personality test, and provided socioeconomic as well as demographic information.

All in all, the type of research used within this master thesis required the collection of quantitative data and subsequent analysis using statistical methods. This produced results that can be generalised.

3.1.2 Questionnaire Design and Method of Data Collection

Collection of Primary Data Using a Questionnaire Method

Because of its empirical nature this study needed primary data (collected using an experimental design) to test the outlined hypotheses. Primary data are data specifically collected by the researcher for the research problem whereas secondary data have been collected by someone else and for another purpose than the research at hand (Homburg et al., 2013). There are several possibilities for collecting primary data including, for example, observations, interviews, or questionnaires. This master thesis used methods and techniques from field research (more specifically: a questionnaire method) to fulfil its purpose. The main reasons for the use of a questionnaire were the cost efficiency and the reach of a wide geographical as well as large audience, the possibility for respondents to answer at any point in time that suited them and the freedom from interviewer bias. The cross-sectional or one-time nature of the questionnaire allowed for an efficient collection of data from a large number of subjects (which usually increases reliability and facilitates the use of statistical techniques) (Iacobucci & Churchill, 2010; Kothari, 2009; Kotler & Armstrong, 2006).

Minimising Errors and Biases

When measuring a construct such as perceived price it is possible that those are not directly accessible, thus the measurement is limited to attributes. These attributes aim at representing the construct as adequately as possible. However, any value measured in a questionnaire consists of the true value for the construct plus some systematic errors plus random errors. Possible sources of such errors are the respondent, the situation, the researcher, and the instrument. For the measurement to be sound reliability, validity, and practicality had to be ensured. Validity is *“the extent to which a test measures what we actually wish to measure. Reliability has to do with the accuracy and precision of a measurement procedure [...] Practicality is concerned with a wide range of factors of economy, convenience, and*

interpretability” (Thorndike & Hagen, 1969, p. 162). Once validity was ensured, the measurements still had to be evaluated with regard to their reliability. Because there are several disadvantages associated with questionnaires (e.g. a low response rate) and since it is important to provide high reliability and validity with empirical research, the questionnaire was designed keeping possible negative influences in mind. Reliability of the questionnaire was ensured in several ways with specific attention to observer bias and error, method bias, and participant bias and error (Churchill, 1979; Hair, Black, Babin, & Anderson, 2010; MacKenzie & Podsakoff, 2012; Podsakoff et al., 2012; Viswanathan & Kayande, 2012).

Closed-End Questions Reduce Observer Bias

The questionnaire was structured to the extent that all subjects were given the same pre-determined questions with the same wording. This master thesis used closed-end questions to limit the possible answers to the options provided (although research suggests that open-end questions are the more adequate tool in many situations). This reduced the risk of observer bias because open-end questions would allow for subjective interpretation of answers provided (Iacobucci & Churchill, 2010; Kothari, 2009). For the questionnaire design the SoSci Survey online tool was used. All questions and scales were entered through the software interface, whereas the actual survey was created with PHP and HTML coding. All data were exported automatically from the survey design software and imported into SPSS. This prevented errors connected to manual data transfer.

Design Accounts for Respondent Fatigue

According to Edwards (2008, p. 476), method bias results from “*response tendencies that [participants] apply across measures, similarities in item structure or wording that induce similar responses, the proximity of items in an instrument, and similarities in the medium, timing, or location in which measures are collected*”¹⁴. The influence of method bias is higher when subjects are either not willing to answer accurately or the difficulty of the questionnaire and subject’s ability to answer the questions impact whether they can provide accurate answers. The questionnaire was structured to account for respondent fatigue which could lead to respondents dropping out or simply chose answers to be finished instead of stating their actual

¹⁴ For a discussion on definitions of method bias see Podsakoff et al. (2012).

opinion. The order of questions is also important because common survey response effects such as question order effects and affective priming can occur. That is, that the more important research questions (i.e. does price colour influence perceived price, perceived value, and purchase intention) were evaluated at the beginning of the questionnaire since with increasing time spent on answering, the answers might become less differentiated. This structure allowed to establish whether price colour significantly impacts price perception and then, subsequently, to consider how this effect may be influenced (i.e. involvement, personality). To rule out affective priming, subjects were not asked about specific colours at the beginning of the survey but towards the end (Baumgartner & Steenkamp, 2001; Galesic & Bosnjak, 2009; Krosnick, 1999; Lilien, Rangaswamy, & Bruyn, 2013; Moy, Scheufele, Eveland, & McLeod, 2001; Podsakoff et al., 2012; Saunders et al., 2009; Scheufele & Tewksbury, 2007; Shaughnessy, Zechmeister, & Zechmeister, 2011; Zaller & Feldman, 1992).

Online Questionnaire Reduces Participant Bias

Participant bias often results from a social desirability bias. This bias stems from participants providing answers that they believe are socially desirable but are not necessarily an accurate description of their beliefs, opinions, or themselves. Socially desirable responses were limited by means of the online nature (i.e. the absence of an observer while filling in the survey) and the reassurance of anonymity throughout the survey. Additionally, participant error might be a result from subjects not seeing how or why the research topic is relevant to them. This error was minimised by designing a newspaper advertising analogous to the ones encountered during an everyday buying process. The similarity to actual stimuli aimed at reminding subjects that the research deals with situations from their everyday lives and that it is therefore relevant to them (Maccoby & Maccoby, 1954; MacKenzie & Podsakoff, 2012; Podsakoff et al., 2012).

Ensuring Validity

The research design aimed at ensuring both internal and external validity. External validity is concerned with the possibility of generalising the results to, for example, other settings or populations. The internal validity refers to whether the research measures what it is designed to measure. The empirical nature of this study (researching causal relationships between variables that describe aspects of a real situation) was the basis for its external validity (Kothari, 2009). The primary concern with internal validity arises from the third variable problem, that is the potential influence of a third variable on the effect the independent variable has on the dependent variable. More specifically, it is important to establish that the changes in the

dependent variable would not have been observed if there were no variation in the independent variable. However, it is not sufficient to establish that there is a connection between the variables because the independent variable does not have to be the only cause for variations in the dependent variable. For example, perceived price, perceived value, and purchase intention are not only influenced by colour or by price but can also be influenced by other situational factors. Research does not necessarily aim at showing that the independent variable (here: price colour) is the only factor influencing the (main) dependent variables (here: perceived price, perceived value, and purchase intention) but one variable with a casual influence. Since correlation does not ensure causation the third variable problem had to be ruled out to establish internal validity. A distribution of the questionnaire to a wide audience ensured that third variables connected to self-selection could be controlled for. Besides analysing the variation in perceived price, perceived value, and purchase intention, this master thesis also considered control variables to provide high internal validity. Furthermore, subjects were assigned randomly to one of the conditions which avoided third-variable threats and ruled out self-selection concerns. For the randomisation process a condition was drawn from urns without replacement to ensure that all experimental groups have similar sizes (at least before the data are cleaned). The ballot was stored when participants finished the survey to account for subjects who dropped out earlier. Participants were also not given any monetary incentives for completing the questionnaire in order to avoid possible extraneous cues that compromise validity. The nature of an online questionnaire allowed to rule out experimenter expectancy effects which might occur in a true experimental setting (Brewer, 2000; Campbell, 1957; Campbell & Stanley, 1963, 1966; Cook & Campbell, 1979; Kothari, 2009)¹⁵.

The practicality aspect refers to the measurement being economical, interpretable, and convenient. From an economic and convenience point of view, a questionnaire is an efficient way to achieve the research goals. Because the interpretation of answers is typically done by the researchers, interpretability was given as well (Kothari, 2009).

¹⁵ For a more detailed differentiation between possible influences on validity as well as examples and definitions of the respective terms see Brewer (2000).

Rotation and Randomisation to Reduce Biases

The order of stimuli was rotated and the assigned colours were randomised (to avoid unwanted priming effects), (Kothari, although it has been suggested to have the same question order for all subjects (Kothari, 2009). This ensured that results from subjects in the non-priming condition were not due to the colour of the first stimulus unintentionally serving as prime for the second stimulus. This especially reduced biases such as primacy and recency effects as well as contrast and consistency effects. The importance of randomisation was, for example, outlined by Fisher (1926)¹⁶.

Online Questionnaire as the Best Option for this Research

Online questionnaires are convenient, allowing the researcher to see results instantaneously, and can be conducted expeditiously. In an electronic questionnaire, subjects could, furthermore, easily be reminded to or forced to answer all items, limiting item incompleteness. All in all, the survey was conducted electronically as an online questionnaire to increase the number of possible subjects as well as limit the impact of undesired influences such as the social desirability bias or an interviewer's interference (Buchanan & Hvizdak, 2009; Kiesler & Sproull, 1986; Krosnick, 1999; Maccoby & Maccoby, 1954).

Pre-test

Two product categories (that had previously been shown to either tend to be a high or a low involvement product category) were used in the survey (Dens & Pelsmacker, 2010; Zaichkowsky, 1985). Based on the results of a pre-test (reported in *appendix F*) instant coffee was the appropriate choice for the low involvement condition and laptops were used in the high involvement condition.

Experiment 1: Retail (Offline) Channel

The Survey Design and Scale Type

Respondents were randomly assigned to one of two conditions (prime, non-prime) and then subsequently shown one colour (red, blue; in the priming condition the primed colour) or two

¹⁶ The presumably first argumentation for randomisation as statistical principle can be found in Peirce (1877, 1878a, 1878b, 1878c, 1878d, 1878e, 1883).

different colours (in the non-priming condition). All subjects were asked to assess two advertisements with coloured prices (one for instant coffee and one for laptops) with respect to perceived price, perceived value, and purchase intention. Furthermore, a scale for affect and a short personality test were embedded. All participants were asked to provide demographic and socioeconomic information at the end.

This master thesis used ratings in order to infer the implied rank order (instead of rankings) because subjects have more pleasure from ratings and tend to be more satisfied with them as ratings are less time consuming (Elig & Frieze, 1979; McIntyre & Ryans, 1977; Reynolds & Jolly, 1980; Taylor & Kinnear, 1971). To ensure that the questionnaire produced answers that reflect the target constructs, previously established scales from academic literature were used¹⁷. The use of previously validated scales also ensured that issues associated with complexity, ambiguity, and participants' cognitive capabilities were limited. The combination of semantic differential items and Likert scales further reduced the risk of method bias. All scales used were of ordinal nature which means the assigned values represent an order with answers from the spectrum, in this case, associated numbers from 1 to 7. However, the scales were symmetric and the distances between each two values were assumed to be equal. Therefore, the scale could be treated as interval scales, allowing for the data to be treated as metric. The scale endpoints were always labelled, the middle only when the previously established scale indicated a label for this option. Some researchers found that labelling more or all scale points improves reliability, validity, and respondent satisfaction. This was especially found when the scale was divided into two equal parts by using a midpoint label (Dickinson & Zellinger, 1980; Hair et al., 2010; Klockars & Yamagishi, 1988; Krosnick & Berent, 1993; Peters & McCormick, 1966). Although a neutral middle was assumed, there was no labelling added for scales which only showed labels on the endpoints because naming the midpoint could alter the meaning of all options. Those issues could especially arise as a result of specific differences in wording and could have an effect beyond what would be acceptable for a previously established scale, thus would compromise reliability and validity instead of improving the questionnaire. For the subsequent statistical analysis of the collected data, it was assumed that the data obtained using ordinal scales were similar to interval variables. This was possible mainly because of the assumption of equal distance between the options or values on a scale. The assumed interval-

¹⁷ For a summary of constructs, scales, and sample items refer to *appendix G*.

scale-like nature allowed, for example, to calculate the mean instead of only median and mode. Dispersion, consequently, could be measured by standard deviation or variance and statistical tests such as t-tests or F-tests could be applied to check for significance (Aaker, Kumar, Day, & Leone, 2011; Bryman & Cramer, 2009; Groves et al., 2009; Hair et al., 2010; Kothari, 2009; MacKenzie & Podsakoff, 2012; Podsakoff et al., 2012).

Because subjects chose from a continuum of answers like, for example, “strongly disagree” to “strongly agree” and did not answer categorical questions (for the main constructs used), the influence of response order effects was minimised. There were no choice alternatives (that were not from a continuum) of which a subject could have decided to choose the first applicable one instead of the optimal one. Although some scholars have suggested that it is necessary to include a no-opinion or no-response option to discourage subjects from providing meaningless opinions, it was shown that this does not increase necessarily reliability. Additionally, some subjects might have an internal opinion they could state or would be able to formulate a specific tendency but would have been discouraged to do so by a no-opinion option (because it reduces cognitive work, thus saves time) (Kothari, 2009; Krosnick, 1999; McClellon & Alwin, 1993; Poe, Seeman, McLaughlin, Mehl, & Dietz, 1988). Consequently, the scales for perceived price, perceived value, purchase intention, affect, and personality did not include a no-opinion option forcing subjects to decide. However, a “prefer not to say”-option was included for the demographic and socioeconomic questions because of their sensitive nature. Although anonymity is ensured, some respondents (who are uncomfortable with providing such information) might be inclined to give wrong answers if forced to answer the questions. Since no answer is better than a wrong answer, a “prefer not to say”-option was included for the respective section. A statement specifying what this option means was adapted from Joinson, Paine, Buchanan, and Reips (2008). If respondents chose the “prefer not to say”-option for any of the questions other than their ability to see colour the mean value of the respective item was assigned for the missing value for subsequent analysis.

Priming Colour

To measure the effect of priming on the influence of colour on perceived price, perceived value, and purchase intention, subjects (who have been assigned to the priming condition randomly) were shown the same, but colour-worded, instructions as subjects in the non-priming condition. For primed subjects both stimuli were shown with prices in the same, previously primed colour. In the non-priming condition, subjects were shown one stimulus, that is one advertisement, with

either red, blue, or black prices and the other stimulus with one of the two remaining colours¹⁸. The combinations were randomised. The order of stimuli, that is whether the high or low involvement stimulus is shown first, was rotated for both the priming and the non-priming condition. This ruled out multiple problems that could occur without randomisation such as unintended priming effects or some memory errors and biases.

Stimuli Design

For each product category, subjects were exposed to advertisements with different product options. The instructions were adapted from (Puccinelli et al., 2013). Puccinelli et al. also showed that the exact design of the advertisement itself is unlikely to interfere with the independent and dependent variables, thus their ad designs were slightly adapted to the context of this master thesis. The advertisement for the low involvement condition showed three instant coffees and the high involvement advertisement showed three laptops. Each of the items was described with several product attributes such as coffee package size or laptop battery lifetime and price. Showing several product attributes ensured that subjects were not aware of the dependent variables and thus less likely to find cues on what they were expected to do. This limited the possibility of researcher-desirable answers (Brewer, 2000). The prices were an average price from several local stores in Bergen, Norway, and Mannheim, Germany, portrayed in Euros. The average prices were rounded to the nearest 99 or 49 cents for the low involvement products and 99 or 49 Euros, respectively, for the high involvement products to adequately reflect real-world pricing (Stiving & Winer, 1997; Thomas & Morwitz, 2005)¹⁹. The instructions for each question were adopted from Oh (2000).

Main Constructs: Perceived Price, Perceived Value, and Purchase Intention

This master thesis measured perceived price, perceived value, and purchase intention (because purchase intention is influenced by perceived value which in turn is (partly) influenced by

¹⁸ *Appendix H* further outlines how the priming was conducted and which specific colours were used.

¹⁹ Refer to *appendix I* for a depiction of the advertising stimuli.

perceived price) to evaluate the influence of colour along several steps of a consumer's decision process (Chang & Wildt, 1994).

The perceived price is influenced by the objective price, as stated in Euros, and the internal reference price (Chang & Wildt, 1994). Since the reference price can be influenced by other prices in the environment and how they are perceived it is likely that coloured prices in a shop influence the reference price, thus, consequently the perceived price. While Chang and Wildt (1994) used a single 9-point scale for measuring perceived price this master thesis measured the item adopted from their research on a 7-point scale to have the same number of scale divisions across all measures²⁰. Subjects indicated whether they regard the prices shown in the store as low or high. Additionally, a second item was used to measure perceived price. Similar to Ryu and Han (2010) subjects were asked to indicate on a 7-point Likert-type scale the extent to which they agree with the statement that prices shown were reasonable.

After looking at the advertisement subjects were asked about their perception of savings, more specifically about the perceived value for money the store delivers. The scale used was adapted from the measure developed by Dodds et al. (1991). The five items used were changed into the plural form to account for the perceived value that the store delivers, not the perceived value of a single product. Subjects were asked whether they perceived the products to be a poor value for money or a good value for money, whether they consider the prices to be economical and the products a good buy or not, whether the prices shown are acceptable or not, and whether the products appear to be a bargain or not. Perceived value was measured with a 7-point scale.

To predict what behaviour might result from an influence of price colour on perceived price (and on perceived value), purchase intention was measured using the scale outlined by Jarvenpaa, Tractinsky, and Saarinen (1999)²¹: "How likely is it that you would go to this store?" (adapted), "How likely is that you would consider purchasing from this store in the next three months?", "How likely is that you would consider purchasing from this store in the next year?", and "For this purchase, how likely is it that you buy from this store?". Subjects were asked to

²⁰ For a discussion on the number of scale divisions and the reasoning behind the use of 7-point scales in this master thesis see *appendix J*.

²¹ Different possibilities to measure purchase intention are discussed in *appendix K*.

indicate their purchase intention on a 7-point scale (“very unlikely” to “very likely”). Results were weighted equally to produce the value for purchase intention for each subject.

Affect (for comparison to previous research)

As suggested by Puccinelli et al. (2013), this master thesis also controlled for emotional states. That is because previous research indicates that colour influences evaluation in two stages, the affect stage and subsequently at the evaluation stage (Crowley, 1993). Thus, subjects were asked to indicate their emotional states on a three-item 7-point scale adapted from Watson, Clark, and Tellegen (1988). Subjects indicated to what extent they feel happy, pleased, and glad on a scale from 1 = “not at all” to 7 = “extremely”. This measure was embedded after the scales for perceived price, perceived value, and purchase intention. This scale was used twice in the non-priming condition (once after the low involvement stimulus and once after the high involvement stimulus) in order to measure affect for both, red and blue price colour. For the priming condition, it was also embedded twice to control for differences in affect during the survey which are not necessarily linked to colour.

Personality Scale

The assessment of a respondent’s personality was based on the FFM (sometimes referred to as Big Five). However, since the main object of this study was not the assessment of personality but its effect on the influence of colour on price perception a short version of the typical five factor model scale was used. The short version also reduced the negative influence of survey length on response rate and data quality (because the personality test was implemented at the end of the questionnaire and it has been shown that questions asked later have shorter response times and result in more uniform answers). This helped to keep the questionnaire as short as possible (Bogen, 1996; Chudoba, 2010; Galesic & Bosnjak, 2009; Tarran, 2010). It has been argued that the short form has acceptable reliability and is especially useful when the number of measures is constrained by, for example, time (Cooper, Smillie, & Corr, 2010). This short measure is called Mini-IPIP personality scale since it assesses personality based on items in the International Personality Item Pool (Goldberg, 1999). The respective items are proxies for personality inventories and have been shown to be applicable when evaluating personality traits. This master thesis used the 20-item Mini-IPIP scale developed by Donnellan et al. (2006)

to assess personality traits²². Each of the dimensions from the FFM was measured with four items. This master thesis used the term Neuroticism for Emotional Stability since that is the label used by the authors of the Mini-IPIP scale. Neuroticism is merely on the opposite end of the same spectrum as Emotional Stability thus it is the same dimension reversely scored. Respondents indicated on a 7-point scale to what extent the behaviour described is applicable to them. To produce a total score for each of the five personality dimensions the scores of the respective items were added and then divided by the number of items in that dimension, resulting in a mean value for each dimension (used to describe an individual's personality).

In order to be able to evaluate **P1**, subjects were also asked to indicate their favourite colour. Several colours were named and an "other, please specify"-option included. The order in which the options were presented was rotated to ensure that subjects do not select the first applicable instead of the optimal option.

Control Variables and Survey Instructions

There are potential extraneous factors that could have had an impact on the relationship of the constructs included in this master thesis. To control for possible differences that could arise from variations within a sub-group, participants were asked to provide information on their age, gender, household net income, and employment status. The age ranges and income ranges were retrieved from Homburg, Koschate-Fischer, and Wiegner (2012). Income was stated as Euro instead of Dollar values. The question on employment status served as confirmation of the suspected student-based sample. The different options were retrieved from Wyse (2012) and an "other"-option and a "prefer-not-to-say"-option were added. However, some respondents might not be willing to provide the information at the beginning of the questionnaire but are willing to do so after they have already answered all other questions. Additionally, the concern or anxiety to confirm negative stereotypes (known as stereotype threat) was accounted for in the design of this thesis: Demographic and socioeconomic information was requested at the end to avoid that respondents experience any concern while filling in the main part of the survey (Harrison, 2007; Kothari, 2009; Steele & Aronson, 1995). Because of the nature of an online questionnaire subjects might live in different countries at the time of the study. As price levels can differ among countries, this study controlled for country of origin to discover differences

²² *Appendix L* further outlines reasons for the use of the 20-item Mini-IPIP scale.

in responses that might arise from differences in price levels and not from price colour. At the end of the questionnaire subjects were also asked to indicate which colour they associate with sales prices since the colours used for advertising sale prices among countries. Subjects were presented with a multiple-choice list with the colours red, orange, yellow, green, blue, purple, black, and white as well as an “other”-option. The alternatives were chosen according to the most frequent naming for specific wavelengths in the visible spectrum (and, in addition, black and white). Sale price colour is important to control for because there is the possibility that one of the colours, for example red, is commonly associated with sale prices and therefore shows better results than other colours. Thus, the effects shown in the study could be due to previous associations with low prices and not a result from the specific properties of a colour. To rule out this possibility, information on subjects’ previous associations with sale price colours was requested (multiple-choice question). Finally, participants were asked to indicate whether they suffer from or have been diagnosed with any form of colour vision deficiency. This item was included because colour and colour differences are the central constructs within this master thesis. Elliot and Maier (2014) pointed out the importance of accounting for colour-deficient participants. Failure to do so might result in inconsistent findings. Also, previous researchers had to eliminate subjects because of colour blindness to ensure the accuracy of their results (Bellizzi & Hite, 1992). Scholars from various areas have noted that, especially with sensitive information, subjects’ answers are less reliable when anonymous or confidential treatment of the provided information is not ensured (O'Malley, Johnston, Bachman, & Schulenberg, 2000). Thus, respondents were affirmed that the information provided is stored anonymously. To ensure that respondents kept that in mind, this information was provided at the beginning of the questionnaire, before filling in the personality test, and a third time before providing demographic and socioeconomic information. It is important to guarantee subjects that they cannot be identified as an individual when asked about sensitive information such as demographics or socioeconomics as well as when filling out a personality test. Subjects were also assured that there are no right or wrong answers (Podsakoff et al., 2012).

The time required to complete the questionnaire was stated on the first page, whereby the number originated from the experiences collected during the software validation period. An indicated, thus expected, completion time of five minutes could be considered acceptable, thus the questionnaire accounted for the negative influence of expected completion time on willingness to participate (Galesic & Bosnjak, 2009).

The previously described scales and wordings were selected carefully to minimise error and biases. Since respondents' answers are not only influenced by question wording but also by visual elements the questionnaire was designed with a strong focus on providing reliable results (Couper, Traugott, & Lamias, 2001). For example, a bar showing the progress in completing the questionnaire was implemented to keep respondents motivated to finish the questionnaire. Also, it has been suggested that showing multiple items per page can be beneficial for data quality (Couper et al., 2001). Therefore, perceived price, perceived value, and purchase intention were shown on the same page (affect was shown on the next page in order to avoid having too many items on one page). All questions regarding the personality test were presented on a single page as well. The questionnaire was designed using a neutral design with only black, white, and shades of grey to ensure that the questionnaire colour did not interfere with the colours used within the study and did not influence the results in favour of one of the tested colours. This again ruled out the possibility of biases due to unintended priming of colours. This was particularly important since the colours and other design elements of a questionnaire affect a respondent's behaviour and could influence the quality of the data collected (Couper et al., 2001; Kothari, 2009).

Sample Design

The results within this master thesis were based on a sample since it is (almost) impossible to conduct a study using the entire world population. Sample design has been defined as “*definite plan determined before any data are actually collected for obtaining a sample from a given population*” (Kothari, 2009, p. 14). Because of the ease of access the focus of the design was convenience sampling (primarily students)²³.

The questionnaire was distributed online via social media in order to ease enrolment in the study. Commercial options for distribution of the questionnaire were not feasible given the monetary burden and the early stage of this research. To achieve robust results the questionnaire was distributed online in three ways: Firstly, students of the Norwegian School of Economics, Bergen, Norway, were asked to fill in the questionnaire. Secondly, the questionnaire was shared with students from the University of Mannheim, Mannheim, Germany, and lastly, distributed to a wider audience via different social media groups and pages. To increase response rates all

²³ For a discussion of other possible sample design see Kothari (2009).

target subjects were reminded to participate in the survey one day after the initial contact (Brewer, 2000; Iacobucci & Churchill, 2010).

3.2 Analysis and Results

In this section, the data are analysed for significance, the hypotheses **H1-H7** are investigated and the research propositions **P1-P2** are evaluated. Furthermore, the results are compared to previous findings as well as to what would be expected according to literature. Detailed information will be provided as to how the data were screened, how the final sample was obtained, how reliability of the scales was evaluated, and which tests were used to analyse the data for significance.

3.2.1 Initial Data Analysis

In the initial data analysis phase the data are evaluated against a certain set of criteria and, if necessary, corrections are made. This phase does not aim at answering the research questions (Adèr, Mellenbergh, & Hand, 2008).

Quality of Data

Data Screening, Sample Size, and Sample Characteristics

The response rate (1.4%) was fairly low reflecting the untargeted, or rather impersonal, distribution approach ($response\ rate = \frac{number\ of\ respondents\ who\ entered\ the\ survey}{number\ of\ possible\ respondents} = \frac{222}{15,755} \approx$

1.4%). 222 subjects started the survey and 194 filled in all items (initial sample size $N = 194$).

Hence, the careful design of the survey resulted in a completion rate of 83%

($completion\ rate = \frac{number\ of\ completed\ surveys}{number\ of\ respondents\ who\ entered\ the\ survey} = \frac{194}{222} \approx 83\%$).

Checking the data for highly inappropriate responses (“data screening”) constitutes an important step that has to precede the statistical analysis of the data (Tabachnick & Fidell, 2013). The process of data screening also involves data editing which is the adjustment of errors to ensure validity and consistency (Granquist & Kovar, 1997). It is important to check the

obtained data for careless responses²⁴. The questionnaire design used in this master thesis aimed at minimising such influences through keeping the length of the survey to a minimum, not offering compensation that might stimulate subjects to simply click-through for the sake of getting compensated as well as making participation voluntary (Berry et al., 1992; Brewer, 2000; Meade & Craig, 2012). Nevertheless, the online nature of the questionnaire might have resulted in some careless responses due to anonymity and the lack of personal accountability (Douglas & McGarty, 2001; Lee, 2006). It is also possible that respondents engaged in so-called multitasking which can be described as the tendency to perform several tasks at the same time like, for example, watching a movie while typing. This would limit the attention paid to the specific items and to filling in the questionnaire (Carrier, Cheever, Rosen, Benitez, & Chang, 2009; Meade & Craig, 2012; Spelke, Hirst, & Neisser, 1976). Consequently, the obtained data were screened carefully and 28 cases were taken out of the sample prior to further analysis. The respective cases were deleted because the respondents' answer patterns revealed that they did not read the items (carefully) and only clicked through the survey which resulted in contradicting answers: For example, the same price for the same stimulus was judged as very low but also very high at the same time by the same respondent. Careless responding influences results especially if reversed scales are used, which was the case for one of the two scales measuring perceived price. Responding irrespective of item content is a type of problematic response that has been described as content nonresponsivity, a form of stimulus avoidance that can cause random or careless responses (Nichols, Greene, & Schmolck, 1989; Woods, 2006).

Meade and Craig (2012) suggest the use of post hoc methods that should be performed after the data has been obtained. For example, response time has been shown to have a nonlinear relationship with the quality of obtained data. This means, that very short answer times should be deleted from the sample because they are likely to be careless responses²⁵. Consequently,

²⁴ For reference values on careless responses from other studies refer to *appendix M*.

²⁵ For possibilities to account for careless responders prior to administration see Meade and Craig (2012) as well. The additional scales (that would be required) were implemented for this master thesis in order to keep survey length to a minimum. For further discussions on data editing and cleaning see Little and Smith (1987), Karweit and Meyers (2013), and Granquist and Kovar (1997).

one further case was deleted from the sample because the response time was too low (below 200s), thus the probability of careless responses was too high to continue the analysis with the respective data (Meade & Craig, 2012).

Furthermore, four cases were removed due to colour vision deficiency, more specifically, because of red-green colour blindness. Consequently, the corrected sample²⁶ size (which was used for the subsequent analyses) was $N = 161$.

Analysis of Common Method Bias

Although the methodological setup aimed at minimising biases and errors, it had to be ensured that the variance was not a result from the measurement method instead of the underlying construct. Even with setting up the research design carefully, the common method bias could not be completely ruled out through ex ante approaches (Bagozzi & Yi, 1991). Therefore, several Harman's Single-Factor tests were performed ex ante and evaluated whether mainly one of the factors contributed to the variance. (Mat Roni, 2014; Podsakoff et al., 2012; Podsakoff, MacKenzie, Lee, & Podsakoff, 2003)²⁷. Results, detailed in *appendix O*, showed that no single factor was the major contributor to variance.

Quality of Measurements

The scales used within this master thesis were retrieved from previous research which ensured that they represent a specific construct. The items fulfil the criterion of unidimensionality which means that the items are highly associated with each other (Hair et al., 2010).

Reliability

Nevertheless, it is possible that some measures show low reliability (Bagozzi & Yi, 1988). Because several items were combined in this master thesis to form one composite measure for

²⁶ See *appendix N* for further description of the corrected sample and for each of the five conditions.

²⁷ Some researchers point out that further tests could be performed, however the results were well below the values that are typically considered acceptable for Harman's Single Factor test (Chang, van Witteloostuijn, & Eden, 2010).

a construct it was important to account for measurement errors. For example, perceived value was measured with five items and the average score of those items was used as replacement variable to describe perceived value with one value instead of five values. This concept of summated scales required to account for measurement error of a single variable as well as to ensure that the items can, in fact, be combined to describe the underlying construct adequately (Hair et al., 2010).

Due to the nature of the experiment, it was not possible to ensure reliability through measure consistency for an individual at two points in time. Thus, when evaluating the quality of measurements, the reliability of the instrument had to be evaluated through an analysis of internal consistency. The reasoning behind the assessment of internal consistency was that items which measure the same construct should be interrelated (Churchill, 1979; Hair et al., 2010; Nunnally, 1979). Hence, several diagnostic measures were applied to evaluate the internal consistency.

Inter-item and Item-to-total Correlation

Firstly, inter-item correlations (the correlation among items) and item-to-total correlations (correlation to the summated scale score) were measured. Inter-item correlation should be at least .300 and the latter .500 (Churchill, 1979; Field, 2005; Hair et al., 2010; Robinson, Shaver, & Wrightsman, 1991). The average inter-item correlation (IIC), the average item-to-total correlation (ITTC) per measure, the IIC for each item, and the ITTC per item for each measure are listed in *appendix P*.

Cronbach's Alpha

Secondly, as a further indicator for internal consistency, Cronbach's alpha (α) was analysed (Hair et al., 2010). Cronbach's alpha is a very common statistic for describing a scale's reliability and can have values from 0 to 1 (the higher the alpha, the lower the influence of the random error). It has been suggested that Cronbach's alpha should be between .700 and .950 with higher values being a sign of higher reliability. However, if the alpha is too high it is likely that some items within the scale are redundant and should not have been included in the questionnaire to reduce test length (Cortina, 1993; Cronbach, 1951; Tavakol & Dennick, 2011). *Appendix Q* provides evidence that α was acceptable for all measures indicating high levels of reliability. It may be of note that some researchers have argued that the acceptable values for α should not be treated as cut-off values (Peters, 2014). Lower values such as .600 have been

suggested for Cronbach's alpha especially in the case of exploratory research (i.e. the personality aspect in this master thesis) (Robinson et al., 1991).

Validity

After ensuring reliability of the scales used, convergent and discriminant validity were evaluated. Convergent validity is "*the degree to which two measures of the same concept are correlated*" (Hair et al., 2010, p. 125). Discriminant validity assesses how correlated the scales of similar but conceptually distinct measures are and ensures the concepts are sufficiently different (Campbell & Fiske, 1959; Hair et al., 2010). The IICs and ITTCs showed acceptable values ensuring both convergent and discriminant validity for the respective measures (see *appendix P*).

Descriptive Statistics

Mean and variance (or standard deviation) are typically used when providing information about the variability and location of a distribution. Skewness and kurtosis deliver information to describe the shape of a distribution. The goal of this description is to ensure that the assumption of normal distribution holds for the data obtained. This is important because a non-normal distribution influences, among other factors, the statistical tests that can be performed (Bland & Altman, 1996; DeCarlo, 1997). Therefore, *appendix R* summarises the mean, standard deviation, variance, skewness, and kurtosis for all measures. It has been outlined that the values for skewness and kurtosis should be between -1 and 1 to prove normal univariate distribution (George & Mallery, 2010). However, Tabachnick and Fidell (2013) argue that also slightly higher or lower values for kurtosis, as seen in *appendix R* (for e.g. the full sample with low involvement purchase intention), are acceptable.

Goodness of Fit: Test of Normality

Appendix R shows that some of the kurtosis values were more extreme than usually acceptable in literature (e.g. perceived price under high involvement in condition 4). Consequently, a Shapiro–Wilk test of normality was performed to establish that the data follows a normal distribution and the appropriate tests could be conducted in section 3.2.3. The Shapiro–Wilk test is applicable to univariate samples and can be described as "*the best omnibus test of normality*" (Rahman & Govindarajulu, 1997, p. 219). The sample sizes for each condition were larger than $n = 3$, which is the minimum sample size, and smaller than $n = 50$, which is the

maximum sample size that does not require modifications of the test (Rahman & Govindarajulu, 1997; Royston, 1992). The results of the test are shown in *appendix S*, where results with $p < .050$ indicate that the respective distribution is significantly different from a normal distribution (Shapiro & Wilk, 1965)²⁸. The tests revealed that normal distribution of the underlying population could not be assumed for most of the variables in at least one condition.

Analysis of Rotation

It was important to assess whether the rotation of stimuli was sufficient to rule out order effects. Therefore, *t*-tests (and Mann-Whitney tests if required) were conducted for each of the five conditions (colour × priming): The order for which the low involvement stimulus was shown first was compared to the alternative for which the low involvement stimulus was shown after the high involvement stimulus. The analysis of rotation revealed that the high involvement stimulus was sometimes evaluated significantly better when shown first as outlined in *appendix T*. Consequently, further analysis had to take order effects into account when assessing the results for the high involvement state.

Analysis for Variance Homogeneity

Because some of the distributions were shown to be non-normal the analysis of variances had to be robust for non-normality. Levene's test of equality of variances allowed to test for variance homogeneity with lower sensitivity to deviations from a normal distribution than other tests (Gastwirth, Gel, & Miao, 2009; Levene, 1960). Consequently, Levene's test was performed for all relevant variables²⁹.

²⁸ The Shapiro-Wilk test was used to test for normality because it was more appropriate in the specific situation compared other, similar tests (Shapiro, Wilk, & Chen, 1968).

²⁹ For simplicity, the influence of kurtosis on those tests was neglected. For further information on kurtosis and tests for equal variance see Pearson (1931), Box (1953) as well as Brown and Forsythe (1973).

3.2.2 Methods for Main Data Analysis

In this section, the obtained data are used to answer the research questions and to confirm or reject the hypotheses and research propositions put forward in chapter 2 of this thesis (Adèr et al., 2008). To test the hypotheses **H1-H7**, three tests for significance were conducted, namely Student's *t*-test, Welch's *t*-test, and the Mann-Whitney test. The main difference between the three options is given by the underlying assumptions on the distribution of the data, particularly whether the data follows a normal distribution (*t*-tests) or a non-Gaussian (Mann-Whitney test) distribution. Furthermore, in order to compare the data obtained to the results reported by Puccinelli et al. (2013), several 2 (price colour: black or red/blue) \times 2 (gender: male or female) between-subject analyses of variance (ANOVAs) were performed.

Finally, to evaluate the two research propositions **P1** and **P2**, the data were analysed by using a linear regression model.

t-tests: Testing Normal Distributed Data

In the first step, the data were assessed using independent-samples *t*-tests. There are several assumptions that have to be fulfilled for a *t*-test to be suitable: The applied scale has to be at least ordinal, the subjects in the sample need to be randomly selected, the sample size has to be large enough, the data should follow a normal distribution, and the variances have to be equal. The first three conditions were fulfilled as the scales were ordinal, subjects were randomly selected, and a sample size of about 30 per condition could be considered satisfying (Hair et al., 2010; Kothari, 2009). Although one of the assumptions of the *t*-test is normal distribution of the underlying population, it has been suggested that the results are robust in other cases as well (Boneau, 1960; Srivastava, 1958). Researchers sometimes neglect concerns regarding normality and assume that the values for the underlying population, from which the sample is drawn, are normally distributed and consequently apply *t*-tests even for non-normally distributed samples (Ruxton, 2006). As Puccinelli et al. (2013) used parametric tests, it could be argued that the underlying population from which both their samples and the samples in this master thesis were drawn follows a normal distribution and, hence, a *t*-test would be acceptable for all cases.

Student's *t*-test: Testing Normal Distributed Data with Equal Variances

Student's *t*-test was conducted only for cases with equal variances although it has been shown to be robust to unequal variances (Kothari, 2009; Markowski & Markowski, 1990).

Welch's *t*-test: Testing Normal Distributed Data with Unequal Variances

For the cases with unequal variances, the results were analysed using Welch's *t*-test, which is the more appropriate method if populations have different variances (Ruxton, 2006; Welch, 1947, 1951).

Mann-Whitney Test: Testing Non-Normal Distributed Data

However, in order to perform a statistically more accurate and correct analysis, the data needed to be analysed using a different test since both *t*-tests assume that populations have normal distributions (Hair et al., 2010; Welch, 1947). Because it was shown that normal distribution could not always be assumed for the underlying populations, the Mann-Whitney test, also sometimes called Wilcoxon-Mann-Whitney (WMW) test, was conducted. It tested the null-hypothesis that the distribution of evaluations for the two respectively tested colours were equal. The WMW test has the following two underlying assumptions: Firstly, both groups have to be independent of each other. This was ensured by the between-subject design for the conditions. The second assumption of ordinal scales was also met. This allowed to make a statement which one of two values is greater. The Mann-Whitney test could be applied for cases with equal as well as unequal variances (Elliott & Woodward, 2007; Fay & Proschan, 2010; Mann & Whitney, 1947; Wilcoxon, 1945). It is argued that the WMW test is more robust and more efficient compared to *t*-tests for non-normal distributions (Conover, 1999; Hair et al., 2010).

ANOVA

In order to be able to draw a comparison between the results reported by Puccinelli et al. (2013) and the findings of this master thesis, it was important to analyse the data in the same way and with the same methods. Hence (and although it was outlined that some data were non-normally distributed) an ANOVA was conducted to evaluate perceived value. It is of note that Puccinelli et al. evaluated their research under the assumption of normality. As both samples were drawn from the same population (and to enable a comparison of the findings) it was assumed, for this step, that the data obtained in this master thesis fulfilled the requirements for performing an ANOVA (Elliott & Woodward, 2007; Puccinelli et al., 2013).

Linear Regression

Linear regressions examine the relationship between an independent variable and a dependent variable. Several linear regressions can be conducted if there are multiple independent variables. The data needs to originate from a paired observation, meaning that both the values for the dependent and the independent variable were observed together. Linear regression requires normality and equal variances. Although this was not ensured for all variables, linear regression is used within this master thesis for indicative purposes. Therefore, even with non-normality or unequal variances it could be possible to reveal a tendency for relationships among colour and personality. The use of linear regression was acceptable given the purpose within this thesis because linear regression tends to be rather robust to nonfulfillment of the underlying assumptions (Elliott & Woodward, 2007; Hair et al., 2010).

ANCOVA

An analysis of covariance (ANCOVA) was conducted to evaluate the effect of the control variables age, income, country, employment, and colour frequently used for sale prices³⁰ on the influence of price colour on perceived price, perceived value, and purchase intention. Based on the argumentation with respect to the ANOVA and the linear regression (see pp. 53-54) it was presumed that the assumptions for performing an ANCOVA were fulfilled (Keppel & Wickens, 2004; Montgomery, 2012). The categorical variables were recoded. Each level was transformed to a new variable which was assigned the value 1 if the respondent indicated the respective level (and 0 otherwise). This allowed for performing an ANCOVA for each level of each control variable.

3.2.3 Main Data Analysis and Results of the Statistical Tests

Condition 1 showed both stimuli with black prices only. It was used as base for comparison for the analysis of the other four conditions. The significance level used was $\alpha = .050$ which means a result was considered statistically significant when the p -value of the respective test was lower than .050 (Craparo, 2007).

³⁰ Gender and favourite colour were analysed and discussed separately (see section 3.2.3).

Results of Statistical Tests for Experiment 1: p-values

<u>Inv</u>	<u>Ms</u>	<u>1 vs. 2</u>	<u>1 vs. 3</u>	<u>1 vs. 4</u>	<u>1 vs. 5</u>	<u>1 vs. 4 & 5</u>	<u>2 vs. 4 (LI)/5 (HI)</u>	<u>3 vs. 5 (LI)/4 (HI)</u>
LI	PP	.009 (.010)	.004 (.018)	.005 (.012)	.060 (.127)	.008 (.020)	.742 (.758)	.270 (.370)
	PV	.001	.001 (.002)	.004	.011	.002 (.010)	.826	.300
	PI	.082 (.121)	.215 (.271)	.121 (.183)	.139 (.152)	.084 (.110)	.856	.872
	Af	.305	.279	.625	.258	.734	.165	.976
HI	PP	.007 (.030)	.009 (.034)	.019 (.068)	.001 (.008)	.003 (.010)	.695	.737 (.834)
	PV	.004	.009	.004	.001	.001	.549	.790
	PI	.061 (.042)	.284 (.222)	.059 (.048)	.091 (.048)	.049 (.023)	.678	.413 (.650)
	Af	.005	.062	.585 (.399)	.081	.103 (.057)	.271	.232 (.371)

Note. *p*-values are shown for *t*-tests (WMW tests in brackets). Bold numbers indicate significant differences, i.e. $p < .050$. The following short forms are used in the table: Inv = Level of Involvement, Ms = Measure, LI = Low Involvement, HI = High Involvement, PP = Perceived Price, PV = Perceived Value, PI = Purchase Intention, Af = Affect. Note that the WMW test was only performed for comparisons for which the Shapiro-Wilk test indicated deviations from the Gaussian distribution of data.

Table 1: Results of Statistical Tests for Experiment 1: p-values

Table 1 (see p. 55) outlines the results of all t -tests (and Mann-Whitney tests if required) in order to aid the comparison between the different conditions. The influence of rotation is not shown in this overview for reasons of simplicity but it was considered in the subsequent analysis (this section and *appendix U*).

In the subsequent paragraphs the significant values derived from t -tests are described in more detail. All results of the statistical tests are listed in *appendix U*³¹. In order to be more precise, the Mann-Whitney test was performed for non-Gaussian distributions as well. If the Mann-Whitney test agreed with the t -test, the results of the WMW test are only reported in *appendix U*. Literature indicates that this usually holds for most of the cases (see e.g. Winter & Dodou, 2010). Therefore, the following text focuses on the numbers for the (significant) t -tests. It turns out that all the numbers agree but for a few cases which will be pointed out separately.

Comparison of Condition 1 and Condition 2: black vs. blue, priming

Low Involvement

With priming, the blue prices ($M_{blue,priming} = 3.82$, $SD_{blue,priming} = 1.40$) were perceived significantly better (lower) than black prices ($M_{black} = 2.86$, $SD_{black} = 1.36$) in the low involvement state, Levene's test: $F = .628$, $p = .431$, Student's t -test: $t(58) = -2.703$, $p = .009$.

Additionally, perceived value was significantly higher if subjects saw blue prices ($M_{blue,priming} = 4.10$, $SD_{blue,priming} = 1.32$) compared to black prices ($M_{black} = 3.02$, $SD_{black} = 1.17$), Levene's test: $F = .037$, $p = .849$, Student's t -test: $t(58) = -3.359$, $p = .001$.

Purchase intention and affect were not significantly influenced by blue price colour ($p > .050$).

High Involvement

Levene's test for equal variances showed no significant results for affect and purchase intention (purchase intention: $F = .571$, $p = .453$; affect: $F = .032$, $p = .859$) in the high involvement state and significant results for perceived price and perceived value (perceived price: $F = 5.596$, $p = .021$; perceived value: $F = 5.589$, $p = .020$).

³¹ This includes the results of the Shapiro-Wilk tests that had to be performed if rotation affected the results of the t -tests or the WMW tests.

Blue price font colour ($M_{blue,priming} = 4.88$, $SD_{blue,priming} = 1.07$) led to a significantly better³² perceived price than black ($M_{black} = 3.95$, $SD_{black} = 1.49$), Welch's t -test: $t(55.971) = -2.780$, $p = .007$.

Perceived value was significantly higher for the laptop advertisement with blue prices ($M_{blue,priming} = 4.86$, $SD_{blue,priming} = .96$) than with black prices ($M_{black} = 3.94$, $SD_{black} = 1.40$), Welch's t -test: $t(54.885) = -2.980$, $p = .004$. Under consideration of rotation, the influence was only significant if the high involvement stimulus was shown first ($M_{black} = 3.50$, $SD_{black} = 1.38$, $M_{blue,priming} = 4.58$, $SD_{blue,priming} = .86$, Levene's test: $F = 3.628$, $p = .068$, Student's t -test: $t(25) = -2.311$, $p = .029$). If the low involvement advertisement was shown first results were not significant ($p > .050$).

According to Student's t -test, purchase intention was not significantly higher for blue prices ($M_{blue,priming} = 4.04$, $SD_{blue,priming} = 1.55$) compared to black prices ($M_{black} = 3.25$, $SD_{black} = 1.65$, Levene's test: $F = .571$, $p = .453$, $t(58) = -1.913$, $p = .061$), which contradicts the results delivered by the WMW test ($Mdn_{blue,priming} = 4.13$, $Mdn_{black} = 2.63$, $U = 311$, $n_{blue,priming} = 32$, $n_{black} = 28$, $p = .042$).

Affect was first analysed without taking order effect into account and subsequently for each rotation. If subjects saw blue prices ($M_{blue,priming} = 4.49$, $SD_{blue,priming} = 1.45$) affect was significantly higher than with black prices ($M_{black} = 3.45$, $SD_{black} = 1.33$), Levene's test: $F = .032$, $p = .859$, Student's t -test: $t(58) = -2.898$, $p = .005$. Similar results were found if the stimulus was shown after the low involvement advertisement ($M_{black} = 3.96$, $SD_{black} = 1.38$, $M_{blue,priming} = 5.06$, $SD_{blue,priming} = 1.08$, Levene's test: $F = 1.020$, $p = .320$, Student's t -test: $t(31) = -2.562$, $p = .015$) but not if the high involvement stimulus was shown first ($p > .050$).

³² Note that perceived price was measured with two items, one of which was reversely scored. Higher values for mean and median represent a better, that is lower, perceived price.

Comparison of Condition 1 and Condition 3: black vs. red, priming

Low Involvement

Perceived price was significantly higher for the red priced instant coffee ad ($M_{red,priming} = 3.97$, $SD_{red,priming} = 1.65$) than if the products were shown with black prices ($M_{black} = 2.86$, $SD_{black} = 1.36$), Levene's test: $F = .627$, $p = .431$, Student's t -test: $t(65) = -2.997$, $p = .004$.

If the low involvement stimulus was shown with red prices ($M_{red,priming} = 4.16$, $SD_{red,priming} = 1.42$) perceived value was significantly higher than with black prices ($M_{black} = 3.02$, $SD_{black} = 1.17$), Levene's test: $F = .563$, $p = .456$, Student's t -test: $t(65) = -3.574$, $p = .001$.

Purchase intention and affect were not significantly influenced by red price colour ($p > .050$).

High Involvement

Perceived price in the high involvement state was perceived significantly lower if prices were primed red ($M_{red,priming} = 4.80$, $SD_{red,priming} = .97$) compared to the control condition with black prices ($M_{black} = 3.95$, $SD_{black} = 1.49$), Levene's test: $F = 9.150$, $p = .004$, Welch's t -test: $t(52.584) = -2.730$, $p = .009$.

In the high involvement state and without accounting for order effects, perceived value was significantly higher for the red priced products ($M_{red,priming} = 4.74$, $SD_{red,priming} = .97$) than for the black priced products ($M_{black} = 3.94$, $SD_{black} = 1.40$), Levene's test: $F = 6.187$, $p = .015$, Welch's t -test: $t(54.585) = -2.689$, $p = .009$. If the high involvement stimulus was presented before the instant coffee advertisement, Levene's test showed equal variances ($F = 3.788$, $p = .063$). The influence of the primed red prices ($M_{red,priming} = 4.43$, $SD_{red,priming} = .79$) on perceived value was significantly higher than the influence of black prices ($M_{black} = 3.50$, $SD_{black} = 1.38$), Student's t -test: $t(26) = -2.099$, $p = .046$. If the low involvement advertisement was shown first results were not significant ($p > .050$).

Purchase intention and affect were not significantly influenced by red price colour ($p > .050$).

Comparison of Condition 1 and Condition 4: black vs. low involvement: blue, high involvement: red, non-priming

Low Involvement

Levene's test for equal variances showed no significant results for the low involvement state (perceived price: $F = .498, p = .483$; perceived value: $F = 1.751, p = .191$).

Price was perceived significantly better for blue prices ($M_{blue,non-priming} = 3.95, SD_{blue,non-priming} = 1.65$) than for black prices ($M_{black} = 2.86, SD_{black} = 1.36$) in the low involvement state without priming, Levene's test: $F = .498, p = .483$, Student's t -test: $t(62) = -2.898, p = .005$.

Student's t -test suggested that with blue prices ($M_{blue,non-priming} = 4.02, SD_{blue,non-priming} = 1.50$) the value was perceived significantly higher compared to black prices ($M_{black} = 3.02, SD_{black} = 1.17$), Levene's test: $F = 1.751, p = .191, t(62) = -2.968, p = .004$.

Again, purchase intention and affect were not significantly influenced by blue price colour ($p > .050$).

High Involvement

According to Welch's t -test, price was perceived significantly better under high involvement for red prices ($M_{red,non-priming} = 4.72, SD_{red,non-priming} = 1.00$) than for black prices ($M_{black} = 3.95, SD_{black} = 1.49$), Levene's test: $F = 9.193, p = .004, t(54.233) = -2.416, p = .019$. This contradicts the results of the WMW test ($Mdn_{black} = 4.50, Mdn_{red,non-priming} = 4.75, U = 377.5, n_{black} = 32, n_{red,non-priming} = 32, p = .068$).

Perceived value was first analysed without taking order effects into account and then under consideration of stimuli order. The ad with red prices for laptops ($M_{red,non-priming} = 4.80, SD_{red,non-priming} = .76$) was perceived to deliver significantly higher value than the ad with black prices ($M_{black} = 3.94, SD_{black} = 1.40$), Levene's test: $F = 14.127, p < .001$, Welch's t -test: $t(47.601) = -3.042, p = .004$. Taking order effects into account, the analyses showed different results depending on the order of stimuli. Red prices ($M_{red,non-priming} = 4.72, SD_{red,non-priming} = .69$) led to a significantly higher perceived value compared to black prices ($M_{black} = 3.50, SD_{black} = 1.38$) if the laptops, the high involvement stimulus, were shown first, Levene's test: $F = 6.514, p = .016$, Welch's t -test: $t(21.850) = -3.180, p = .004$. If the instant coffee advertisement was shown first there was no significant difference ($p > .050$).

According to the Mann-Whitney test, purchase intention under high involvement was significantly higher if subjects saw blue prices ($Mdn_{blue,non-priming} = 3.88$) compared to black prices ($Mdn_{black} = 2.63$), $U = 390.5$, $n_{black} = 32$, $n_{blue,non-priming} = 34$, $p = .048$. Those results contradict what was obtained by the Student t -test ($M_{black} = 3.25$, $SD_{black} = 1.65$, $M_{blue,non-priming} = 3.89$, $SD_{red,non-priming} = 1.37$, Levene's test: $F = 1.601$, $p = .210$, $t(17) = -1.717$, $p = .091$).

Affect was not significantly influenced by red price colour ($p > .050$).

Comparison of Condition 1 and Condition 5: black vs. low involvement: red, high involvement: blue, non-priming

Low Involvement

Perceived value was significantly higher for red prices ($M_{red,non-priming} = 3.82$, $SD_{red,non-priming} = 1.30$) compared to black prices ($M_{black} = 3.02$, $SD_{black} = 1.17$), Levene's test: $F = .559$, $p = .457$, Student's t -test: $t(64) = -2.614$, $p = .011$.

Perceived price, purchase intention, and affect were not significantly influenced by red price colour ($p > .050$).

High Involvement

Levene's test revealed unequal variances for perceived price, $F = 15.882$, $p < .001$. Perceived price was significantly lower (i.e. better) for blue prices ($M_{blue,non-priming} = 4.98$, $SD_{blue,non-priming} = .84$) than for black prices ($M_{black} = 3.95$, $SD_{black} = 1.49$), Welch's t -test: $t(48.411) = -3.389$, $p = .001$.

Perceived value was analysed using Welch's t -test (Levene's test: $F = 12.532$, $p = .001$). Results revealed that blue prices for laptops ($M_{blue,non-priming} = 4.99$, $SD_{blue,non-priming} = .84$) led to a significantly higher perceived value than black prices ($M_{black} = 3.94$, $SD_{black} = 1.40$), $t(49.983) = -3.669$, $p = .001$.

Also, purchase intention was significantly higher if the laptops were shown with blue prices than with black prices if the WMW test was applied ($Mdn_{black} = 2.63$, $Mdn_{blue,non-priming} = 3.88$, $U = 390.5$, $n_{black} = 32$, $n_{blue,non-priming} = 34$, $p = .048$) but not if Student's t -test was used ($M_{black} = 3.25$, $SD_{black} = 1.65$, $M_{blue,non-priming} = 3.89$, $SD_{blue,non-priming} = 1.37$), Levene's test: $F = 1.601$, $p = .210$, $t(64) = -1.717$, $p = .091$.

The influence of blue prices ($M_{blue,non-priming} = 4.12$, $SD_{blue,non-priming} = 1.12$) on affect was significantly higher than for black prices ($M_{black} = 2.94$, $SD_{black} = 1.10$) if, and only if, the laptops were shown before the low involvement stimulus, Levene's test: $F = .089$, $p = .768$, Student's t -test: $t(28) = -2.913$, $p = .007$.

Comparison of Condition 1 and Condition 4 and 5: black vs. colour

Low Involvement

Under low involvement, price was perceived significantly better with coloured prices ($M_{colour,non-priming} = 3.74$, $SD_{colour,non-priming} = 1.59$) compared to black prices ($M_{black} = 2.86$, $SD_{black} = 1.36$), Levene's test: $F = .695$, $p = .407$, Student's t -test: $t(96) = -2.694$, $p = .008$. The same held true for perceived value ($M_{black} = 3.02$, $SD_{black} = 1.17$, $M_{colour,non-priming} = 3.92$, $SD_{colour,non-priming} = 1.40$, Levene's test: $F = 1.503$, $p = .223$, Student's t -test: $t(96) = -3.134$, $p = .002$).

Purchase intention and affect were not significantly influenced by price colour ($p > .050$).

High Involvement

Price ($M_{black} = 3.95$, $SD_{black} = 1.49$, $M_{colour,non-priming} = 4.85$, $SD_{colour,non-priming} = .92$, Levene's test: $F = 16.919$, $p < .001$, Welch's t -test: $t(42.949) = -3.124$, $p = .003$) and value ($M_{black} = 3.94$, $SD_{black} = 1.40$, $M_{colour,non-priming} = 4.90$, $SD_{colour,non-priming} = .80$, Levene's test: $F = 19.643$, $p < .001$, Welch's t -test: $t(41.024) = -3.588$, $p = .001$) were perceived significantly better if subjects were shown coloured prices compared to subjects who saw black prices. Purchase intention was also significantly higher for coloured prices if the influence of rotation was neglected ($M_{black} = 3.25$, $SD_{black} = 1.65$, $M_{colour,non-priming} = 3.92$, $SD_{colour,non-priming} = 1.30$, Levene's test: $F = 4.228$, $p = .042$, Welch's t -test: $t(50.402) = -2.016$, $p = .049$). However, after taking stimulus rotation into account there was no significant effect ($p > .050$).

Affect was not significantly influenced by price colour ($p > .050$).

Influence of Priming Blue Prices

Low Involvement (Comparison of Condition 2 and 4)

Neither perceived price, perceived value, purchase intention, nor affect were significantly influenced by priming blue price colour ($p > .050$).

High Involvement (Comparison of Condition 2 and 5)

The influence of blue on affect was only significantly higher with priming than without priming if the high involvement stimulus was shown first ($M_{blue,priming} = 5.06$, $SD_{blue,priming} = 1.08$, $M_{blue,non-priming} = 4.03$, $SD_{blue,non-priming} = 1.75$), Levene's test: $F = 5.440$, $p = .026$, Welch's t -test: $t(32.193) = 2.177$, $p = .037$.

For all other measures, there was no significant effect of priming blue ($p > .050$).

*Influence of Priming Red Prices***Low Involvement (Comparison of Condition 3 and 5)**

The influence of priming red compared to not priming red was insignificant for all measures ($p > .050$).

High Involvement (Comparison of Condition 3 and 4)

There was no significant influence of priming red on the effect of price colour for perceived price, perceived value, purchase intention, or affect ($p > .050$).

Full Sample: Analysis of Gender Differences

Puccinelli et al. (2013) found that men perceive savings to be significantly higher if prices are coloured red compared to black while women did not. The following analysis is meant to challenge this finding with the new data acquired within this master thesis. Additionally, it is outlined whether the results hold for other colours than red, more specifically, blue. For the comparison, perceived value will be analysed in the low involvement state and in the high involvement state for black, red, and blue using a 2 (price colour) \times 2 (gender) ANOVA. Results for red price colour were compared to black under consideration of gender. Blue price colour was evaluated similarly. Because it has been shown that there is no significant effect of primed, coloured prices compared to non-primed, coloured prices (neglecting the one scenario in which, after consideration of rotation, one of the measures showed significance), condition 2 and 4 were evaluated together for the colour blue and compared to black in the low involvement state. The same logic was applied to red (low involvement: condition 3 and 5) and again for the high involvement state (blue: condition 2 and 5, red: condition 3 and 4).

Stimulus rotation did not interfere with the results. It is important to note that all results are obtained under the assumption of normality, although some of the data does not follow a normal distribution.

Blue Price Colour

For the low involvement state, a two-way ANOVA was conducted to analyse the influence of price colour and gender on perceived value. Price colour was either blue or black, and gender included two attribute levels (male, female). The main effect for price colour was statistically significant with an F ratio of $F(1, 88) = 11.743, p = .001$, which confirms the significant difference between black prices ($M_{black} = 3.02, SD_{black} = 1.17$) and blue price colour ($M_{blue} = 4.06, SD_{blue} = 1.41$). However, the main effect for gender ($M_{male} = 3.89, SD_{male} = 1.58, M_{female} = 3.54, SD_{female} = 1.26$) was not significant, $F(1, 88) = .174, p = .678$. The interaction effect was not significant, $F(1, 88) = .363, p = .548$.

A two-way ANOVA was conducted for the high involvement state. The main effect for price colour was shown to be statistically significant, $F(1, 90) = 23.249, p < .001$, which shows the significant difference between black prices ($M_{black} = 3.94, SD_{black} = 1.40$) and blue price colour ($M_{blue} = 4.93, SD_{blue} = .89$). However, the main effect for gender ($M_{male} = 4.63, SD_{male} = 1.33, M_{female} = 4.57, SD_{female} = 1.05$) was not significant, $F(1, 90) = 1.819, p = .181$. The interaction effect was significant, $F(1, 90) = 8.090, p = .008$. *Appendix V* outlines that black prices are evaluated substantially worse by men than by women while the evaluations of coloured prices were rather similar among genders.

Red Price Colour

For the low involvement state, a two-way ANOVA was conducted to analyse the influence of price colour and gender on perceived value. Price colour included two levels (red, black) and gender was either male or female. The main effect for price colour was statistically significant with an F ratio of $F(1, 97) = 12.230, p = .001$, which confirms the significant difference between black prices ($M_{black} = 3.02, SD_{black} = 1.17$) and red price colour ($M_{red} = 3.99, SD_{red} = 1.36$). However, the main effect for gender ($M_{male} = 4.01, SD_{male} = 1.71, M_{female} = 3.43, SD_{female} = .99$) was not significant, $F(1, 97) = 2.121, p = .260$. The interaction effect was not significant, $F(1, 97) = 2.925, p = .186$.

Again, a two-way ANOVA was performed for the high involvement state. Results showed that the main effect for price colour was statistically significant, $F(1, 95) = 19.525, p < .001$, which

shows the significant difference between black prices ($M_{black} = 3.94$, $SD_{black} = 1.40$) and red price colour ($M_{red} = 4.77$, $SD_{red} = .87$). However, the main effect for gender ($M_{male} = 4.50$, $SD_{male} = 1.27$, $M_{female} = 4.51$, $SD_{female} = 1.02$) was not significant, $F(1, 95) = 2.594$, $p = .111$. The interaction effect was significant, $F(1, 95) = 7.244$, $p = .008$. *Appendix V* again shows that the evaluations of coloured prices were similar among genders but the black prices were evaluated substantially worse by men compared to women.

Full Sample: Analysis of Affect

In order to confirm results from previous research, a two-way ANOVA with respect to perceived value was performed in analogy to the work of Puccinelli et al. (2013). The outcome, depicted in *appendix W*, did not show a significant interaction effect of colour and affect on perceived value for low involvement (all p -values well above .050) but the interaction effect was significant under high involvement.

Full Sample: Analysis of the Personality Test

The research propositions **P1** and **P2** require an evaluation of whether a higher level in a specific personality aspect strengthens (or weakens) the link between price colour and price perception. Hence, a linear regression was performed. In order to be able to draw comparisons to Puccinelli et al. (2013) the regression focused on perceived value in the low involvement state.

Results revealed that a linear regression model can be used to link higher levels of Neuroticism to a better evaluation of perceived value of red prices compared to black under high involvement³³. However, a significant influence was not found for other combinations of colour and personality. Additionally, it should be pointed out that the findings are only indicative and have to be treated with caution because some values used within the analysis are not normally distributed and the experiment used a short-form personality test only.

Additionally, it was analysed whether a specific trait can be associated with a certain colour which a subject indicated as his or her favourite (**P1**). The comparison of personality dimension scores and favourite colours showed support for the idea of linking colour and personality traits. For example, subjects who selected blue as their favourite colour showed higher levels of

³³ See *appendix X* for the results of the regression.

Extraversion compared to subjects who chose red ($M_{blue} = 4.86$, $SD_{blue} = 1.02$, $M_{red} = 3.98$, $SD_{red} = 1.39$, Levene's test: $F = 3.738$, $p = .057$, Student's t -test: $t(72) = -2.641$, $p = .010$, however: WMW test showed $p = .057$) or black ($M_{blue} = 3.98$, $SD_{blue} = 1.39$, $M_{black} = 4.23$, $SD_{black} = .93$, Levene's test: $F = .606$, $p = .439$, Student's t -test: $t(73) = -2.114$, $p = .038$) as well as higher levels of Intellect/Imagination than respondents who's favourite colour was green ($M_{blue} = 5.49$, $SD_{blue} = .92$, $M_{green} = 4.96$, $SD_{green} = 1.08$, Levene's test: $F = 1.117$, $p = .294$, Student's t -test: $t(83) = -2.118$, $p = .037$) or purple ($M_{blue} = 5.49$, $SD_{blue} = 1.08$, $M_{purple} = 4.29$, $SD_{purple} = 1.35$, Levene's test: $F = 2.193$, $p = .143$, Student's t -test: $t(67) = -2.868$, $p = .006$)³⁴. However, those results should also be treated with caution as they only indicate a relationship. Further research could aim at establishing a clear cause-effect relationship or interaction between personality and favourite colour (**P1**) as well as outline whether this interaction might influence the effect of price colour on price judgement.

Control Variables

This master thesis also controlled for age, income, employment, country respondents currently live in, and colour that is associated with sale or discounted prices. None of the control variables significantly interacted with the influence of price colour on price judgement, more specifically on price perception, perceived value, or purchase intention (all p -values $> .050$, see *appendix Y*).

Subjects indicated that the most common colours used to indicate discounts are, in descending order, red ($n_{red} = 139$), yellow ($n_{yellow} = 59$), and orange ($n_{orange} = 29$). In Germany ($n_{Germany} = 94$), red ($n_{Germany,red} = 87$) is mostly used to show that products are on sale, yellow ($n_{Germany,yellow} = 30$) and orange ($n_{Germany,orange} = 15$) are used less often. In Norway ($n_{Norway} = 37$), red ($n_{Norway,red} = 31$) is mostly used to show that products are on sale, yellow

³⁴ *Appendix S* shows that the Mann-Whitney test was more appropriate than t -tests for the personality dimensions; results are outlined in *appendix U*.

($n_{Norway,yellow} = 15$) and orange ($n_{Norway,orange} = 6$) are used less frequently, but both colours are more common than in Germany³⁵.

3.3 Result Discussion

The hypotheses were reviewed under consideration of the statistically significant and insignificant results reported in section 3.2.3. For example, the influence of price colour on purchase intention was not significant in the comparison of condition 1 versus condition 4 and 5. Consequently, it was decided that **H1c** was not supported. The following table outlines how the obtained data supports or refutes the hypotheses **H1-H7** after careful consideration.

Analysis of Hypotheses. (N/A = not applicable; the results refer to a significance level of $\alpha = .050$)

	<u>Short Explanation</u>	<u>Direction</u>	<u>Support</u>
H1a	Price Colour (Non-Priming) → Perceived Price	-	Yes
H1b	Price Colour (Non-Priming) → Perceived Value	+	Yes
H1c	Price Colour (Non-Priming) → Purchase Intention	+	No
H2a	Blue Price Colour (Non-Priming) → Perceived Price	-	Yes
H2b	Blue Price Colour (Non-Priming) → Perceived Value	+	Yes
H2c	Blue Price Colour (Non-Priming) → Purchase Intention	+	No
H3a	Red Price Colour (Non-Priming) → Perceived Price	-	Yes
H3b	Red Price Colour (Non-Priming) → Perceived Value	+	Yes
H3c	Red Price Colour (Non-Priming) → Purchase Intention	+	No

³⁵ The numbers for each colour add up to more than 100% of the sample size because each subject could indicate several colours (multiple-choice question).

H4a	Low Involvement: Price Colour → Perceived Price	-	Yes
H4b	Low Involvement: Price Colour → Perceived Value	+	Yes
H4c	Low Involvement: Price Colour → Purchase Intention	+	No
H5a	High Involvement: Price Colour → Perceived Price	N/A	No
H5b	High Involvement: Price Colour → Perceived Value	N/A	No
H5c	High Involvement: Price Colour → Purchase Intention	N/A	Yes
H6a	Price Colour (Priming) → Perceived Price	-	Yes
H6b	Price Colour (Priming) → Perceived Value	+	Yes
H6c	Price Colour (Priming) → Purchase Intention	+	No
H7a	Price Colour (Priming) → Perceived Price > Price Colour (Non-Priming) → Perceived Price	N/A	No
H7b	Price Colour (Priming) → Perceived Value > Price Colour (Non-Priming) → Perceived Value	N/A	No
H7c	Price Colour (Priming) → Purchase Intention > Price Colour (Non-Priming) → Purchase Intention	N/A	No

Table 2: Analysis of Hypotheses (Experiment 1)

The Influence of Non-Primed Price Colour on Price Evaluation

As expected, the results support the idea that price colour influences price judgement. More specifically, coloured prices lead to a better price perception as compared to black prices. Consequently, products are considered better value for money which is reflected by a higher perceived value. This effect holds for red as well as for blue price colour. This finding shows that also price font colours that are not typically associated with discounted prices like blue can influence individuals during the buying process. However, it is possible that those effects result from two different underlying motivations. While consumers might buy red priced products as a result of an avoidance motivation, more specifically to avoid spending too much money, they might tend to purchase products with blue prices because they are perceived as a good buy,

signalling an approach motivation. Furthermore, while red facilitates heuristic processing, studies have shown that there is a higher impulsive buying behaviour for blue. It is possible that (although the underlying motivations or processes differ) the results are somewhat similar because both colours are at the opposing end of the U-shaped activation curve (Babin et al., 2003; Wilson, 1966).

The Level of Involvement

The notion that price colour influences perceived price negatively and perceived value positively under low involvement was supported by the data. This further suggests that price colour can influence the subsequent evaluation within the buying process as a result of, presumably, unconscious processing.

Nevertheless, the results also reveal that price colour might not only influences price perception and subsequent evaluation under low involvement but also for high involvement products. This contradicts Puccinelli et al. (2013) who claim that the effect of price colour only holds true under low involvement. The difference could be explained in several ways: Firstly, research has shown that the central and the peripheral route of processing are not mutually exclusive but the respective forms of processing can occur at the same time. It is possible that subjects evaluated the product attributes such as display size and battery lifetime carefully, through the central route, while price colour was still an influencing factor, although unconsciously through the peripheral route (Chen et al., 1999). Secondly, subjects might have been aware of the coloured prices and willingly included them in their evaluation, perhaps because they suspected that the price colour must have a positive meaning as a retailer would not use it otherwise. Thirdly, it might also be possible that, although laptops have been shown to be a high involvement product in the pre-test, the information was not processed under high involvement. This could be due to the experimental setting of an online questionnaire. Additionally, some researchers have shown that economic decisions tend to be influenced more by heuristic cues than by thorough evaluation (see section 2.3.4). It is possible that colour still serves as a heuristic cue and therefore influenced subsequent decision making, even for high involvement categories (Mandel & Johnson, 2002). Further research should consider evaluating the differences of high and low involvement in an actual field setting where respondents make real world choices such as spending their own money to buy a laptop. This would likely lead to more accurate levels of involvement, thus produce more precise results.

The Influence of Priming

Primed Price Colour vs. Black Prices

If colour was primed coloured price were perceived significantly better than black prices. Consequently, price perception was significantly lower and perceived value significantly higher for coloured, primed prices.

Primed vs. Non-Primed Price Colour

Although literature suggested that priming colour increases the effect size of the influence of price colour within the buying process (Herr, 1989), results showed only an insignificant effect of priming compared to non-primed, coloured prices. Again, this result could be interpreted in two ways: On the one hand, it might be possible that, contrary to similar contexts, priming is not an effective measure to enhance the effects of price colour on price judgement. Furthermore, it is possible that previously established connections, such as red for sale prices, had a stronger, although insignificant, influence than priming. An exposure to the prime over a longer period of time in the real world might lead to significant results for priming, compared to non-priming. On the other hand, there are explanations why there was no effect observed even if there was an actual effect in a real world buying process. Firstly, even in the non-priming condition the first shown price colour (for example, red prices for instant coffee) could influence the evaluation of the subsequent stimuli (for example, blue prices for laptops). Therefore, the comparison of non-priming and priming is not perfectly accurate. However, since rotation minimised this influence other possible explanations are outlined: The decision to use 7-point scales might have limited the possibilities to show a significant higher level for the non-priming coloured price condition compared to black prices and then subsequently a significantly higher level for the primed prices compared to the non-priming conditions (because there are only a few levels to choose from). A 9-point scale might produce better results in this case. Furthermore, it is possible that the prime itself, the coloured introduction, did not have the expected effect. For example, it might be possible that a longer, forced exposure time to the prime would have increased its effect.

Additionally, the subjects might have had an inner reference price for coffee and laptops, which was not influenced to a significant extent by priming. However, with product categories for which consumers do not have a reference in mind, the influence of priming could be significant because the price level itself is ambiguous.

The Level of Affect

Puccinelli et al. (2013) also found that price colour increases affect, which in a second stage leads to higher perceived savings. Nevertheless, the data obtained in experiment 1 does not always support the idea that price colour results in an increase in affect. This can either be explained using the idea that activation contributes to the effect of price colour or shows that price colour does not necessarily influence affect. In both cases, findings suggest that affect is not always preceding the evaluation stage but might merely be a facilitator. Although, overall results do not always show a significant interaction effect of price font colour and affect, some results indicate that affect and activation tend to increase the influence of price colour on price judgement, which is in agreement with literature (see e.g. Babin et al., 2003; Bellizzi & Hite, 1992; Herr, 1989; Wilson, 1966)

The Influence of Gender

This master thesis outlines that gender might be a poor proxy for explaining differences among individuals. In fact, the notion that only men “*are seduced by red*” (Puccinelli et al., 2013, p. 115) or, more specifically, evaluate coloured prices significantly higher than women was not supported. This finding held for both blue and red price font colour. Nevertheless, a significant difference between black and coloured prices was found for male subjects because they evaluated the black prices substantially lower than female participants. However, this is not sufficient to conclude that coloured prices are only useful for influencing men. It rather indicates that personal differences might be the reason for a stronger (or less strong) influence of price colour on perceived price and perceived value. Therefore, a connection between personality traits and the extent to which price font colour influences subsequent evaluations is proposed.

Personality as Explanation

The Connection between Personality Traits and (Favourite) Colour

After analysing the chosen favourite colour and the respective results of the personality dimensions for each subject it might be suggested that there is a link between colour and personality. Although this finding is only indicative, it is important because it supports the idea that differences in colour are perceived differently by subjects, at least partly, because of their personality traits (**P1**). This finding encourages further research especially with respect to the links between (favourite) colour, personality, coloured prices, and price judgement.

The Connection between Personality Traits, Price Colour, and Price Evaluation

The results indicated an influence of personality on the relationship between price colour and perceived value only for one combination. Nevertheless, this finding is sufficient to suggest that there might be a link between personality traits and price perception and evaluation. The influence, extent, and importance of this link are, however, not fully revealed. Therefore, **P2** is supported, as the results outline that further research is necessary and reasonable.

4. Experiment 2

While experiment 1 imitates a step of the buying process for a retail store setup, experiment 2 focuses on the influence of price colour on price perception in an online shop-like setting. The corresponding online questionnaire exposed the subjects to a stimulus which was designed similarly to an online shop.

4.1 Research Design and Data Collection Procedure

The following focuses on the research design and data collection procedure for experiment 2.

4.1.1 Research Design

The research design was analogue to experiment 1 (see section 3.1.1).

4.1.2 Questionnaire Design and Method of Data Collection

Experiment 2: Online Channel

The second experiment looked at the influence of price colour in an online setting. The questionnaire was designed like in the first study but the stimuli were changed to look more like an online shop instead of a newspaper advertisement³⁶. To ensure that results from experiment 1 and experiment 2 could be compared, a between-subjects design was used. This guaranteed that knowledge of experiment 1 could not affect experiment 2. Therefore, a question whether subjects had participated in a study within the previous week was included at the start of the questionnaire. If respondents answered “yes” they saw the last page of the survey (which thanked them for their participation). Otherwise the actual questionnaire started. Slight adaptations were made to the wording to better fit the online nature. For example, experiment 1 used one adapted item for the purchase intention scale developed by Jarvenpaa et al. (1999) whereas experiment 2 used the original wording “How likely is it that you would return to this store's web site?”. Furthermore, the scenario described was changed to reflect an online shop

³⁶ See *appendix Z* for a depiction of the advertising stimuli.

offer instead of a newspaper advertisement. The data collection procedure was the same as in experiment 1 (see section 3.1.2).

Sample Design

The same procedure as for experiment 1 was applied (see section 3.1.2).

4.2 Analysis and Results

In this section, the data are analysed for significance, the hypotheses **H1-H7** are investigated and the research propositions **P1** and **P2** are evaluated with special attention to the characteristics of an online shop-like setting.

4.2.1 Initial Data Analysis

Quality of Data

Data Screening and Sample Characteristics

Following the data screening process outlined in 4.1.1, one response was deleted because the subject suffered from colour blindness and 53 further data entries because of careless responses. Additionally, 49 subjects indicated that they already participated in another survey, likely experiment 1. Those subjects were filtered out and were not shown the survey at all. 202 subjects from the target population started the survey and 157 completed it. After deleting the participants who gave careless responses or suffered from colour blindness the corrected sample size was $N = 103$. The sample is described in detail in *appendix AA*. All in all, response rate was 1.3% and completion rate was 77.7%. Both rates were slightly lower than for experiment 1 but had acceptable values.

Analysis of Common Method Bias

Harman's Single-Factor test (see *appendix AB*) showed that none of the factors accounted for a major part of the variance. Those results were in line with experiment 1. Additionally, the quality of measurements was assessed in detail to provide further evidence that the common method bias did not influence the results.

Quality of Measurements

Similar to experiment 1, inter-item correlations, item-to-total correlations, and Cronbach's alpha were calculated. The analysis was continued with the items that performed well with respect to the correlations and Cronbach's alpha³⁷.

Descriptive Statistics

The descriptive statistics (displayed in *appendix AD*) revealed similar characteristics compared to experiment 1, more specifically, that most participants were students from Norway or Germany, and had rather low disposable household income.

Goodness of Fit: Test of Normality

Again, some of the values for kurtosis, shown in *appendix AD*, were outside the acceptable range. Consequently, several Shapiro-Wilk tests were run to test normality of the distributions. *Appendix AE* outlines that normality could not be assumed for all measures and all conditions.

Analysis of Rotation

Appendix AF shows that in some cases rotation significantly impacted the influence of price colour on subsequent evaluation. Thus, the main data analysis considered the respective cases with special attention to rotation.

Analysis for Variance Homogeneity

The variances were evaluated using Levene's test for equal variances to subsequently decide on the optimal statistical tests.

4.2.2 Methods for Main Data Analysis

The data were analysed using the same statistical methods and tests as in experiment 1 (see section 3.2.2).

³⁷ For further information on the correlations as well as which items were dropped refer to *appendix AC*.

4.2.3 Main Data Analysis and Results of the Statistical Tests

Table 3 (see p. 76) outlines the results of all *t*-tests (and Mann-Whitney tests, if required) for experiment 2 in order to facilitate the comparison between the different conditions. The influence of rotation is not shown in this overview for reasons of simplicity but it was considered in the subsequent analysis (this section and *appendix AG*).

The main goal of experiment 2 was to establish that price colour also influences price judgement in an online shop-like setting and to provide further clarification with respect to priming and involvement. Therefore, the focus of the following paragraphs will be on the respective tests with special attention to the significant results (similarly to experiment 1, only results of *t*-tests are reported unless otherwise indicated; a more in-depth breakdown of test results for all measures is provided in *appendix AG*). The results for the role of gender, affect, and personality are briefly outlined in *appendix AH*. None of the control variables had a significant effect on the influence of price colour on perceived price, perceived value, or purchase intention (*p*-values > .050; see *appendix AI*). Because of the comparably small sample size of condition 1 results with *p*-values below .100 (and above .050) are also reported and named “marginally significant” (Pritschet, Powell, & Horne, 2016; Royall, 1986). However, Pritschet et al. (2016) criticised the use of the term “marginally significant”. Thus, the exact *p*-values are reported which allows other researchers to make their own interferences based on the results outlined.

Results of Statistical Tests for Experiment 2: p-values

<u>Inv</u>	<u>Ms</u>	<u>1 vs. 2</u>	<u>1 vs. 3</u>	<u>1 vs. 4</u>	<u>1 vs. 5</u>	<u>1 vs. 4 & 5</u>	<u>2 vs. 4 (LI) / 5 (HI)</u>	<u>3 vs. 5 (LI) / 4 (HI)</u>
LI	PP	.088	.028	.370	.296 (.255)	.249	.334	.208 (.252)
	PV	.097	.042 (.050)	.465	.422	.376	.276	.231
	PI	.286 (.122)	.058 (.083)	.576 (.627)	.597 (.602)	.523 (.557)	.582 (.627)	.182 (.267)
	Af	.656	.915	.213	.910	.404	.542	.993
HI	PP	.223	.548	.209 (.262)	.677	.337 (.406)	.275	.498 (.596)
	PV	.131	.362	.124	.559	.213	.238	.485
	PI	.672 (.667)	.586 (.424)	.146 (.146)	.648 (.532)	.229 (.199)	.992	.318
	Af	.576	.528	.218	.937	.385 (.385)	.623	.040

Note. *p*-values are shown for *t*-tests (WMW tests in brackets). Bold numbers indicate significant differences, i.e. $p < .050$. The following short forms are used in the table: Inv = Level of Involvement, Ms = Measure, LI = Low Involvement, HI = High Involvement, PP = Perceived Price, PV = Perceived Value, PI = Purchase Intention, Af = Affect. Note that the WMW test was only performed for comparisons for which the Shapiro-Wilk test indicated deviations from the Gaussian distribution of data.

Table 3: Results of Statistical Tests for Experiment 2: p-values

Comparison of Condition 1 and Condition 2: black vs. blue, priming

Low Involvement

Under low involvement, price and value were perceived significantly better to a significance level of $\alpha < .100$ if subjects were primed blue and shown blue prices compared to black prices. Perceived price was marginally significant to $p = .088$ ($M_{black} = 2.88$, $SD_{black} = 1.36$, $M_{blue,priming} = 3.63$, $SD_{blue,priming} = 1.27$, Levene's test: $F = .269$, $p = .607$, Student's t -test $t(38) = -1.752$, $p = .088$). The influence of blue price colour ($M_{blue,priming} = 3.78$, $SD_{blue,priming} = 1.04$) on perceived value was marginally significant compared to black prices ($M_{black} = 3.17$, $SD_{black} = 1.15$), Levene's test: $F = .556$, $p = .460$, Student's t -test: $t(38) = -1.703$, $p = .097$. *Appendix AG* shows that purchase intention and affect were not significantly influenced by blue price colour ($p > .100$).

High Involvement

Appendix AG also shows that none of the measures significantly differed under high involvement when comparing condition 1 and condition 2 ($p > .100$).

Comparison of Condition 1 and Condition 3: black vs. red, priming

Low Involvement

Price was perceived significantly lower (i.e. better) under low involvement for red prices ($M_{red,priming} = 3.86$, $SD_{red,priming} = 1.53$) compared to black prices ($M_{black} = 2.88$, $SD_{black} = 1.36$) if red was primed, Levene's test: $F = .012$, $p = .912$, Student's t -test: $t(43) = -2.276$, $p = .028$. Similarly, perceived value was positively influenced by the primed price colour prices ($M_{black} = 3.17$, $SD_{black} = 1.15$, $M_{red,priming} = 3.95$, $SD_{red,priming} = 1.37$, Levene's test: $F = .058$, $p = .811$, Student's t -test: $t(43) = -2.092$, $p = .042$ (WMW test indicated $p = .050$). However, after consideration of the influence of stimulus rotation both measures did not have significant results, as shown in *appendix AG*. Additionally, the difference in purchase intention was marginally significant, with a higher purchase intention for red prices ($M_{red,priming} = 3.14$, $SD_{red,priming} = 1.71$) than for black prices ($M_{black} = 2.28$, $SD_{black} = 1.26$), Levene's test: $F = 2.400$, $p = .129$, Student's t -test: $t(43) = -1.944$, $p = .058$. The influence of red price colour on affect was not significant ($p > .100$).

High Involvement

If the high involvement stimulus was seen first subjects indicated higher purchase intention under high involvement in the red price condition ($M_{red,priming} = 3.36$, $SD_{red,priming} = .74$) than with black prices ($M_{black} = 2.45$, $SD_{black} = 1.12$), Levene's test: $F = 2.006$, $p = .169$, Student's t -test: $t(25) = -2.357$, $p = .027$. Appendix AG also reveals that none of the other measures significantly differed under high involvement when comparing condition 1 and condition 3 ($p > .100$).

Comparison of Condition 1 and Condition 4: black vs. low involvement: blue, high involvement: red, non-priming

Low and High Involvement

None of the measures was significantly influenced by blue or red price colour in the non-priming condition ($p > .100$).

Comparison of Condition 1 and Condition 5: black vs. low involvement: red, high involvement: blue, non-priming

Low and High Involvement

Purchase intention in the low involvement state only differed significantly if the high involvement stimulus was shown first. Purchase intention was significantly higher with red prices ($M_{red,non-priming} = 2.00$, $SD_{red,non-priming} = 1.02$) compared to black prices ($M_{black} = 3.29$, $SD_{black} = .78$), Levene's test: $F = .257$, $p = .618$, Student's t -test: $t(25) = -2.802$, $p = .011$. All other measures for both high and low involvement were insignificant ($p > .100$), as reported in appendix AG.

Comparison of Condition 1 and Condition 4 and 5: black vs. colour

Low and High Involvement

None of the measures was significantly influenced by price colour ($p > .100$).

Influence of Priming Blue Prices

Low and High Involvement

Subjects who were primed with blue prices ($M_{blue,priming} = 4.19$, $SD_{blue,priming} = 1.09$) only showed significantly lower affect compared to those who were not primed ($M_{blue,non-priming} = 5.13$,

$SD_{blue,non-priming} = .65$) in the low involvement state and if the instant coffee stimulus was shown first, Levene's test: $F = 3.654$, $p = .073$, Student's t -test: $t(17) = -2.324$, $p = .033$. All other measures did not show significant differences as a result of priming blue ($p > .100$).

Influence of Priming Red Prices

Low Involvement

Similarly, there were significant differences in perceived price and perceived value if red prices were primed and the low involvement stimulus was presented first. Price ($M_{red,priming} = 4.65$, $SD_{red,priming} = 1.53$, $M_{red,non-priming} = 3.18$, $SD_{red,non-priming} = 1.25$, Levene's test: $F = .038$, $p = .848$, Student's t -test: $t(19) = 2.419$, $p = .026$) and value ($M_{red,priming} = 4.68$, $SD_{red,priming} = 1.28$, $M_{red,non-priming} = 3.40$, $SD_{red,non-priming} = 1.31$, Levene's test: $F < .001$, $p = .987$, Student's t -test: $t(19) = 2.260$, $p = .036$) were perceived significantly better for the priming condition. Purchase intention and affect did not significantly differ for red, primed prices ($p > .100$).

High Involvement

Perceived price, perceived value, and purchase intention were not significantly influenced by priming red price colour ($p > .100$).

However, under high involvement, affect was significantly higher in the non-priming condition, $M_{red,priming} = 3.89$, $SD_{red,priming} = 1.13$, $M_{red,non-priming} = 4.53$, $SD_{red,non-priming} = .93$, Levene's test: $F = .039$, $p = .844$, Student's t -test: $t(44) = -2.117$, $p = .040$. This finding complements what was reported for priming blue prices.

4.3 Result Discussion

The results of experiment 2 are discussed in the following on the basis of section 4.2.3, *appendix U*, and *appendix V* (results for gender, affect, and personality for experiment 2) and comparisons between experiment 2 and experiment 1 are drawn, if appropriate.

The Influence of Non-Primed Price Colour on Price Evaluation

There was no significant influence of price colour on price judgement in an online setting if no priming was applied. This could be attributed to the frequent use of price colour in online shops. The differential effect of price colour on perceived price, perceived value, and purchase

intention might be reduced as consumers are faced with coloured prices online more frequently than offline. This idea was supported by insignificant differences in affect. Consumers presumably show only minor reactions when encountering coloured prices if colour is used more frequently in an online channel (habituation effect). All in all, this might result from the effect the different characteristics of online shops and retail outlets with respect to the influence of price colour on price evaluation.

The Level of Involvement

Experiment 2 supported the notion that effects are more likely to occur under low involvement than under high involvement. This could either be due to different characteristics of online shopping or due to an imperfect representation of the overall population in the sample of experiment 1. Both conceivable explanations and insights from Puccinelli et al. (2013) propose that there is a differential effect of involvement on the influence of price colour within the buying process (**H4-H5**) and challenge the findings of experiment 1.

The Influence of Priming

Primed Price Colour vs. Black Prices

If primed, the influence of price colour was significant for red and marginally significant for blue (in contrast to the case without priming). This supports **H6a** and **H6b**, more specifically, the idea that the influence of coloured prices on price judgement is significant compared to black prices if the colour was previously primed. It could be argued that priming prices can be easily done in an online setting. For example, a prime could be implemented on the landing page (i.e. the first page of a website) and subsequently influence the perception of coloured prices for all sub-pages of the respective website. The application of priming in an online channel tends to be easier and cheaper than in a retail setting. Consequently, it could be suggested that price colour, in fact, significantly influences price judgement in an online setting because consumers can efficiently be primed.

There could be two alternative reasons for blue price colour showing a less significant effect than red: It may be argued that blue price colour, in fact, does not influence consumers to the same extent as red price colour. However, this would challenge the predictions of literature and would contradict the results of experiment 1. On the other hand, blue might (in the real world) have a similar effect size compared to red although the experiment only exhibited marginal significance in this regard. A larger sample size could either solidify or reject this indication.

Primed vs. Non-Primed Price Colour

The comparison of primed price colour to non-primed price colour revealed an insignificant influence of priming on price evaluation. This finding is in line with experiment 1 and can be explained similarly: It might be possible that the prime itself was not strong enough, exposure time was too short, a scale with more divisions might produce better results, or that the internal reference price was not sufficiently influenced by priming. All in all, however, priming colour did lead to a slightly better price perception which, in turn, resulted in significant differences between primed, coloured prices and black prices.

The Level of Affect

Price colour was shown to influence affect and an interaction effect between price colour and affect on perceived value was determined. Thus, it can be argued that affect tends to be a contributor to how individuals use price colour for evaluations. However, this does not allow to conclude that affect is the only contributor or always influences how consumers make decisions. The finding that colour influences affect, which in turn influences the effect of colour on perceived value at a later stage, was in line with previous findings in marketing and psychology literature (Crowley, 1993; Puccinelli et al., 2013).

Additionally, affect was significantly higher for coloured prices if they were not previously primed compared to the priming condition. One possible explanation could be that individuals tend to get used to a colour if it is frequently encountered (Elliot & Maier, 2014; Küller, Mikellides, & Janssens, 2009). The state of tension that might result from red colours could decline over time. Therefore, individuals would show lower affect if they saw the respective colour for the second time (the first time being the prime) because they had previously encountered the colour in the specific environment – the colour would not appear to be as unexpected as without priming.

The Influence of Gender

The analysis of the data obtained in experiment 2 further suggested that gender is not an appropriate characteristic to describe differences among individuals with respect to the influence of price colour on buying behaviour.

Personality as Explanation

The Connection between Personality Traits and (Favourite) Colour

Similarly to experiment 1, a connection between (favourite) colour and personality traits was indicated. **P1** calls for more research on cause-and-effect relationships with respect to this topic.

The Connection between Personality Traits, Price Colour, and Price Evaluation

It became evident that it is possible to link personality traits to the influence price colour might have during the buying process, although the results were only indicative and need to be treated with caution. However, the finding that higher Intellect/Imagination and Conscientiousness could be linked to a higher perceived value for the colour red under high involvement tended to contradict some previous studies on colour and the associated characteristics. The suggested connection between colour and personality and the rather inconclusive results with respect to which trait can be linked to which colour underline the importance of further research in this area (**P2**).

Price Colour in an Online Channel compared to a Retail Setting

The discussion in the previous paragraphs confirmed that the influence of price colour on price judgement not only holds true for offline channels but also in an online shop-like setting (at least in some situations). This finding has important implications for both researchers and managers. It enables managers to consider the use of coloured prices not only for their retail outlets but also their online shops (where the implementation could be faster, easier, and cheaper and consumer behaviour is easier to observe than in a retail outlet). It also provides academics with an additional starting point for further research: The effects in experiment 2 were mainly observed in the priming condition whereas experiment 1 revealed an influence of price colour regardless of priming or non-priming conditions in a retail setting. Thus, it could be argued that the effect size of the influence of price colour on perceived price, perceived value, and purchase intention tends to be larger in a retail setting than in an online setting. Therefore, further research could investigate by the means of a direct comparison whether the effect size is, in fact, larger in a retail setting than in an online setting. Nevertheless, it could also be argued that the implementation of priming in an online setting is easier and connection to lower cost and thus, both channels could produce similar results.

Appendix AJ outlines which hypotheses were supported and which were refuted by experiment 2 and how the research propositions were evaluated in the light of experiment 2. In conclusion, experiment 2 revealed that the influence of price colour on consumer behaviour can also be present in an online setting.

5. General Discussion

The experiments and the corresponding analyses provide strong support for the notion that price colour influences consumers during the buying process: Consumers tend to perceive price lower and the delivered value higher if prices are coloured. Consumers are very likely to be influenced by price colour under low involvement while the influence is limited to a few cases under high involvement. The effect of colour on pricing is present in offline channels and tends to have an influence in online channels as well. Additionally, personality traits might influence the extent to which a specific customer reacts to coloured prices. It is found, however, that price colour does not always lead to a higher purchase intention.

5.1 Theoretical Implications

This master thesis extends the existing body of research in the intersection of marketing and psychology, more specifically to the academic literature on behavioural pricing.

Firstly, previous research either briefly evaluated several colours or focused on red only. In the work presented here, effects are seen for both blue and red price colour. This is in line with the idea that activation for both colours is similarly high as it has a U-shaped relationship to wavelength. Nevertheless, it is likely that the underlying cognitive processes differ substantially. This master thesis outlines that the result tends to be a change in price judgement as soon as a red or blue stimulus enters an individual's mind. It is not fully known how the consumer arrives at his/her final decision when faced with coloured prices but literature allows to argue that the cognitive processes are very different for blue and red. While red induces an avoidance motivation, blue results in an approach motivation. More specifically, the literature discussed in chapter 2 of this master thesis and the subsequent findings suggest the following: On the one hand, if the consumer is confronted with red prices, the fear of overpaying for the product at a later time or for other products with similar benefits induces the customer's mind to judge a red price as low. Thus, red prices influence price judgement because the customer wants to avoid a negative outcome in the future, that is the regret of overpaying for a product. On the other hand, it can be argued that blue price colour influences subsequent evaluation based on an approach motivation. The colour blue results in a more positive judgement of the specific price or product because the product is perceived as offering higher value for money.

That is the customer evaluates blue prices significantly better than black prices because of an underlying approach motivation. In other words, the customer wants to achieve a positive outcome in that the blue priced product is expected to deliver a higher (perceived) value. This idea does not only enrich the scientific research on behavioural pricing but also suggests further implications for consumer behaviour in general: If blue and red produce comparable results in a pricing context, although based on a different underlying motivation, they might perform similarly in other contexts as well.

Secondly, this master thesis has tested the influence of price colour on price judgement for further product categories. Previous research has been limited to kitchen appliances such as toasters or microwaves. The results of both experiments extend the findings to groceries and consumer electronics.

Thirdly, the results provide evidence that low involvement does not necessarily always lead to heuristic, simple processing and that high involvement leads to systematic, thorough processing. Literature and the work presented here suggest that it is possible that both types of processing coexist at the same time or (at the least) that one influences the other. Therefore, literature that argues in favour of a clear distinction of heuristic and systematic processing is being challenged, whereas studies that reveal an interaction and intersection between both are supported (e.g. Chaiken & Maheswaran, 1994; Chen et al., 1999).

Fourthly, findings suggest that priming might be a possible tool to influence consumer behaviour and to alter the effects of coloured pricing. This idea extends the intersection of priming and behavioural pricing with two further scenarios, primed prices in a retail setting and primed prices in an online setting.

Puccinelli et al. (2013) have outlined that further research should examine whether price colour can also influence consumers in an online shop setting. This master thesis clearly builds upon this suggestion and findings indicate that price colour is (under certain conditions) also relevant in an online setting. The findings also imply that there are important differences among online and offline channels with respect to price colour. Further research could investigate in more detail which underlying drivers are responsible for the different effects of price colour in the various channels.

Lastly, both experiments challenge the idea that gender is the dominating reason for differences among individuals with respect to the influence of price colour on price judgement. More

specifically, it is proposed that personality traits are the underlying cause for differences among consumers rather than gender alone.

5.2 Managerial Implications

The findings have important implications for managers, especially for areas such as shop design and price presentation.

Most stores use red or yellow to highlight sale prices and influence consumers. This master thesis suggests that price colour also affects consumer behaviour for non-discounted prices. This idea offers managers new possibilities for price promotions in terms of highlighting several prices instead of reducing those prices. Additionally, it can be suggested that previously learned connections of red and sale prices are not necessarily the main reason why consumers can be influenced by coloured prices as effects are present for red and blue. Consequently, blue price colour might be as effective as red but would additionally allow managers to set their products apart from competitive offerings.

Experiment 2 further provides evidence that price colour might also be a successful method of behavioural pricing in an online context. This extends the application opportunities of price colour to more organisations, channels, and managers. However, results have only been observed in the priming condition. Given the frequent use of colouring in an online setting it could be speculated that consumers are more used to coloured prices and are therefore less influenced by the use of price colour in online shops (habituation effect). Nevertheless, in an online shop it might be easier and cheaper to implement a prime which subsequently results in a better price perception along the buying process. Overall, this suggests that price colour can influence price evaluation for both offline and online channels but managers need to pay attention to the specifics of their respective channel.

Furthermore, the findings entail implications for shop design. For example, the differences that arise from the rotation of stimuli might be a sign of how other products in an advertisement or within a store might influence the effect price colour has on price judgement. For example, placing higher priced products at the store entrance could possibly increase the likelihood that colour affects a consumer's judgement of lower priced products that are placed right before the cashier's desk.

Additionally, the idea that personality influences behaviour with respect to coloured prices could be important for managers who either have comprehensive knowledge of their consumers' personality traits or who target consumers with specific characteristics.

Finally, priming did not negatively influence individuals but it sometimes supported the effect of price colour on price perception and perceived value. Therefore, managers could try to apply priming in their retail stores or in their online shops and subsequently evaluate the results of priming for their specific business situation.

5.3 Limitations and Directions for Further Research

In sections 3.3 and 4.3 implications have been outlined and opportunities for further research with respect to coloured prices have been described. In the light of the potential impact of this master thesis' findings, it is also important to clearly describe the limitations of this research and to point towards conceivable further research.

5.3.1 Immediate Suggestions

In this section, issues concerning the online nature of the questionnaire, the underrepresentation of some parts of the population in the sample, and the cross-sectional study type are addressed as well as suggestions for improvements highlighted.

Differences among participants' electronic displays might have led to differences in how colours were displayed, and thus, perceived. The experiments could be redone in a setting where every participant uses the same computer and screen, for example in a university library. Additionally, online surveys have several disadvantages compared to paper surveys and field experiments. For example, there are issues about online questionnaires for the collection of self-report data (Kiesler & Sproull, 1986). Because participants cannot be observed, they might not put as much effort into answering as they would in a controlled environment. Even if online questionnaires predict actual consumer behaviour rather accurately there still are differences between real and simulated environments (Burke, Harlam, Kahn, & Lodish, 1992). Further research should evaluate the findings of this master thesis in a real-world retail store or online shop setting. This could also provide further insights for managers in terms of optimal store

design. Furthermore, this would eliminate issues with the gap between stated purchase intention and actual purchase behaviour (Morrison, 1979).

The results might be biased to the extent that the samples have largely consisted of students with low household income, which are not representative of the overall population. This is partly due to the nature of an online questionnaire, since some groups are under-represented in online surveys due to a lack of (frequent) internet access (Hair et al., 2010). Further research could validate the findings for consumers apart from students (especially consumers with higher income could show a lower sensitivity to prices and thus, might be less affected by price colour).

The experiments have not been conducted over time. This means all information has been collected at the same point in time. Therefore, it was not possible to evaluate how consumers might adapt to the use of colours in pricing, especially for non-discount prices. It is conceivable that, after consumers realise that prices are simply coloured and not discounted, the effect size decreases. A future, longitudinal study could challenge this hypothesis.

As previously suggested, additional experiments could elaborate on the connection between personality traits and the influence of price colour onto consumer behaviour. Results in this master thesis indicated that there is justified interest in further studies that link the two concepts. It is possible that specific colours are either connected to one dimension or to various levels of multiple dimensions. Further studies could focus on assessing either specific dimensions or certain combinations of personality traits with respect to their effect on the influence of price colour. Although the personality scale used throughout this thesis has already delivered acceptable results in terms of reliability, there is still room for improvement. Thus, the use of a more comprehensive form of personality test is recommended.

Factor loadings have been analysed briefly for this master thesis and suggest that perceived price and perceived value are similar in this (specific) context. Further research could apply multivariate techniques to analyse the influence of price colour within the buying process. The analysis presented here is limited to the use of univariate approaches whereas with multivariate approaches it would be important to pay special attention to factor analysis, average variance extracted, composite reliability, and factor loadings.

5.3.2 Further Conceivable Research Directions

There are several additional ideas that could be outlined in the scope of further research: Additional studies could test other colours, account for cultural differences, evaluate price tag colour in addition to price font colour, test more product categories (or services) and a B2B setting, or focus in more detail on differences among sales and communication channels. Furthermore, additional research on purchase intention (i.e. consideration and choice sets), habituation to price colour over time, and the influence of price colour on price fairness and image could be of interest.

Firstly, experiments could validate the results obtained for further colours such as orange, yellow, green, or purple. *Appendix AK* outlines how the respective colours could be characterised. This might help scholars to quickly identify which colours should be considered for further research.

Secondly, cultural differences between countries could be taken into account in subsequent studies. Puccinelli et al. (2013) have conducted their study in the United States of America and most subjects for the two experiments within this master thesis are from European countries. It will be crucial to investigate countries or regions that are likely to reveal different results and then subsequently conduct studies for comparison. This is especially important in the light of increasing heterogenization of consumers due to cultural differences. Culture can, for example, be used to explain differences in shopping behaviour among countries (Hofstede, 2016; Hofstede, Hofstede, & Minkov, 2010; Mooij & Hofstede, 2002).

Thirdly, price tag layout could be evaluated in further studies. This includes but is not limited to price font type, font size, and price tag colour. Previous research has shown that font size could influence how prices are perceived. Additionally, the size of a price tag as well as its colour might have an effect on consumer behaviour (Coulter & Coulter, 2005; Coulter & Norberg, 2009; Dehaene & Akhavein, 1995). Therefore, further studies could combine insights from this master thesis on price colour and extent literature on price tags with respect to price font colour, type, and size as well as price tag colour and combinations thereof.

Additionally, researchers could focus on different categories to provide evidence that the effects hold true for a variety of products or services (e.g. on an offer) and outline categories for which the influence of price colour is comparably low. For example, customers of luxury items tend

to react differently to price changes than classical theory would suggest. Price increases are often associated with an increase in perceived benefit and increase the willingness to buy. Taking this so-called Veblen effect into account, further research could investigate to which extent price colour might have a negative influence on perceived value and purchase intention in some situations (Besanko et al., 2013; Veblen, 1899).

Furthermore, Puccinelli et al. (2013) and the two experiments in this master thesis strongly focus on a business-to-consumer (B2C) buying situation. Scholars could evaluate whether there is an influence of price colour in a business-to-business (B2B) context. Because a firm's buying centre typically involves multiple people and requires more thorough elaboration along the buying process, it may be speculated that there will be little to no influence of price colour on price perception and buying behaviour (Lilien et al., 2013). Nevertheless, studies could compare a B2C and a B2B setting and either provide support for this statement or outline situations in which price colour also influences subsequent evaluation in a B2B setting.

This master thesis establishes that, in general, there is an influence of price colour on price perception for an offline and an online setting. Further studies could now start to investigate various sub-channels in more detail. For example, price colour seems to be a rather unlikely factor for purchase decision in a direct selling environment because consumers tend to be persuaded by the sales representative (Peterson & Wotruba, 1996; Weitz, 1978). However, consumers in a mobile shopping environment (where consumers buy products through their mobile devices such as phones and tablets) face a different process for information search and purchasing compared to consumers who use computers or offline channels (Lu & Yu-Jen Su, 2009). This could result in a different effect size of the influence of price colour along the buying process. Additionally, the influence could vary depending on the communication channel used. For example, price colour in television advertisements could have a different influence on price perception than newspaper advertisements due to the channels' different characteristics (Abernethy, 1992). Further insights about which sales channels and which communication channels are most likely to produce effective results through the use of colour are especially relevant to managers.

Both experiments suggest that the influence of colour on price perception does not necessarily lead to a higher purchase intention. Research has shown that consumers often do not evaluate all possible alternatives when making a buying decision. Consumers rather tend to analyse a set of alternatives briefly and to include the more attractive options into their consideration set.

Further analysis then tends to involve the processing of more information in order to choose from the alternatives (Häubl & Trifts, 2000; Shocker, Ben-Akiva, Boccara, & Nedungadi, 1991). Consequently, it might be possible that price colour is only used to include a product in the subset of products which are then further evaluated. This could explain why price colour influences price perception and perceived value but has limited influence on purchase intention. Further research could include more product alternatives in order to offer a larger variety of choices and force the customer to base the initial processing rather on heuristic cues than on thorough evaluation of available information in order to narrow down the alternatives to a consideration set. This could be important for marketers because the inclusion of a product into the consideration set constitutes a prerequisite for purchase at a later stage of the buying process. Additional experiments could clearly outline the effect of price colour along this choice process.

In this master thesis, it was implicitly argued that reference price plays a role in how consumers evaluate price colour. Further research could more clearly test the exact influence of price colour on reference price and then, in turn, the influence of reference price on price perception for coloured prices. This could be conducted with respect to two ideas: On the one hand, it should be assessed how the reference price is influenced by price colour when encountered for the first time. On the other hand, a study over time could reveal how the reference price changes over time as a result of coloured prices. Both research directions could further contribute to showing whether it is better to apply colour to only some prices (in order to direct special attention towards the respective products while the other products serve as anchor or reference) or to all prices in a store (in order to generate a perception of low prices for the entire store which could positively influence the perceived distance between the reference price and the prices in the whole outlet).

Finally, it would be of interest to both scholars and managers to evaluate the influence of price colour on product, brand, and store image as well as perceived price fairness. Retail stores that sell rather exclusive products at high prices might not profit from applying a coloured-price strategy, whereas outlets that operate under a low-price strategy could benefit from colouring prices. Customers might be negatively affected to a stronger extent for high prices compared to low prices stores if they find out that the coloured prices do not indicate sales but non-discount prices. This argumentation is, at least partly, based on how image, fairness, and pricing interact. Therefore, further research could evaluate what effect coloured prices have on image as well as on perceived fairness.

Appendix

List of Appendices

Appendix A: The Physics of Colour	XX
Appendix B: Human Colour Vision.....	XX
Appendix C: Hypotheses and Research Propositions	XXII
Appendix D: Priming and Reference Prices	XXIII
Appendix E: Research Classification.....	XXIV
Appendix F: Pre-Test Results	XXV
Appendix G: Constructs.....	XXVI
Appendix H: Priming and Colour	XXVII
Appendix I: Advertising Stimuli Retail (Experiment 1)	XXVIII
Appendix J: The Case For 7-Point Scales.....	XXVIII
Appendix K: Purchase Intention Scale.....	XXIX
Appendix L: Discussion of Personality Scales	XXIX
Appendix M: Careless Responses	XXX
Appendix N: Sample Details per Condition (Experiment 1)	XXX
Appendix O: Harman's Single-Factor Test (Experiment 1)	XXXIV
Appendix P: Inter-item and Item-to-total Correlation (Experiment 1)	XXXV
Appendix Q: Cronbach's Alpha (Experiment 1).....	LXXVIII
Appendix R: Descriptive Statistics per Condition (Experiment 1)	LXXX
Appendix S: Test of Normality (Experiment 1).....	LXXXVI

Appendix T: Rotation of Stimuli (Experiment 1)	LXXXVI
Appendix U: Statistical Tests (Experiment 1).....	LXXXVIII
Appendix V: Two-Way ANOVA Gender (Experiment 1)	CV
Appendix W: Two-Way ANOVA Affect (Experiment 1).....	CIX
Appendix X: Linear Regression Analysis of Personality Traits (Experiment 1)...	CXII
Appendix Y: Control Variables (Experiment 1)	CXII
Appendix Z: Advertising Stimuli Online (Experiment 2).....	CXV
Appendix AA: Sample Details per Condition (Experiment 2)	CXVI
Appendix AB: Harman's Single-Factor Test (Experiment 2).....	CXIX
Appendix AC: IIC, ITTC, Cronbach's Alpha (Experiment 2).....	CXX
Appendix AD: Descriptive Statistics (Experiment 2)	CLXIII
Appendix AE: Test of Normality (Experiment 2).....	CLXIX
Appendix AF: Analysis of Rotation (Experiment 2)	CLXX
Appendix AG: Statistical Tests (Experiment 2).....	CLXXI
Appendix AH: Results for Gender, Affect, Personality (Experiment 2)	CLXXXVI
Appendix AI: Control Variables (Experiment 2).....	CXCIV
Appendix AJ: Evaluation of Hypotheses (Experiment 2).....	CXCVI
Appendix AK: Further Colours.....	CXCVIII

List of Appendix Tables

Table 4: Overview of Hypotheses and Research Propositions	XXIII
Table 5: Constructs.....	XXVI
Table 6: Age Group per Condition (Experiment 1)	XXXI
Table 7: Gender per Condition (Experiment 1)	XXXI
Table 8: Disposable Household Income per Condition (Experiment 1)	XXXII
Table 9: Country per Condition (Experiment 1)	XXXIII
Table 10: Employment per Condition (Experiment 1).....	XXXIV
Table 11: Harman's Single-Factor Test (Experiment 1).....	XXXIV
Table 12: Average inter-item and item-to-total correlations (Experiment 1)	XXXV
Table 13: Inter-item and Item-to-total Correlation for PP LI Full Sample (Experiment 1).....	XXXVI
Table 14: Inter-item and Item-to-total Correlation for PV LI Full Sample (Experiment 1).....	XXXVII
Table 15: Inter-item and Item-to-total Correlation for PI LI Full Sample (Experiment 1).....	XXXVIII
Table 16: Inter-item and Item-to-total Correlation for Af LI Full Sample (Experiment 1).....	XXXVIII
Table 17: Inter-item and Item-to-total Correlation for PP HI Full Sample (Experiment 1).....	XXXIX
Table 18: Inter-item and Item-to-total Correlation for PV HI Full Sample (Experiment 1).....	XXXIX
Table 19: Inter-item and Item-to-total Correlation for PI HI Full Sample (Experiment 1)	XL
Table 20: Inter-item and Item-to-total Correlation for Af HI Full Sample (Experiment 1)....	XL
Table 21: Inter-item and Item-to-total Correlation for Per Ext Full Sample (Experiment 1)	XLI
Table 22: Inter-item and Item-to-total Correlation for Per Ag Full Sample (Experiment 1).	XLI
Table 23: Inter-item and Item-to-total Correlation for Per Co Full Sample (Experiment 1)	XLII
Table 24: Inter-item and Item-to-total Correlation for Per Ne Full Sample (Experiment 1)	XLII
Table 25: Inter-item and Item-to-total Correlation for Per In Full Sample (Experiment 1)	XLIII
Table 26: Inter-item and Item-to-total Correlation for PP LI Condition 1 (Experiment 1)	XLIII
Table 27: Inter-item and Item-to-total Correlation for PV LI Condition 1 (Experiment 1)	XLIV
Table 28: Inter-item and Item-to-total Correlation for PI LI Condition 1 (Experiment 1) ..	XLV
Table 29: Inter-item and Item-to-total Correlation for Af LI Condition 1 (Experiment 1) .	XLV

Table 30: Inter-item and Item-to-total Correlation for PP HI Condition 1 (Experiment 1)	XLVI
Table 31: Inter-item and Item-to-total Correlation for PV HI Condition 1 (Experiment 1).....	XLVI
Table 32: Inter-item and Item-to-total Correlation for PI HI Condition 1 (Experiment 1).....	XLVII
Table 33: Inter-item and Item-to-total Correlation for Af HI Condition 1 (Experiment 1).....	XLVII
Table 34: Inter-item and Item-to-total Correlation for Per Ext Condition 1 (Experiment 1).....	XLVIII
Table 35: Inter-item and Item-to-total Correlation for Per Ag Condition 1 (Experiment 1).....	XLVIII
Table 36: Inter-item and Item-to-total Correlation for Per Co Condition 1 (Experiment 1).....	XLIX
Table 37: Inter-item and Item-to-total Correlation for Per Ne Condition 1 (Experiment 1).....	XLIX
Table 38: Inter-item and Item-to-total Correlation for Per In Condition 1 (Experiment 1).....	L
Table 39: Inter-item and Item-to-total Correlation for PP LI Condition 2 (Experiment 1).....	L
Table 40: Inter-item and Item-to-total Correlation for PV LI Condition 2 (Experiment 1).....	LI
Table 41: Inter-item and Item-to-total Correlation for PI LI Condition 2 (Experiment 1).....	LII
Table 42: Inter-item and Item-to-total Correlation for Af LI Condition 2 (Experiment 1).....	LII
Table 43: Inter-item and Item-to-total Correlation for PP HI Condition 2 (Experiment 1).....	LIII
Table 44: Inter-item and Item-to-total Correlation for PV HI Condition 2 (Experiment 1).....	LIII
Table 45: Inter-item and Item-to-total Correlation for PI HI Condition 2 (Experiment 1).....	LIV
Table 46: Inter-item and Item-to-total Correlation for Af HI Condition 2 (Experiment 1).....	LIV
Table 47: Inter-item and Item-to-total Correlation for Per Ext Condition 2 (Experiment 1).....	LV
Table 48: Inter-item and Item-to-total Correlation for Per Ag Condition 2 (Experiment 1).....	LV
Table 49: Inter-item and Item-to-total Correlation for Per Co Condition 2 (Experiment 1).....	LVI
Table 50: Inter-item and Item-to-total Correlation for Per Ne Condition 2 (Experiment 1).....	LVI
Table 51: Inter-item and Item-to-total Correlation for Per In Condition 2 (Experiment 1).....	LVII
Table 52: Inter-item and Item-to-total Correlation for PP LI Condition 3 (Experiment 1).....	LVII
Table 53: Inter-item and Item-to-total Correlation for PV LI Condition 3 (Experiment 1).....	LVIII
Table 54: Inter-item and Item-to-total Correlation for PI LI Condition 3 (Experiment 1).....	LIX
Table 55: Inter-item and Item-to-total Correlation for Af LI Condition 3 (Experiment 1).....	LIX
Table 56: Inter-item and Item-to-total Correlation for PP HI Condition 3 (Experiment 1).....	LX

Table 57: Inter-item and Item-to-total Correlation for PV HI Condition 3 (Experiment 1) ...LX	
Table 58: Inter-item and Item-to-total Correlation for PI HI Condition 3 (Experiment 1)....LXI	
Table 59: Inter-item and Item-to-total Correlation for Af HI Condition 3 (Experiment 1) ...LXI	
Table 60: Inter-item and Item-to-total Correlation for Per Ext Condition 3 (Experiment 1).....	LXII
Table 61: Inter-item and Item-to-total Correlation for Per Ag Condition 3 (Experiment 1)LXII	
Table 62: Inter-item and Item-to-total Correlation for Per Co Condition 3 (Experiment 1).....	LXIII
Table 63: Inter-item and Item-to-total Correlation for Per Ne Condition 3 (Experiment 1).....	LXIII
Table 64: Inter-item and Item-to-total Correlation for Per In Condition 3 (Experiment 1)LXIV	
Table 65: Inter-item and Item-to-total Correlation for PP LI Condition 4 (Experiment 1) LXIV	
Table 66: Inter-item and Item-to-total Correlation for PV LI Condition 4 (Experiment 1).LXV	
Table 67: Inter-item and Item-to-total Correlation for PI LI Condition 4 (Experiment 1) .LXVI	
Table 68: Inter-item and Item-to-total Correlation for Af LI Condition 4 (Experiment 1) LXVI	
Table 69: Inter-item and Item-to-total Correlation for PP HI Condition 4 (Experiment 1).....	LXVII
Table 70: Inter-item and Item-to-total Correlation for PV HI Condition 4 (Experiment 1).....	LXVII
Table 71: Inter-item and Item-to-total Correlation for PI HI Condition 4 (Experiment 1).....	LXVIII
Table 72: Inter-item and Item-to-total Correlation for Af HI Condition 4 (Experiment 1).....	LXVIII
Table 73: Inter-item and Item-to-total Correlation for Per Ext Condition 4 (Experiment 1).....	LXIX
Table 74: Inter-item and Item-to-total Correlation for Per Ag Condition 4 (Experiment 1).....	LXIX
Table 75: Inter-item and Item-to-total Correlation for Per Co Condition 4 (Experiment 1).....	LXX
Table 76: Inter-item and Item-to-total Correlation for Per Ne Condition 4 (Experiment 1).....	LXX
Table 77: Inter-item and Item-to-total Correlation for Per In Condition 4 (Experiment 1).....	LXXI

Table 78: Inter-item and Item-to-total Correlation for PP LI Condition 5 (Experiment 1).....	LXXI
Table 79: Inter-item and Item-to-total Correlation for PV LI Condition 5 (Experiment 1).....	LXXII
Table 80: Inter-item and Item-to-total Correlation for PI LI Condition 5 (Experiment 1).....	LXXIII
Table 81: Inter-item and Item-to-total Correlation for Af LI Condition 5 (Experiment 1).....	LXXIII
Table 82: Inter-item and Item-to-total Correlation for PP HI Condition 5 (Experiment 1).....	LXXIV
Table 83: Inter-item and Item-to-total Correlation for PV HI Condition 5 (Experiment 1).....	LXXIV
Table 84: Inter-item and Item-to-total Correlation for PI HI Condition 5 (Experiment 1).....	LXXV
Table 85: Inter-item and Item-to-total Correlation for Af HI Condition 5 (Experiment 1).....	LXXV
Table 86: Inter-item and Item-to-total Correlation for Per Ext Condition 5 (Experiment 1).....	LXXVI
Table 87: Inter-item and Item-to-total Correlation for Per Ag Condition 5 (Experiment 1).....	LXXVI
Table 88: Inter-item and Item-to-total Correlation for Per Co Condition 5 (Experiment 1).....	LXXVII
Table 89: Inter-item and Item-to-total Correlation for Per Ne Condition 5 (Experiment 1).....	LXXVII
Table 90: Inter-item and Item-to-total Correlation for Per In Condition 5 (Experiment 1).....	LXXVIII
Table 91: Descriptive Statistics (Experiment 1)	LXXX
Table 92: Descriptive Statistics Condition 1 (Experiment 1)	LXXXI
Table 93: Descriptive Statistics Condition 2 (Experiment 1)	LXXXII
Table 94: Descriptive Statistics Condition 3 (Experiment 1)	LXXXIII
Table 95: Descriptive Statistics Condition 4 (Experiment 1)	LXXXIV
Table 96: Descriptive Statistics Condition 5 (Experiment 1)	LXXXV
Table 97: Shapiro-Wilk test of Normality (Experiment 1)	LXXXVI
Table 98: Results of Statistical Tests: Condition 1 vs. Condition 2 (Experiment 1)	XC

Table 99: Results of Statistical Tests: Condition 1 vs. Condition 3 (Experiment 1)	XCIII
Table 100: Results of Statistical Tests: Condition 1 vs. Condition 4 (Experiment 1)	XCVI
Table 101: Results of Statistical Tests: Condition 1 vs. Condition 5 (Experiment 1)	XCVIII
Table 102: Results of Statistical Tests: Condition 1 vs. Condition 4 and 5 (Experiment 1)....	CI
Table 103: Results of Statistical Tests: Priming Blue (Experiment 1)	CII
Table 104: Results of Statistical Tests: Priming Red (Experiment 1).....	CIV
Table 105: ANOVA Affect, Blue and Black, Perceived Value, Low Involvement (Experiment 1).....	CIX
Table 106: ANOVA Affect, Red and Black, Perceived Value, Low Involvement (Experiment 1).....	CX
Table 107: ANOVA Affect, Blue and Black, Perceived Value, High Involvement (Experiment 1).....	CX
Table 108: ANOVA Affect, Red and Black, Perceived Value, High Involvement (Experiment 1).....	CXI
Table 109: Linear Regression Analysis of Personality Traits (Experiment 1)	CXII
Table 110: Control Variables p-values (Experiment 1)	CXIV
Table 111: Age Group per Condition (Experiment 2)	CXVI
Table 112: Gender per Condition (Experiment 2)	CXVI
Table 113: Disposable Household Income per Condition (Experiment 2)	CXVII
Table 114: Country per Condition (Experiment 2)	CXVIII
Table 115: Employment per Condition (Experiment 2).....	CXIX
Table 116: Harman's Single-Factor Test (Experiment 2).....	CXIX
Table 117: Inter-item and Item-to-total Correlation for PP LI Full Sample (Experiment 2).....	CXX
Table 118: Inter-item and Item-to-total Correlation for PV LI Full Sample (Experiment 2).....	CXXI
Table 119: Inter-item and Item-to-total Correlation for PI LI Full Sample (Experiment 2).....	CXXII
Table 120: Inter-item and Item-to-total Correlation for Af LI Full Sample (Experiment 2).....	CXXII
Table 121: Inter-item and Item-to-total Correlation for PP HI Full Sample (Experiment 2).....	CXXIII
Table 122: Inter-item and Item-to-total Correlation for PV HI Full Sample (Experiment 2).....	CXXIII

Table 123: Inter-item and Item-to-total Correlation for PI HI Full Sample (Experiment 2).....	CXXIV
Table 124: Inter-item and Item-to-total Correlation for Af HI Full Sample (Experiment 2).....	CXXIV
Table 125: Inter-item and Item-to-total Correlation for Per Ext Full Sample (Experiment 2).....	CXXV
Table 126: Inter-item and Item-to-total Correlation for Per Ag Full Sample (Experiment 2).....	CXXV
Table 127: Inter-item and Item-to-total Correlation for Per Co Full Sample (Experiment 2).....	CXXVI
Table 128: Inter-item and Item-to-total Correlation for Per Ne Full Sample (Experiment 2).....	CXXVI
Table 129: Inter-item and Item-to-total Correlation for Per In Full Sample (Experiment 2).....	CXXVII
Table 130: Inter-item and Item-to-total Correlation for PP LI Condition 1 (Experiment 2).....	CXXVII
Table 131: Inter-item and Item-to-total Correlation for PV LI Condition 1 (Experiment 2).....	CXXVIII
Table 132: Inter-item and Item-to-total Correlation for PI LI Condition 1 (Experiment 2).....	CXXIX
Table 133: Inter-item and Item-to-total Correlation for Af LI Condition 1 (Experiment 2).....	CXXIX
Table 134: Inter-item and Item-to-total Correlation for PP HI Condition 1 (Experiment 2).....	CXXX
Table 135: Inter-item and Item-to-total Correlation for PV HI Condition 1 (Experiment 2).....	CXXX
Table 136: Inter-item and Item-to-total Correlation for PI HI Condition 1 (Experiment 2).....	CXXXI
Table 137: Inter-item and Item-to-total Correlation for Af HI Condition 1 (Experiment 2).....	CXXXI
Table 138: Inter-item and Item-to-total Correlation for Per Ext Condition 1 (Experiment 2).....	CXXXII
Table 139: Inter-item and Item-to-total Correlation for Per Ag Condition 1 (Experiment 2).....	CXXXII

Table 140: Inter-item and Item-to-total Correlation for Per Co Condition 1 (Experiment 2).....	CXXXIII
Table 141: Inter-item and Item-to-total Correlation for Per Ne Condition 1 (Experiment 2).....	CXXXIII
Table 142: Inter-item and Item-to-total Correlation for Per In Condition 1 (Experiment 2).....	CXXXIV
Table 143: Inter-item and Item-to-total Correlation for PP LI Condition 2 (Experiment 2).....	CXXXIV
Table 144: Inter-item and Item-to-total Correlation for PV LI Condition 2 (Experiment 2).....	CXXXV
Table 145: Inter-item and Item-to-total Correlation for PI LI Condition 2 (Experiment 2).....	CXXXVI
Table 146: Inter-item and Item-to-total Correlation for Af LI Condition 2 (Experiment 2).....	CXXXVI
Table 147: Inter-item and Item-to-total Correlation for PP HI Condition 2 (Experiment 2).....	CXXXVII
Table 148: Inter-item and Item-to-total Correlation for PV HI Condition 2 (Experiment 2).....	CXXXVII
Table 149: Inter-item and Item-to-total Correlation for PI HI Condition 2 (Experiment 2).....	CXXXVIII
Table 150: Inter-item and Item-to-total Correlation for Af HI Condition 2 (Experiment 2).....	CXXXVIII
Table 151: Inter-item and Item-to-total Correlation for Per Ext Condition 2 (Experiment 2).....	CXXXIX
Table 152: Inter-item and Item-to-total Correlation for Per Ag Condition 2 (Experiment 2).....	CXXXIX
Table 153: Inter-item and Item-to-total Correlation for Per Co Condition 2 (Experiment 2).....	CXL
Table 154: Inter-item and Item-to-total Correlation for Per Ne Condition 2 (Experiment 2).....	CXL
Table 155: Inter-item and Item-to-total Correlation for Per In Condition 2 (Experiment 2).....	CXLI
Table 156: Inter-item and Item-to-total Correlation for PP LI Condition 3 (Experiment 2).....	CXLI

Table 157: Inter-item and Item-to-total Correlation for PV LI Condition 3 (Experiment 2).....	CXLII
Table 158: Inter-item and Item-to-total Correlation for PI LI Condition 3 (Experiment 2).....	CXLIII
Table 159: Inter-item and Item-to-total Correlation for Af LI Condition 3 (Experiment 2).....	CXLIII
Table 160: Inter-item and Item-to-total Correlation for PP HI Condition 3 (Experiment 2).....	CXLIV
Table 161: Inter-item and Item-to-total Correlation for PV HI Condition 3 (Experiment 2).....	CXLIV
Table 162: Inter-item and Item-to-total Correlation for PI HI Condition 3 (Experiment 2).....	CXLV
Table 163: Inter-item and Item-to-total Correlation for Af HI Condition 3 (Experiment 2).....	CXLV
Table 164: Inter-item and Item-to-total Correlation for Per Ext Condition 3 (Experiment 2).....	CXLVI
Table 165: Inter-item and Item-to-total Correlation for Per Ag Condition 3 (Experiment 2).....	CXLVI
Table 166: Inter-item and Item-to-total Correlation for Per Co Condition 3 (Experiment 2).....	CXLVII
Table 167: Inter-item and Item-to-total Correlation for Per Ne Condition 3 (Experiment 2).....	CXLVII
Table 168: Inter-item and Item-to-total Correlation for Per In Condition 3 (Experiment 2).....	CXLVIII
Table 169: Inter-item and Item-to-total Correlation for PP LI Condition 4 (Experiment 2).....	CXLVIII
Table 170: Inter-item and Item-to-total Correlation for PV LI Condition 4 (Experiment 2).....	CXLIX
Table 171: Inter-item and Item-to-total Correlation for PI LI Condition 4 (Experiment 2) ...	CL
Table 172: Inter-item and Item-to-total Correlation for Af LI Condition 4 (Experiment 2) ..	CL
Table 173: Inter-item and Item-to-total Correlation for PP HI Condition 4 (Experiment 2).	CLI
Table 174: Inter-item and Item-to-total Correlation for PV HI Condition 4 (Experiment 2)	CLI
Table 175: Inter-item and Item-to-total Correlation for PI HI Condition 4 (Experiment 2)	CLII
Table 176: Inter-item and Item-to-total Correlation for Af HI Condition 4 (Experiment 2)	CLII

Table 177: Inter-item and Item-to-total Correlation for Per Ext Condition 4 (Experiment 2).....	CLIII
Table 178: Inter-item and Item-to-total Correlation for Per Ag Condition 4 (Experiment 2).....	CLIII
Table 179: Inter-item and Item-to-total Correlation for Per Co Condition 4 (Experiment 2).....	CLIV
Table 180: Inter-item and Item-to-total Correlation for Per Ne Condition 4 (Experiment 2).....	CLIV
Table 181: Inter-item and Item-to-total Correlation for Per In Condition 4 (Experiment 2).....	CLV
Table 182: Inter-item and Item-to-total Correlation for PP LI Condition 5 (Experiment 2).....	CLV
Table 183: Inter-item and Item-to-total Correlation for PV LI Condition 5 (Experiment 2).....	CLVI
Table 184: Inter-item and Item-to-total Correlation for PI LI Condition 5 (Experiment 2).....	CLVII
Table 185: Inter-item and Item-to-total Correlation for Af LI Condition 5 (Experiment 2).....	CLVII
Table 186: Inter-item and Item-to-total Correlation for PP HI Condition 5 (Experiment 2).....	CLVIII
Table 187: Inter-item and Item-to-total Correlation for PV HI Condition 5 (Experiment 2).....	CLVIII
Table 188: Inter-item and Item-to-total Correlation for PI HI Condition 5 (Experiment 2).....	CLIX
Table 189: Inter-item and Item-to-total Correlation for Af HI Condition 5 (Experiment 2).....	CLIX
Table 190: Inter-item and Item-to-total Correlation for Per Ext Condition 5 (Experiment 2).....	CLX
Table 191: Inter-item and Item-to-total Correlation for Per Ag Condition 5 (Experiment 2).....	CLX
Table 192: Inter-item and Item-to-total Correlation for Per Co Condition 5 (Experiment 2).....	CLXI
Table 193: Inter-item and Item-to-total Correlation for Per Ne Condition 5 (Experiment 2).....	CLXI

Table 194: Inter-item and Item-to-total Correlation for Per In Condition 5 (Experiment 2).....	CLXII
Table 195: Descriptive Statistics Full Sample (Experiment 2)	CLXIII
Table 196: Descriptive Statistics Condition 1 (Experiment 2)	CLXIV
Table 197: Descriptive Statistics Condition 2 (Experiment 2)	CLXV
Table 198: Descriptive Statistics Condition 3 (Experiment 2)	CLXVI
Table 199: Descriptive Statistics Condition 4 (Experiment 2)	CLXVII
Table 200: Descriptive Statistics Condition 5 (Experiment 2)	CLXVIII
Table 201: Shapiro-Wilk test of Normality (Experiment 2)	CLXIX
Table 202: Results of Statistical Tests: Condition 1 vs. Condition 2 (Experiment 2)	CLXXII
Table 203: Results of Statistical Tests: Condition 1 vs. Condition 3 (Experiment 2) ...	CLXXV
Table 204: Results of Statistical Tests: Condition 1 vs. Condition 4 (Experiment 2) .	CLXXVII
Table 205: Results of Statistical Tests: Condition 1 vs. Condition 5 (Experiment 2) ..	CLXXIX
Table 206: Results of Statistical Tests: Condition 1 vs. Condition 4 and 5 (Experiment 2).....	CLXXX
Table 207: Results of Statistical Tests: Priming Blue (Experiment 2)	CLXXXII
Table 208: Results of Statistical Tests: Priming Red (Experiment 2).....	CLXXXV
Table 209: ANOVA Affect, Blue and Black, Perceived Value, Low Involvement (Experiment 2).....	CXC
Table 210: ANOVA Affect, Red and Black, Perceived Value, Low Involvement (Experiment 2).....	CXCI
Table 211: ANOVA Affect, Blue and Black, Perceived Value, High Involvement (Experiment 2).....	CXCII
Table 212: ANOVA Affect, Red and Black, Perceived Value, High Involvement (Experiment 2).....	CXCIII
Table 213: Control Variables p-values (Experiment 2)	CXCVI
Table 214: Analysis of Hypotheses (Experiment 2)	CXCVII

List of Appendix Figures

Figure 1: Advertising Stimuli Experiment 1	XXVIII
Figure 2: ANOVA Gender, Black, Blue, Low Involvement (Experiment 1)	CV
Figure 3: ANOVA Gender, Black, Blue, High Involvement (Experiment 1).....	CVI
Figure 4: ANOVA Gender, Black, Red, Low Involvement (Experiment 1)	CVII
Figure 5: ANOVA Gender, Black, Red, High Involvement (Experiment 1).....	CVIII
Figure 6: Advertising Stimuli Experiment 2	CXV
Figure 7: ANOVA Gender, Black, Blue, Low Involvement (Experiment 2)	CLXXXVI
Figure 8: ANOVA Gender, Black, Blue, High Involvement (Experiment 2).....	CLXXXVII
Figure 9: ANOVA Gender, Black, Red, Low Involvement (Experiment 2)	CLXXXVIII
Figure 10: ANOVA Gender, Black, Red, High Involvement (Experiment 2).....	CLXXXIX

Appendix A: The Physics of Colour

The quest for the nature of light has triggered numerous research activities (see e.g. Einstein, 1905; Heisenberg, 1927; Huygens, 1678; Newton, 1671; Planck, 1901; Young, 1802), among which is the fundamental discussion of whether light is a particle or a wave. Today, the dual nature of light is an established principle within the framework of quantum theory and it is now referred to as particle-wave dualism (Eisberg & Resnick, 1985). As far as colour is concerned, it is convenient to discuss the physics part of this phenomenon in the context of the wave properties of light and, conceptually, to attribute a wavelength or a multitude of wavelengths to a colour.

The combination of light waves of different wavelengths is called a spectrum. While a known spectrum may erroneously be perceived as a complete information about colour, there are further misperceptions about the nature of colour: Newton's (1671) experiments have shown how a sunbeam splits into different colours when traversing a prism. This finding suggests that light is composed of waves with different colours (Fara, 2015; Mills, 1981). In contradiction to popular wording, (non-luminous) objects do not have an attached colour (Boynton, 1988) - they rather appear to have a specific colour because they absorb some wavelengths of the spectrum and reflect and/or transmit others (Schmidt, 1994). This fact makes colour dependent on the illumination (e.g. sunlight versus neon light, bright versus dim, etc.) and material properties such as surface texture (e.g. glossy versus non-glossy) and/or transmission properties (e.g. diffusely scattering versus coloured glass). Even more so, the colour sensing unit such as a photographic film, a digital camera sensor, or the human eye, have to be taken into account (see e.g. Goldsmith, 1990; Star, 2005; Vo-Dinh, 2003). Consequently, colour vision "*is the process by which an organism extracts information regarding the wavelength composition of a visual stimulus*" (Nathans, 1999, p. 199). This definition correctly expands the understanding of colour from the physics of propagating electromagnetic waves towards the inclusion of perception and, hence, physiology and psychology.

Appendix B: Human Colour Vision

As outlined in *appendix A*, colour can only exist if there is a living organism capable of recognizing light and interpreting some part of the different properties of light as different colours. As such, different species have different abilities to see and interpret colours. Chicken, for example, have six different visual pigments and can see a broader range of colours than

mice, which only have three visual pigments. A bird's eye can often recognize a richer colour spectrum than a human eye.

Humans can detect electromagnetic waves of wavelengths between 380nm and 780nm. This range is called the "visible spectrum" of light. Humans can see up to 10 million different colours which implies a vast range of possible combinations (Goldsmith, 1990; Hard & Sivik, 2001; Judd & Wyszecki, 1975; Linhares, Pinto, & Nascimento, 2008; Star, 2005; Vo-Dinh, 2003)

Young (1802) has suggested that three different types of different sensors in the retina of the human eye, the so-called cones, are responsible for colour vision. Based on Young's previous findings, Helmholtz (1867) has developed a theory of trichromatic colour vision to describe how humans experience colour. Vision occurs when light travels through a lens onto the eye's retina, which consists of rods and cones. Rods, being very sensitive to light, allow for black-and-white vision, whereas cones, of which humans have three different types, are sensitive to different parts of the visible spectrum. Consequently, cones in humans are responsible for distinguishing three types of wavelength ranges: short-wavelength, medium-wavelength, and long-wavelength. Light at those wavelengths is, although not perfectly accurate, often referred to as blue, green, and red light (Goldsmith, 1990; Svaetichin, 1956).

There are two models that describe colours: an additive and a subtractive model. Helmholtz (1867) has provided evidence that every colour can be created using the three primary colours red, green, and blue and that combining these three colours in a specific way will yield white. He has suggested that the human eye is unable to detect the specific portion of each colour in a mix but rather sees one mixed colour because multiple cones respond simultaneously and the brain interprets the combined stimulus (Welsch & Liebmann, 2012). Combining red, green, and blue to produce white is, for example, used with light-emitting diodes. Different combinations of red, green, and blue allow for varying the emitted light in order to achieve a desired colour (Muthu, Schuurmans, & Pashley, 2002). Literature sometimes suggests a subtractive colour model where the colours cyan, magenta, and yellow are complements to red, green, and blue and determine what will be reflected. This model is typically used for printers, where black is added to form the CYMK colour model (Galer & Horvat, 2003; Jennings, 2003).

Appendix C: Hypotheses and Research Propositions

Overview of Hypotheses and Research Propositions. (N/A = not applicable; the column “section” indicates where the theoretical background for the respective hypothesis/proposition is outlined)

	<u>Short Explanation</u>	<u>Direction^a</u>	<u>Section</u>
H1a	Price Colour (Non-Priming) → Perceived Price	-	2.3.3
H1b	Price Colour (Non-Priming) → Perceived Value	+	2.3.3
H1c	Price Colour (Non-Priming) → Purchase Intention	+	2.3.3
H2a	Blue Price Colour (Non-Priming) → Perceived Price	-	2.3.3
H2b	Blue Price Colour (Non-Priming) → Perceived Value	+	2.3.3
H2c	Blue Price Colour (Non-Priming) → Purchase Intention	+	2.3.3
H3a	Red Price Colour (Non-Priming) → Perceived Price	-	2.3.3
H3b	Red Price Colour (Non-Priming) → Perceived Value	+	2.3.3
H3c	Red Price Colour (Non-Priming) → Purchase Intention	+	2.3.3
H4a	Low Involvement: Price Colour → Perceived Price	-	2.3.4
H4b	Low Involvement: Price Colour → Perceived Value	+	2.3.4
H4c	Low Involvement: Price Colour → Purchase Intention	+	2.3.4
H5a	High Involvement: Price Colour ⇌ Perceived Price	N/A	2.3.4
H5b	High Involvement: Price Colour ⇌ Perceived Value	N/A	2.3.4
H5c	High Involvement: Price Colour ⇌ Purchase Intention	N/A	2.3.4
H6a	Price Colour (Priming) → Perceived Price	-	2.3.5
H6b	Price Colour (Priming) → Perceived Value	+	2.3.5

H6c	Price Colour (Priming) → Purchase Intention	+	2.3.5
H7a	Price Colour (Priming) → Perceived Price > Price Colour (Non-Priming) → Perceived Price	N/A	2.3.5
H7b	Price Colour (Priming) → Perceived Value > Price Colour (Non-Priming) → Perceived Value	N/A	2.3.5
H7c	Price Colour (Priming) → Purchase Intention > Price Colour (Non-Priming) → Purchase Intention	N/A	2.3.5
P1	Personality Traits & Favourite Colour	N/A	2.3.6
P2	Personality Traits & Price Colour	N/A	2.3.6

^a Signs indicate a lower (-) or higher (+) value of the dependent variable (e.g.: Price is perceived (-) lower (H1c). Value is perceived (+) higher (H1b))

Table 4: Overview of Hypotheses and Research Propositions

The hypotheses **H1-H7** were assessed by comparing the respective conditions: **H1a-c** were evaluated by comparing condition 1 to (the combination of) condition 4 and condition 5. Comparing condition 1 to condition 4 and to condition 5 (separately) aimed at evaluating **H2a-c** and **H3a-c**. Condition 2 and 3 were used for assessing the influence of priming colour (if compared to black, i.e. condition 1: **H6a-c**; if compared to coloured, non-primed prices, i.e. condition 4 and 5: **H7a-c**). **H4a-c** and **H5a-c** were evaluated based on all statistical tests for all comparisons between the respective conditions.

Appendix D: Priming and Reference Prices

It has been shown that external reference prices can evoke an assimilation effect if they are near the upper limit of what a consumer perceives as range of normal prices in the market place. As result, the internal reference price is shifted towards the anchor resulting in more favourable evaluations of the encountered price. However, if the external reference price falls outside the expected range a contrast effect occurs and the external reference price is encoded as unbelievable. Adaption level theory, which also can describe how reference prices influence price judgement, can explain how assimilation and contrast effect occur when a primed category serves as anchor. If a stimulus falls within a given range around the anchor assimilation occurs

and the anchor is influenced, which in turn affects price judgement. If the stimulus falls outside that range a contrast effect occurs. Thus, the stimulus is likely to be assigned to another group and will not influence the anchor. However, if a stimulus is ambiguous and a category that is close to that stimulus has been made more accessible through priming, it is likely that the stimulus is assigned to the respective category. Consequently, priming not only influences assimilation and contrast effects but also the extent to which they occur. Other experiments have focused on how a prime associated with price can influence price judgement. Herr (1989) conducted two experiments in the context of priming. In the first experiment respondents were given four different levels of automobile prices as a prime in order to show that consumers store automobile prices like categories and that they can be subject to priming as well. The second experiment aimed at providing evidence that prior category knowledge influences the impact priming has on subsequent judgements. This suggestion is based on the requirement of previous existence of a category in an individual's memory in order for a prime to activate the respective category. In this case, Herr tested how previous knowledge of automobile prices influences priming results. The two experiments revealed that in the pricing context both judgement and categorization are affected by priming. Furthermore, the prime only activated the respective part of the category. This means that the automotive prices only influenced price judgement and not judgements of other product attributes such as prestige, quality, or reliability of the cars. Additionally, the priming outcome – assimilation or contrast effects – can be predicted by the level of primed category extremity and by how ambiguous the target object is. Hypothetical cars, an ambiguous stimulus, and moderate price levels may result in assimilation effects, whereas extreme price levels may result in contrast effects. The findings suggest that the existence and activation of a category allows for predictions of consumer judgements. This has an important impact in the pricing context, especially with respect to reference prices. The influence of reference prices on price judgement is likely to depend on how easily accessible the category is in memory. Herr's results provide evidence that situational cues influence the accessibility of reference prices, and consequently their influence on price judgements (Bargh & Pietromonaco, 1982; Della Bitta et al., 1981; Helson, 1964; Herr et al., 1983; Higgins et al., 1977; Higgins & King, 1981; Lichtenstein & Burton, 1989; Monroe et al., 1977; Sherif & Hovland, 1961).

Appendix E: Research Classification

There are several types of research that can be differentiated with respect to the research approach, the point of view of time, the research setting, or other criteria. Since this research

was conducted at a single point of time it can be described as one-time or cross-sectional research. This contrasts with longitudinal research which takes several time periods into account. There are three types of research settings, namely library research, and laboratory research, field research, with the latter being used for this master thesis. There are four categories that can be used to further describe the research approach: descriptive vs. analytical, applied vs. fundamental, quantitative vs. qualitative, and conceptual vs. empirical research. Since researchers have to use already available information to make conclusions for an analytical research approach while looking for new information through measurement for a descriptive approach, this master thesis clearly follows a descriptive research approach. Applied research typically tries to solve a current problem, while fundamental research looks for generalizable results like predicting human behaviour. Consequently, this master thesis is of fundamental research nature. Furthermore, the study is quantitative because it is based on measuring data and analyses the data by means of statistical analyses. Finally, this master thesis is not of conceptual nature, meaning it does not relate to an abstract idea, but can be described as empirical research. This means that the research is based on data and uses experience, observation or experiments for verification (Iacobucci & Churchill, 2010; Kothari, 2009).

Appendix F: Pre-Test Results

To ensure the adequate level of involvement a pre-test with four categories, instant coffee, shampoo, laptops, and automobiles, was conducted. For this pre-test the product category involvement measures developed by Zaichkowsky (1985) were adopted (the same three items as in Homburg et al. (2012) were used). Subjects were asked to rate the statements on a 7-point Likert-type scale. Results reveal that instant coffee ($M_{LC} = 1.82$, $SD_{LC} = .87$) is a better choice for low involvement than shampoo ($M_S = 3.67$, $SD_S = 2.04$). Similarly, laptops ($M_L = 5.47$, $SD_L = 1.34$) are more suitable than automobiles ($M_A = 4.53$, $SD_A = 1.47$) for the high involvement stimulus. Instant coffee has been shown to be significantly less involving than laptops ($t(32) = 9.51$, $p < .001$). Cronbach's alpha was .921 for instant coffee and .800 for laptops, thus the scale used to measure involvement produced highly reliable results. The pre-test was conducted two weeks prior to the experiment with subjects from the main study's target group ($N = 17$, 81% response rate, 59% male, 41% female, 100% aged 25 or under). The order of product categories was rotated for all subjects. Order effects were insignificant (all p -values well above .050).

Appendix G: Constructs

	<i>Construct</i>	<i>Adapted from</i>	<i>Sample Item</i>
<i>Main Constructs</i>	Perceived Price	Ryu and Han (2010) and Chang and Wildt (1994)	<i>The prices shown were reasonable. And The prices in the shop are...</i>
	Perceived Value	Dodds et al. (1991)	<i>The products appear to be a bargain.</i>
	Purchase Intention	Jarvenpaa et al. (1999)	<i>How likely is it that you would go to this store?</i>
	Affect	Watson et al. (1988)	<i>Right now, I feel glad.</i>
	Personality	Donnellan et al. (2006)	<i>I get chores done right away.</i>
<i>Demographics and Socioeconomics</i>	Age	Homburg et al. (2012)	<i>26-35</i>
	Gender	Homburg et al. (2012)	<i>Female</i>
	Income	Homburg et al. (2012)	<i>Under €1000</i>
	Country	N/A (list of sovereign states)	<i>United States of America</i>
	Employment Status	Wyse (2012)	<i>Student</i>
<i>Pre-test</i>	Involvement	Zaichkowsky (1985)	<i>Laptops are very important to me.</i>

Table 5: Constructs

Appendix H: Priming and Colour

All subjects were given the following statement before looking at the advertisement: “On the next page you will find a print ad from a store that advertises its offers in a newspaper”. In the non-priming condition, all words were shown in black. For subjects in the priming condition, the statement was coloured in either blue or red. Subjects then continued with the coloured advertising stimulus and subsequent questions on perceived price, perceived value, and purchase intention.

As colour is not a mere physical quantity but depends on the illumination and sensation situations (see *appendix A* and *B*), there are various metrics to describe colour. Throughout this thesis, the RGB colour metrics is being used (Hunt, 2004). The RGB colour codes (sRGB IEC 61966-2-1) used during the survey for priming, descriptions, prices, and questions are (255, 0, 0) for red, (0, 0, 255) for blue, and (0, 0, 0) for black. The decision for the RGB metric and the specific colours was based primarily on the default setting in Microsoft programs for red, assuming that sale prices that do not follow a specific corporate branding policy tend to be coloured in this red, and the equivalent blue.

Appendix I: Advertising Stimuli Retail (Experiment 1)

<p>Nescafé Original</p> <p>Has a medium-dark roast that gives it a full flavour and wonderfully invigorating taste. (100g)</p>  <p>€4.49</p>	<p>Nescafé Cap Colombie</p> <p>Made from 100% Arabica beans and has a medium bodied coffee taste with a wonderful honey finish. (100g)</p>  <p>€5.99</p>	<p>Nescafé Café Parisien</p> <p>We've blended fine Arabica and Robusta beans to create a taste of true Parisien excellence. (100g)</p>  <p>€6.99</p>	<p>Hewlett-Packard 15b</p> <p>15.6 inch screen, 4GB RAM, 8 hours battery life.</p>  <p>€349</p>	<p>Hewlett-Packard 250</p> <p>15.6 inch screen, 8GB RAM, 6 hours battery life.</p>  <p>€399</p>	<p>Hewlett-Packard 355</p> <p>15.6 inch screen, 8GB RAM, 8 hours battery life.</p>  <p>€549</p>
<p>Nescafé Original</p> <p>Has a medium-dark roast that gives it a full flavour and wonderfully invigorating taste. (100g)</p>  <p>€4.49</p>	<p>Nescafé Cap Colombie</p> <p>Made from 100% Arabica beans and has a medium bodied coffee taste with a wonderful honey finish. (100g)</p>  <p>€5.99</p>	<p>Nescafé Café Parisien</p> <p>We've blended fine Arabica and Robusta beans to create a taste of true Parisien excellence. (100g)</p>  <p>€6.99</p>	<p>Hewlett-Packard 15b</p> <p>15.6 inch screen, 4GB RAM, 8 hours battery life.</p>  <p>€349</p>	<p>Hewlett-Packard 250</p> <p>15.6 inch screen, 8GB RAM, 6 hours battery life.</p>  <p>€399</p>	<p>Hewlett-Packard 355</p> <p>15.6 inch screen, 8GB RAM, 8 hours battery life.</p>  <p>€549</p>
<p>Nescafé Original</p> <p>Has a medium-dark roast that gives it a full flavour and wonderfully invigorating taste. (100g)</p>  <p>€4.49</p>	<p>Nescafé Cap Colombie</p> <p>Made from 100% Arabica beans and has a medium bodied coffee taste with a wonderful honey finish. (100g)</p>  <p>€5.99</p>	<p>Nescafé Café Parisien</p> <p>We've blended fine Arabica and Robusta beans to create a taste of true Parisien excellence. (100g)</p>  <p>€6.99</p>	<p>Hewlett-Packard 15b</p> <p>15.6 inch screen, 4GB RAM, 8 hours battery life.</p>  <p>€349</p>	<p>Hewlett-Packard 250</p> <p>15.6 inch screen, 8GB RAM, 6 hours battery life.</p>  <p>€399</p>	<p>Hewlett-Packard 355</p> <p>15.6 inch screen, 8GB RAM, 8 hours battery life.</p>  <p>€549</p>

Figure 1: Advertising Stimuli Experiment 1

Appendix J: The Case For 7-Point Scales

Although there is a large body of research on scales and the development of scales, only few scholars have evaluated which number of scale division is most appropriate. Typically, between 3 and 11 scale divisions are used. Most researchers argue that for their purpose an odd number of divisions is most applicable because it allows for a neutral response (Cox, 1980). There is research that suggests the use of 11-point scales (e.g. Leung, 2011). Nevertheless, many academics have argued in favour of 5- or 7-point scales (Colman, Norris, & Preston, 1997). For example, Buttle (1996) has used a 5-point scale to increase response rate and quality. 5-point scales are also readily comprehensible and allow subjects to express their opinions more easily (Marton-Williams, 1986). Cox (1980) argue that, although sometimes 5- or 9-point scales are more appropriate, the optimal number of scale divisions lies around seven. In fact, 7-point scales can lead to a higher reliability (Symonds, 1924). This master thesis uses 7-point scales

for mainly two reasons. Firstly, it has been shown that there is a better correlation with results from t-tests (Lewis, 1993). Secondly, the attention span of humans tends to be limited to seven distinct categories. Thus, an increase above seven scale divisions might compromise results (Colman et al., 1997; Miller, 1956). All in all, only 7-point scales were used for consistency reasons across all measures and because there is evidence that 7-point scales are the more appropriate choice for the purpose of this master thesis (Preston & Colman, 2000).

Appendix K: Purchase Intention Scale

To predict consumer behaviour it is best to measure the customer's intention to perform a specific behaviour, in this case purchasing the product (Fishbein & Ajzen, 1975). The higher the purchase intention, the higher is the possibility for actual purchase behaviour (Dodds et al., 1991). There are mainly two ways of measuring purchase intention. On the one hand, a 5-point intention scale is widely used in research whereas, on the other hand, some scholars prefer to use Juster's (1966) 11-point purchase probability scale (Kalwani & Silk, 1982). It has been found that probability scales are more precise regarding the measurement of likely behaviour (Wright & MacRae, 2007). However, items that are used in connection to Juster's probability scale tend not to be applicable to the specific context of this master thesis. Consequently, a different scale, which measures how likely it is that respondents would buy at the advertising shop as result of the specific coloured condition (black, red, and blue), was used. It has been established that both instruments, intention scales and probability scales, deliver acceptable results, that is they are empirically unbiased and show comparably low variability (Wright & MacRae, 2007). Thus, despite the slight advantage of using probability scales in general, after accounting for the specifics of this master thesis, purchase intention was measured based on Jarvenpaa et al. (1999).

Appendix L: Discussion of Personality Scales

Research shows that it is possible to construct a brief measure of the Big Five dimensions with only 10 items (Gosling, Rentfrow, & Swann, 2003). Gosling et al. (2003) have constructed a 10-item measure that shows acceptable reliability and accuracy when compared to self as well as observer ratings and to results from standard multi-item measures. However, scholars have noted that the use of only two items per dimension is insufficient. In fact, three of the five scales performed rather poor with respect to internal consistency coefficients. Researchers also have challenged the 10-item measure in terms of reliability. Consequently, further research has focused on finding a balance between limiting the number of items and maintaining high levels

of accuracy and consistency (Donnellan et al., 2006). Donnellan et al. (2006) have provided evidence that the Mini-IPIP is comparable with other Big Five measures in terms of results and consistency over time. Consequently, it is an acceptable and useful scale to study personality traits. The authors have also considered Saucier and Goldbergs' (2002) suggestions and have therefore decided to develop a scale with four items per dimension with two positively keyed items and two negatively keyed items. This minimum number of four items per dimension as well as the balance within each dimension was established for all dimensions (but the Intellect/Imagination dimension, which has one item keyed positively and three items keyed negatively). It is especially important to have items with inverted answers because individuals tend to agree with statements. Thus, for a personality test, it is necessary to provide negatively and positively keyed items (Krosnick, 1999; Krosnick & Fabrigar, 1998).

Appendix M: Careless Responses

Meade and Craig (2012) have reported that 10% to 12% of subjects in their study have been what they call careless responders. The authors point out that this problem might occur more frequently as indicated by previous research, especially in internet-based questionnaires as well as with student samples. A study by Johnson (2005) has reported less than 4% of careless responses. However, the respective study used data from subjects who actively chose to take the survey out of personal interest and not as a favour or in exchange for compensation. One study has found that up to 60% of respondents answered at least one item randomly (Berry et al., 1992).

Appendix N: Sample Details per Condition (Experiment 1)

Full Sample

The corrected sample can be described as follows: 85.7% are 25 years or under, 13% are 26-35 and 1.2% are 46-55 years old. 75 participants are male (46.6%) and 86 are female (53.4%). 55.3% of respondents have a disposable household income of below €1,000, 20.5% a disposable household income of €1,000-€1,999, 8.2% of €2,000-€2,999, 6.2% of €3,000-€3,999, and 1.2% a disposable household income of €4,000 or above. 8.1% have selected the “prefer not to say” option, which reflects that the decision to include such an option was well advised. The current country of main residence was either Norway ($n = 37$, 23%) or Germany ($n = 94$, 58.4%) for most respondents. All other subjects currently live in one of 15 other countries, namely Australia ($n = 2$, 1.2%), Brazil ($n = 1$, 0.6%), Czech Republic ($n = 1$, 0.6%), Denmark ($n = 1$,

0.6%), France ($n = 1, 0.6\%$), Greece ($n = 1, 0.6\%$), Italy ($n = 3, 1.9\%$), Kenya ($n = 1, 0.6\%$), Luxembourg ($n = 1, 0.6\%$), Netherlands ($n = 5, 3.1\%$), Portugal ($n = 3, 1.9\%$), Spain ($n = 1, 0.6\%$), Sweden ($n = 3, 1.9\%$), Switzerland ($n = 1, 0.6\%$), and the United States of America ($n = 5, 3.1\%$). Most subjects were students ($n = 138, 85.7\%$). 17 respondents indicated that they are employed for wages (10.6%), 2 were self-employed (1.2%), 1 out of work and looking for work (0.6%), and 3 respondents selected the “other” option to describe their employment status (1.9%).

Sample per Condition

Age per Condition: Frequency (Percent)

<u>Age Group</u>	<u>Condition 1</u> ($n = 32$)	<u>Condition 2</u> ($n = 28$)	<u>Condition 3</u> ($n = 35$)	<u>Condition 4</u> ($n = 32$)	<u>Condition 5</u> ($n = 34$)
25 or under	26 (81.3%)	24 (85.7%)	31 (88.6%)	29 (90.6%)	28 (82.4%)
26-35	5 (15.6%)	3 (10.7%)	4 (11.4%)	3 (9.4%)	6 (17.6%)
46-55	1 (3.1%)	1 (3.6%)			

Table 6: Age Group per Condition (Experiment 1)

Gender per Condition: Frequency (Percent)

<u>Gender</u>	<u>Condition 1</u> ($n = 32$)	<u>Condition 2</u> ($n = 28$)	<u>Condition 3</u> ($n = 35$)	<u>Condition 4</u> ($n = 32$)	<u>Condition 5</u> ($n = 34$)
Male	11 (34.4%)	17 (60.7%)	19 (54.3%)	14 (43.8%)	14 (41.2%)
Female	21 (65.6%)	11 (39.3%)	16 (45.7%)	18 (56.3%)	20 (58.8%)

Table 7: Gender per Condition (Experiment 1)

Disposable Household Income per Condition: Frequency (Percent)

<u>Disposable Household Income</u>	<u>Condition 1</u> (<i>n</i> = 32)	<u>Condition 2</u> (<i>n</i> = 28)	<u>Condition 3</u> (<i>n</i> = 35)	<u>Condition 4</u> (<i>n</i> = 32)	<u>Condition 5</u> (<i>n</i> = 34)
Below €1,000	20 (62.5%)	17 (60.7%)	14 (40.0%)	17 (53.1%)	21 (61.8%)
€1,000-€1,999	5 (15.6%)	3 (10.7%)	12 (34.3%)	6 (18.8%)	7 (20.6%)
€2,000-€2,999	2 (6.3%)	2 (7.1%)	3 (8.6%)	3 (9.4%)	4 (11.8%)
€3,000-€3,999	3 (9.4%)	3 (10.7%)	1 (2.9%)	2 (6.3%)	1 (2.9%)
€4,000 and above	1 (3.1%)		1 (2.9%)		
Prefer not to say	1 (3.1%)	3 (10.7%)	4 (11.4%)	4 (12.5%)	1 (2.9%)

Table 8: Disposable Household Income per Condition (Experiment 1)

Country (currently living in) per Condition: Frequency (Percent)

<u>Country</u>	<u>Condition 1</u> (<i>n</i> = 32)	<u>Condition 2</u> (<i>n</i> = 28)	<u>Condition 3</u> (<i>n</i> = 35)	<u>Condition 4</u> (<i>n</i> = 32)	<u>Condition 5</u> (<i>n</i> = 34)
Australia	1 (3.1%)			1 (3.1%)	
Brazil		1 (3.6%)			
Czech Republic		1 (3.6%)			
Denmark					1 (2.9%)
France			1 (2.9%)		
Germany	20 (62.5%)	12 (42.9%)	22 (62.9%)	23 (71.9%)	17 (50.0%)
Greece	1 (3.1%)				
Italy			1 (2.9%)	2 (6.3%)	
Kenya					1 (2.9%)
Luxembourg		1 (3.6%)			
Netherlands	1 (3.1%)	2 (7.1%)	1 (2.9%)		1 (2.9%)
Norway	8 (25%)	6 (21.4%)	10 (28.6%)	2 (6.3%)	11 (32.4%)
Portugal		1 (3.6%)			2 (5.9%)
Spain		1 (3.6%)			
Sweden		2 (7.1%)			1 (2.9%)
Switzerland				1 (3.1%)	
United States of America	1 (3.1%)	1 (3.6%)		3 (9.4%)	

Table 9: Country per Condition (Experiment 1)

Employment per Condition: Frequency (Percent)

<u>Employment</u>	<u>Condition 1</u> (<i>n</i> = 32)	<u>Condition 2</u> (<i>n</i> = 28)	<u>Condition 3</u> (<i>n</i> = 35)	<u>Condition 4</u> (<i>n</i> = 32)	<u>Condition 5</u> (<i>n</i> = 34)
Employed for wages	4 (12.5%)	4 (14.3%)	2 (5.7%)	7 (21.9%)	
Out of work and looking for work					1 (2.9%)
Self- employed		1 (3.6%)	1 (2.9%)		
Student	28 (87.5%)	22 (78.6%)	31 (88.6%)	25 (78.1%)	32 (94.1%)
Other		1 (3.6%)	1 (2.9%)		1 (2.9%)

Table 10: Employment per Condition (Experiment 1)

Appendix O: Harman's Single-Factor Test (Experiment 1)

Harman's Single-Factor Test. Per condition. Brackets: After item(s) dropped.

	<u>1</u>	<u>2</u>	<u>3</u>	<u>4</u>	<u>5</u>	<u>4 and 5</u>
Highest Percent of Variance Explained by a Single Factor	31.808 (33.654)	26.567 (28.303)	30.095 (31.483)	23.302 (23.648)	18.022 (18.784)	19.803 (20.348)

Table 11: Harman's Single-Factor Test (Experiment 1)

Appendix P: Inter-item and Item-to-total Correlation (Experiment 1)

Full Sample: Average Inter-item and Item-to-total Correlation

Average inter-item and item-to-total correlations. Brackets: After item(s) dropped.

<u>Measure</u>		<u>Average Inter-item</u>	<u>Average Item-to-total</u>
		<u>Correlations</u>	<u>Correlations</u>
Low Involvement	Perceived Price	.824	.824
	Perceived Value	.701	.795
	Purchase Intention	.847	.894
	Affect	.846	.898
High Involvement	Perceived Price	.697	.697
	Perceived Value	.663	.766
	Purchase Intention	.745	.817
	Affect	.865	.896
Personality	Extraversion	.500	.613
	Agreeableness	.562	.668
	Conscientiousness	.387 (.477)	.507 (.558)
	Neuroticism	.356 (.495)	.478 (.548)
	Intellect/Imagination	.437 (.495)	.551 (.572)

Table 12: Average inter-item and item-to-total correlations (Experiment

1)

The following short forms are used in the tables below: LI = Low Involvement, HI = High Involvement, Per = Personality, PP = Perceived Price, PV = Perceived Value, PI = Purchase Intention, Af = Affect, Ext = Extraversion, Ag = Agreeableness, Co = Conscientiousness, Ne = Neuroticism, In = Intellect/Imagination. Items that are dropped performed unsatisfactory in the analysis of the full sample (unless otherwise indicated).

Full Sample: Inter-item and Item-to-total Correlation

Inter-item and Item-to-total Correlation for PP LI Full Sample.

<u>Items</u>	<u>a.</u>	<u>b.</u>
a. The prices in the shop are low vs. high. (reversed)	.824	
b. The prices shown were reasonable. Strongly disagree vs. strongly agree	.824	.824

Table 13: Inter-item and Item-to-total Correlation for PP LI Full Sample

(Experiment 1)

Inter-item and Item-to-total Correlation for PV LI Full Sample.

<u>Items</u>	<u>a.</u>	<u>b.</u>	<u>c.</u>	<u>d.</u>	<u>e.</u>
a. The products are poor vs. good value for money	.828				
b. At the prices shown the products are very uneconomical vs. very economical	.679	.770			
c. The products are considered a good buy. Strongly disagree vs. strongly agree	.799	.687	.822		
d. The prices shown for the products are very unacceptable vs. very acceptable	.786	.737	.752	.839	
e. The products appear to be a bargain. The prices shown for the products are very unacceptable vs. very acceptable	.637	.628	.647	.657	.716

*Table 14: Inter-item and Item-to-total Correlation for PV LI Full Sample
(Experiment 1)*

*Inter-item and **Item-to-total** Correlation for PI LI Full Sample.*

<u>Items. Very unlikely vs. very likely.</u>	<u>a.</u>	<u>b.</u>	<u>c.</u>	<u>d.</u>
a. How likely is it that you would go to this store?	.901			
b. How likely is it that you would consider purchasing from this store in the next three months?	.852	.898		
c. How likely is it that you would consider purchasing from this store in the next year?	.860	.885	.909	
d. For this purchase, how likely is it that you buy from this store?	.843	.810	.829	.867

*Table 15: Inter-item and Item-to-total Correlation for PI LI Full Sample
(Experiment 1)*

*Inter-item and **Item-to-total** Correlation for Af LI Full Sample.*

<u>Items. Strongly disagree vs. strongly agree.</u>	<u>a.</u>	<u>b.</u>	<u>c.</u>
a. Right now, I feel happy.	.863		
b. Right now, I feel pleased.	.825	.883	
c. Right now, I feel glad.	.844	.870	.898

*Table 16: Inter-item and Item-to-total Correlation for Af LI Full Sample
(Experiment 1)*

*Inter-item and **Item-to-total** Correlation for PP HI Full Sample.*

<u>Items</u>	<u>a.</u>	<u>b.</u>
a. The prices in the shop are low vs. high. (reversed)	.697	
b. The prices shown were reasonable. Strongly disagree vs. strongly agree	.697	.697

Table 17: Inter-item and Item-to-total Correlation for PP HI Full Sample (Experiment 1)

*Inter-item and **Item-to-total** Correlation for PV HI Full Sample.*

<u>Items</u>	<u>a.</u>	<u>b.</u>	<u>c.</u>	<u>d.</u>	<u>e.</u>
a. The products are poor vs. good value for money	.790				
b. At the prices shown the products are very uneconomical vs. very economical	.634	.755			
c. The products are considered a good buy. Strongly disagree vs. strongly agree	.738	.660	.790		
d. The prices shown for the products are very unacceptable vs. very acceptable	.736	.758	.758	.835	
e. The products appear to be a bargain. The prices shown for the products are very unacceptable vs. very acceptable	.608	.573	.570	.598	.662

Table 18: Inter-item and Item-to-total Correlation for PV HI Full Sample (Experiment 1)

*Inter-item and **Item-to-total** Correlation for PI HI Full Sample.*

<u>Items. Very unlikely vs. very likely.</u>	<u>a.</u>	<u>b.</u>	<u>c.</u>	<u>d.</u>
a. How likely is it that you would go to this store?	.777			
b. How likely is it that you would consider purchasing from this store in the next three months?	.664	.810		
c. How likely is it that you would consider purchasing from this store in the next year?	.716	.822	.849	
d. For this purchase, how likely is it that you buy from this store?	.770	.734	.762	.833

*Table 19: Inter-item and Item-to-total Correlation for PI HI Full Sample
(Experiment 1)*

*Inter-item and **Item-to-total** Correlation for Af HI Full Sample.*

<u>Items. Strongly disagree vs. strongly agree.</u>	<u>a.</u>	<u>b.</u>	<u>c.</u>
a. Right now, I feel happy.	.902		
b. Right now, I feel pleased.	.868	.892	
c. Right now, I feel glad.	.871	.857	.894

*Table 20: Inter-item and Item-to-total Correlation for Af HI Full Sample
(Experiment 1)*

*Inter-item and **Item-to-total** Correlation for Per Ext Full Sample.*

<u>Items. Strongly disagree vs. strongly agree.</u>	<u>a.</u>	<u>b.</u>	<u>c.</u>	<u>d.</u>
a. I am the life of the party.	.557			
b. I don't talk a lot. (reversed)	.402	.622		
c. I talk to a lot of different people at parties.	.557	.467	.617	
d. I keep in the background. (reversed)	.432	.648	.492	.656

*Table 21: Inter-item and Item-to-total Correlation for Per Ext Full Sample
(Experiment 1)*

*Inter-item and **Item-to-total** Correlation for Per Ag Full Sample.*

<u>Items. Strongly disagree vs. strongly agree.</u>	<u>a.</u>	<u>b.</u>	<u>c.</u>	<u>d.</u>
a. I sympathize with others' feelings.	.731			
b. I am not interested in other people's problems. (reversed)	.566	.685		
c. I feel others' emotions.	.710	.505	.637	
d. I am not interested in others. (reversed)	.527	.657	.404	.620

*Table 22: Inter-item and Item-to-total Correlation for Per Ag Full Sample
(Experiment 1)*

Inter-item and Item-to-total Correlation for Per Co Full Sample.

<u>Items. Strongly disagree vs. strongly agree.</u>	<u>a.</u>	<u>b.</u>	<u>c.</u>	<u>d.</u>
a. I get chores done right away. (item dropped)	.363			
b. I often forget to put things back in their proper place. (reversed)	.288	.579		
c. I like order.	.327	.557	.586	
d. I make a mess of things. (reversed)	.272	.461	.415	.501

*Table 23: Inter-item and Item-to-total Correlation for Per Co Full Sample
(Experiment 1)*

Inter-item and Item-to-total Correlation for Per Ne Full Sample.

<u>Items. Strongly disagree vs. strongly agree.</u>	<u>a.</u>	<u>b.</u>	<u>c.</u>	<u>d.</u>
a. I have frequent mood swings.	.603			
b. I am relaxed most of the time. (reversed)	.469	.564		
c. I get upset easily*.	.525	.491	.477	
d. I seldom feel blue. (reversed, item dropped)	.309	.277	.064	.267

*Table 24: Inter-item and Item-to-total Correlation for Per Ne Full Sample
(Experiment 1)*

*Item was not dropped, although the item-to-total correlation is below the suggested .500 level, since this would drastically decrease Cronbach's alpha.

*Inter-item and **Item-to-total** Correlation for Per In Full Sample.*

<u>Items. Strongly disagree vs. strongly agree.</u>	<u>a.</u>	<u>b.</u>	<u>c.</u>	<u>d.</u>
a. I have a vivid imagination.	.566			
b. I am not interested in abstract ideas. (reversed)	.430	.586		
c. I have difficulty understanding abstract ideas. (reversed)	.407	.674	.602	
d. I do not have a good imagination. (reversed, item dropped)	.490	.290	.328	.450

*Table 25: Inter-item and Item-to-total Correlation for Per In Full Sample
(Experiment 1)*

Condition 1: black, non-priming

*Inter-item and **Item-to-total** Correlation for PP LI Condition 1.*

<u>Items</u>	<u>a.</u>	<u>b.</u>
a. The prices in the shop are low vs. high. (reversed)	.784	
b. The prices shown were reasonable. Strongly disagree vs. strongly agree	.784	.784

*Table 26: Inter-item and Item-to-total Correlation for PP LI Condition 1
(Experiment 1)*

*Inter-item and **Item-to-total** Correlation for PV LI Condition 1.*

<u>Items</u>	<u>a.</u>	<u>b.</u>	<u>c.</u>	<u>d.</u>	<u>e.</u>
a. The products are poor vs. good value for money	.827				
b. At the prices shown the products are very uneconomical vs. very economical	.700	.725			
c. The products are considered a good buy. Strongly disagree vs. strongly agree	.575	.494	.640		
d. The prices shown for the products are very unacceptable vs. very acceptable	.764	.736	.533	.786	
e. The products appear to be a bargain. The prices shown for the products are very unacceptable vs. very acceptable	.736	.570	.639	.619	.752

Table 27: Inter-item and Item-to-total Correlation for PV LI Condition 1

(Experiment 1)

*Inter-item and **Item-to-total** Correlation for PI LI Condition 1.*

<u>Items. Very unlikely vs. very likely.</u>	<u>a.</u>	<u>b.</u>	<u>c.</u>	<u>d.</u>
a. How likely is it that you would go to this store?	.910			
b. How likely is it that you would consider purchasing from this store in the next three months?	.833	.887		
c. How likely is it that you would consider purchasing from this store in the next year?	.915	.901	.929	
d. For this purchase, how likely is it that you buy from this store?	.818	.782	.793	.831

*Table 28: Inter-item and Item-to-total Correlation for PI LI Condition 1
(Experiment 1)*

*Inter-item and **Item-to-total** Correlation for Af LI Condition 1.*

<u>Items. Strongly disagree vs. strongly agree.</u>	<u>a.</u>	<u>b.</u>	<u>c.</u>
a. Right now, I feel happy.	.789		
b. Right now, I feel pleased.	.777	.891	
c. Right now, I feel glad.	.758	.890	.874

*Table 29: Inter-item and Item-to-total Correlation for Af LI Condition 1
(Experiment 1)*

*Inter-item and **Item-to-total** Correlation for PP HI Condition 1.*

<u>Items</u>	<u>a.</u>	<u>b.</u>
a. The prices in the shop are low vs. high. (reversed)	.802	
b. The prices shown were reasonable. Strongly disagree vs. strongly agree	.802	.802

Table 30: Inter-item and Item-to-total Correlation for PP HI Condition 1 (Experiment 1)

*Inter-item and **Item-to-total** Correlation for PV HI Condition 1.*

<u>Items</u>	<u>a.</u>	<u>b.</u>	<u>c.</u>	<u>d.</u>	<u>e.</u>
a. The products are poor vs. good value for money	.892				
b. At the prices shown the products are very uneconomical vs. very economical	.649	.729			
c. The products are considered a good buy. Strongly disagree vs. strongly agree	.871	.724	.916		
d. The prices shown for the products are very unacceptable vs. very acceptable	.821	.742	.886	.892	
e. The products appear to be a bargain. The prices shown for the products are very unacceptable vs. very acceptable	.877	.610	.810	.772	.839

Table 31: Inter-item and Item-to-total Correlation for PV HI Condition 1 (Experiment 1)

*Inter-item and **Item-to-total** Correlation for PI HI Condition 1.*

<u>Items. Very unlikely vs. very likely.</u>	<u>a.</u>	<u>b.</u>	<u>c.</u>	<u>d.</u>
a. How likely is it that you would go to this store?	.906			
b. How likely is it that you would consider purchasing from this store in the next three months?	.908	.922		
c. How likely is it that you would consider purchasing from this store in the next year?	.837	.881	.913	
d. For this purchase, how likely is it that you buy from this store?	.862	.851	.904	.854

*Table 32: Inter-item and Item-to-total Correlation for PI HI Condition 1
(Experiment 1)*

*Inter-item and **Item-to-total** Correlation for Af HI Condition 1.*

<u>Items. Strongly disagree vs. strongly agree.</u>	<u>a.</u>	<u>b.</u>	<u>c.</u>
a. Right now, I feel happy.	.895		
b. Right now, I feel pleased.	.890	.883	
c. Right now, I feel glad.	.800	.782	.814

*Table 33: Inter-item and Item-to-total Correlation for Af HI Condition 1
(Experiment 1)*

*Inter-item and **Item-to-total** Correlation for Per Ext Condition 1.*

<u>Items. Strongly disagree vs. strongly agree.</u>	<u>a.</u>	<u>b.</u>	<u>c.</u>	<u>d.</u>
a. I am the life of the party.	.607			
b. I don't talk a lot. (reversed)	.495	.671		
c. I talk to a lot of different people at parties.	.527	.405	.607	
d. I keep in the background. (reversed)	.558	.791	.648	.826

*Table 34: Inter-item and Item-to-total Correlation for Per Ext Condition 1
(Experiment 1)*

*Inter-item and **Item-to-total** Correlation for Per Ag Condition 1.*

<u>Items. Strongly disagree vs. strongly agree.</u>	<u>a.</u>	<u>b.</u>	<u>c.</u>	<u>d.</u>
a. I sympathize with others' feelings.	.647			
b. I am not interested in other people's problems. (reversed)	.493	.714		
c. I feel others' emotions.	.752	.682	.775	
d. I am not interested in others. (reversed)	.382	.587	.474	.557

*Table 35: Inter-item and Item-to-total Correlation for Per Ag Condition 1
(Experiment 1)*

*Inter-item and **Item-to-total** Correlation for Per Co Condition 1.*

<u>Items. Strongly disagree vs. strongly agree.</u>	<u>a.</u>	<u>b.</u>	<u>c.</u>	<u>d.</u>
a. I get chores done right away. (item dropped)	.211			
b. I often forget to put things back in their proper place. (reversed)	.129	.629		
c. I like order.	.193	.757	.703	
d. I make a mess of things. (reversed)	.230	.488	.519	.548

*Table 36: Inter-item and Item-to-total Correlation for Per Co Condition 1
(Experiment 1)*

*Inter-item and **Item-to-total** Correlation for Per Ne Condition 1.*

<u>Items. Strongly disagree vs. strongly agree.</u>	<u>a.</u>	<u>b.</u>	<u>c.</u>	<u>d.</u>
a. I have frequent mood swings.	.571			
b. I am relaxed most of the time. (reversed)	.493	.580		
c. I get upset easily.	.451	.364	.508	
d. I seldom feel blue. (reversed, item dropped)	.408	.494	.402	.548

*Table 37: Inter-item and Item-to-total Correlation for Per Ne Condition 1
(Experiment 1)*

L

*Inter-item and **Item-to-total** Correlation for Per In Condition 1.*

<u>Items. Strongly disagree vs. strongly agree.</u>	<u>a.</u>	<u>b.</u>	<u>c.</u>	<u>d.</u>
a. I have a vivid imagination.	.696			
b. I am not interested in abstract ideas. (reversed)	.499	.659		
c. I have difficulty understanding abstract ideas. (reversed)	.596	.779	.742	
d. I do not have a good imagination. (reversed, item dropped)	.663	.459	.496	.632

*Table 38: Inter-item and Item-to-total Correlation for Per In Condition 1
(Experiment 1)*

Condition 2: blue, priming

*Inter-item and **Item-to-total** Correlation for PP LI Condition 2.*

<u>Items</u>	<u>a.</u>	<u>b.</u>
a. The prices in the shop are low vs. high. (reversed)	.831	
b. The prices shown were reasonable. Strongly disagree vs. strongly agree	.831	.831

*Table 39: Inter-item and Item-to-total Correlation for PP LI Condition 2
(Experiment 1)*

*Inter-item and **Item-to-total** Correlation for PV LI Condition 2.*

<u>Items</u>	<u>a.</u>	<u>b.</u>	<u>c.</u>	<u>d.</u>	<u>e.</u>
a. The products are poor vs. good value for money	.845				
b. At the prices shown the products are very uneconomical vs. very economical	.770	.837			
c. The products are considered a good buy. Strongly disagree vs. strongly agree	.875	.837	.885		
d. The prices shown for the products are very unacceptable vs. very acceptable	.888	.770	.827	.817	
e. The products appear to be a bargain. The prices shown for the products are very unacceptable vs. very acceptable	.330	.445	.420	.302	.401

Table 40: Inter-item and Item-to-total Correlation for PV LI Condition 2

(Experiment 1)

*Inter-item and **Item-to-total** Correlation for PI LI Condition 2.*

<u>Items. Very unlikely vs. very likely.</u>	<u>a.</u>	<u>b.</u>	<u>c.</u>	<u>d.</u>
a. How likely is it that you would go to this store?	.920			
b. How likely is it that you would consider purchasing from this store in the next three months?	.851	.879		
c. How likely is it that you would consider purchasing from this store in the next year?	.881	.876	.901	
d. For this purchase, how likely is it that you buy from this store?	.839	.754	.774	.825

*Table 41: Inter-item and Item-to-total Correlation for PI LI Condition 2
(Experiment 1)*

*Inter-item and **Item-to-total** Correlation for Af LI Condition 2.*

<u>Items. Strongly disagree vs. strongly agree.</u>	<u>a.</u>	<u>b.</u>	<u>c.</u>
a. Right now, I feel happy.	.952		
b. Right now, I feel pleased.	.928	.945	
c. Right now, I feel glad.	.946	.935	.958

*Table 42: Inter-item and Item-to-total Correlation for Af LI Condition 2
(Experiment 1)*

*Inter-item and **Item-to-total** Correlation for PP HI Condition 2.*

<u>Items</u>	<u>a.</u>	<u>b.</u>
a. The prices in the shop are low vs. high. (reversed)	.712	
b. The prices shown were reasonable. Strongly disagree vs. strongly agree	.712	.712

Table 43: Inter-item and Item-to-total Correlation for PP HI Condition 2 (Experiment 1)

*Inter-item and **Item-to-total** Correlation for PV HI Condition 2.*

<u>Items</u>	<u>a.</u>	<u>b.</u>	<u>c.</u>	<u>d.</u>	<u>e.</u>
a. The products are poor vs. good value for money	.737				
b. At the prices shown the products are very uneconomical vs. very economical	.626	.774			
c. The products are considered a good buy. Strongly disagree vs. strongly agree	.728	.627	.783		
d. The prices shown for the products are very unacceptable vs. very acceptable	.675	.750	.689	.729	
e. The products appear to be a bargain. The prices shown for the products are very unacceptable vs. very acceptable	.443	.567	.544	.358	.552

Table 44: Inter-item and Item-to-total Correlation for PV HI Condition 2 (Experiment 1)

*Inter-item and **Item-to-total** Correlation for PI HI Condition 2.*

<u>Items. Very unlikely vs. very likely.</u>	<u>a.</u>	<u>b.</u>	<u>c.</u>	<u>d.</u>
a. How likely is it that you would go to this store?	.691			
b. How likely is it that you would consider purchasing from this store in the next three months?	.582	.789		
c. How likely is it that you would consider purchasing from this store in the next year?	.705	.775	.882	
d. For this purchase, how likely is it that you buy from this store?	.646	.793	.863	.864

*Table 45: Inter-item and Item-to-total Correlation for PI HI Condition 2
(Experiment 1)*

*Inter-item and **Item-to-total** Correlation for Af HI Condition 2.*

<u>Items. Strongly disagree vs. strongly agree.</u>	<u>a.</u>	<u>b.</u>	<u>c.</u>
a. Right now, I feel happy.	.958		
b. Right now, I feel pleased.	.949	.945	
c. Right now, I feel glad.	.912	.895	.915

*Table 46: Inter-item and Item-to-total Correlation for Af HI Condition 2
(Experiment 1)*

Inter-item and Item-to-total Correlation for Per Ext Condition 2.

<u>Items. Strongly disagree vs. strongly agree.</u>	<u>a.</u>	<u>b.</u>	<u>c.</u>	<u>d.</u>
a. I am the life of the party.	.618			
b. I don't talk a lot. (reversed)*	.291	.540		
c. I talk to a lot of different people at parties.	.722	.476	.738	
d. I keep in the background. (reversed)	.580	.670	.630	.772

Table 47: Inter-item and Item-to-total Correlation for Per Ext Condition 2

(Experiment 1)

*Item not dropped because it performed satisfactory for full sample.

Inter-item and Item-to-total Correlation for Per Ag Condition 2.

<u>Items. Strongly disagree vs. strongly agree.</u>	<u>a.</u>	<u>b.</u>	<u>c.</u>	<u>d.</u>
a. I sympathize with others' feelings.	.718			
b. I am not interested in other people's problems. (reversed)	.579	.729		
c. I feel others' emotions.	.667	.545	.651	
d. I am not interested in others. (reversed)	.594	.762	.481	.720

Table 48: Inter-item and Item-to-total Correlation for Per Ag Condition 2

(Experiment 1)

Inter-item and Item-to-total Correlation for Per Co Condition 2.

<u>Items. Strongly disagree vs. strongly agree.</u>	<u>a.</u>	<u>b.</u>	<u>c.</u>	<u>d.</u>
a. I get chores done right away. (item dropped)	.378			
b. I often forget to put things back in their proper place. (reversed)	.237	.461		
c. I like order.	.386	.375	.610	
d. I make a mess of things. (reversed)	.315	.475	.621	.628

*Table 49: Inter-item and Item-to-total Correlation for Per Co Condition 2
(Experiment 1)*

Inter-item and Item-to-total Correlation for Per Ne Condition 2.

<u>Items. Strongly disagree vs. strongly agree.</u>	<u>a.</u>	<u>b.</u>	<u>c.</u>	<u>d.</u>
a. I have frequent mood swings.	.549			
b. I am relaxed most of the time. (reversed)	.523	.629		
c. I get upset easily.	.504	.498	.379	
d. I seldom feel blue. (reversed, item dropped)	.051	.188	-.193	.011

*Table 50: Inter-item and Item-to-total Correlation for Per Ne Condition 2
(Experiment 1)*

*Inter-item and **Item-to-total** Correlation for Per In Condition 2.*

<u>Items. Strongly disagree vs. strongly agree.</u>	<u>a.</u>	<u>b.</u>	<u>c.</u>	<u>d.</u>
a. I have a vivid imagination.	.588			
b. I am not interested in abstract ideas. (reversed)	.433	.717		
c. I have difficulty understanding abstract ideas. (reversed)	.358	.860	.653	
d. I do not have a good imagination. (reversed, item dropped)	.672	.445	.415	.603

*Table 51: Inter-item and Item-to-total Correlation for Per In Condition 2
(Experiment 1)*

Condition 3: red, priming

*Inter-item and **Item-to-total** Correlation for PP LI Condition 3.*

<u>Items</u>	<u>a.</u>	<u>b.</u>
a. The prices in the shop are low vs. high. (reversed)	.849	
b. The prices shown were reasonable. Strongly disagree vs. strongly agree	.849	.849

*Table 52: Inter-item and Item-to-total Correlation for PP LI Condition 3
(Experiment 1)*

Inter-item and Item-to-total Correlation for PV LI Condition 3.

<u>Items</u>	<u>a.</u>	<u>b.</u>	<u>c.</u>	<u>d.</u>	<u>e.</u>
a. The products are poor vs. good value for money	.768				
b. At the prices shown the products are very uneconomical vs. very economical	.602	.794			
c. The products are considered a good buy. Strongly disagree vs. strongly agree	.777	.709	.821		
d. The prices shown for the products are very unacceptable vs. very acceptable	.742	.815	.750	.894	
e. The products appear to be a bargain. The prices shown for the products are very unacceptable vs. very acceptable	.661	.723	.701	.826	.814

Table 53: Inter-item and Item-to-total Correlation for PV LI Condition 3

(Experiment 1)

*Inter-item and **Item-to-total** Correlation for PI LI Condition 3.*

<u>Items. Very unlikely vs. very likely.</u>	<u>a.</u>	<u>b.</u>	<u>c.</u>	<u>d.</u>
a. How likely is it that you would go to this store?	.927			
b. How likely is it that you would consider purchasing from this store in the next three months?	.894	.928		
c. How likely is it that you would consider purchasing from this store in the next year?	.858	.902	.911	
d. For this purchase, how likely is it that you buy from this store?	.927	.884	.886	.937

*Table 54: Inter-item and Item-to-total Correlation for PI LI Condition 3
(Experiment 1)*

*Inter-item and **Item-to-total** Correlation for Af LI Condition 3.*

<u>Items. Strongly disagree vs. strongly agree.</u>	<u>a.</u>	<u>b.</u>	<u>c.</u>
a. Right now, I feel happy.	.924		
b. Right now, I feel pleased.	.904	.932	
c. Right now, I feel glad.	.903	.914	.932

*Table 55: Inter-item and Item-to-total Correlation for Af LI Condition 3
(Experiment 1)*

*Inter-item and **Item-to-total** Correlation for PP HI Condition 3.*

<u>Items</u>	<u>a.</u>	<u>b.</u>
a. The prices in the shop are low vs. high. (reversed)	.585	
b. The prices shown were reasonable. Strongly disagree vs. strongly agree	.585	.585

Table 56: Inter-item and Item-to-total Correlation for PP HI Condition 3 (Experiment 1)

*Inter-item and **Item-to-total** Correlation for PV HI Condition 3.*

<u>Items</u>	<u>a.</u>	<u>b.</u>	<u>c.</u>	<u>d.</u>	<u>e.</u>
a. The products are poor vs. good value for money	.724				
b. At the prices shown the products are very uneconomical vs. very economical	.629	.778			
c. The products are considered a good buy. Strongly disagree vs. strongly agree	.570	.595	.677		
d. The prices shown for the products are very unacceptable vs. very acceptable	.683	.759	.633	.811	
e. The products appear to be a bargain. The prices shown for the products are very unacceptable vs. very acceptable	.587	.639	.533	.631	.696

Table 57: Inter-item and Item-to-total Correlation for PV HI Condition 3 (Experiment 1)

*Inter-item and **Item-to-total** Correlation for PI HI Condition 3.*

<u>Items. Very unlikely vs. very likely.</u>	<u>a.</u>	<u>b.</u>	<u>c.</u>	<u>d.</u>
a. How likely is it that you would go to this store?	.826			
b. How likely is it that you would consider purchasing from this store in the next three months?	.701	.806		
c. How likely is it that you would consider purchasing from this store in the next year?	.744	.871	.868	
d. For this purchase, how likely is it that you buy from this store?	.822	.640	.721	.788

*Table 58: Inter-item and Item-to-total Correlation for PI HI Condition 3
(Experiment 1)*

*Inter-item and **Item-to-total** Correlation for Af HI Condition 3.*

<u>Items. Strongly disagree vs. strongly agree.</u>	<u>a.</u>	<u>b.</u>	<u>c.</u>
a. Right now, I feel happy.	.877		
b. Right now, I feel pleased.	.774	.798	
c. Right now, I feel glad.	.875	.772	.873

*Table 59: Inter-item and Item-to-total Correlation for Af HI Condition 3
(Experiment 1)*

*Inter-item and **Item-to-total** Correlation for Per Ext Condition 3.*

<u>Items. Strongly disagree vs. strongly agree.</u>	<u>a.</u>	<u>b.</u>	<u>c.</u>	<u>d.</u>
a. I am the life of the party.	.558			
b. I don't talk a lot. (reversed)	.530	.786		
c. I talk to a lot of different people at parties.	.516	.688	.713	
d. I keep in the background. (reversed)	.421	.699	.577	.678

*Table 60: Inter-item and Item-to-total Correlation for Per Ext Condition 3
(Experiment 1)*

*Inter-item and **Item-to-total** Correlation for Per Ag Condition 3.*

<u>Items. Strongly disagree vs. strongly agree.</u>	<u>a.</u>	<u>b.</u>	<u>c.</u>	<u>d.</u>
a. I sympathize with others' feelings.	.754			
b. I am not interested in other people's problems. (reversed)	.634	.705		
c. I feel others' emotions.	.663	.517	.609	
d. I am not interested in others. (reversed)	.556	.595	.374	.594

*Table 61: Inter-item and Item-to-total Correlation for Per Ag Condition 3
(Experiment 1)*

*Inter-item and **Item-to-total** Correlation for Per Co Condition 3.*

<u>Items. Strongly disagree vs. strongly agree.</u>	<u>a.</u>	<u>b.</u>	<u>c.</u>	<u>d.</u>
a. I get chores done right away. (item dropped)	.368			
b. I often forget to put things back in their proper place. (reversed)	.292	.507		
c. I like order.	.380	.463	.544	
d. I make a mess of things. (reversed)	.172	.364	.320	.371

*Table 62: Inter-item and Item-to-total Correlation for Per Co Condition 3
(Experiment 1)*

*Inter-item and **Item-to-total** Correlation for Per Ne Condition 3.*

<u>Items. Strongly disagree vs. strongly agree.</u>	<u>a.</u>	<u>b.</u>	<u>c.</u>	<u>d.</u>
a. I have frequent mood swings.	.720			
b. I am relaxed most of the time. (reversed)	.637	.671		
c. I get upset easily.	.556	.628	.515	
d. I seldom feel blue. (reversed, item dropped)	.352	.182	-.008	.208

*Table 63: Inter-item and Item-to-total Correlation for Per Ne Condition 3
(Experiment 1)*

*Inter-item and **Item-to-total** Correlation for Per In Condition 3.*

<u>Items. Strongly disagree vs. strongly agree.</u>	<u>a.</u>	<u>b.</u>	<u>c.</u>	<u>d.</u>
a. I have a vivid imagination.	.541			
b. I am not interested in abstract ideas. (reversed)	.550	.556		
c. I have difficulty understanding abstract ideas. (reversed)	.504	.602	.621	
d. I do not have a good imagination. (reversed, item dropped)	.236	.182	.316	.293

*Table 64: Inter-item and Item-to-total Correlation for Per In Condition 3
(Experiment 1)*

Condition 4: LI: blue, HI: red, non-priming

*Inter-item and **Item-to-total** Correlation for PP LI Condition 4.*

<u>Items</u>	<u>a.</u>	<u>b.</u>
a. The prices in the shop are low vs. high. (reversed)	.869	
b. The prices shown were reasonable. Strongly disagree vs. strongly agree	.869	.869

*Table 65: Inter-item and Item-to-total Correlation for PP LI Condition 4
(Experiment 1)*

*Inter-item and **Item-to-total** Correlation for PV LI Condition 4.*

<u>Items</u>	<u>a.</u>	<u>b.</u>	<u>c.</u>	<u>d.</u>	<u>e.</u>
a. The products are poor vs. good value for money	.871				
b. At the prices shown the products are very uneconomical vs. very economical	.695	.776			
c. The products are considered a good buy. Strongly disagree vs. strongly agree	.808	.714	.856		
d. The prices shown for the products are very unacceptable vs. very acceptable	.829	.733	.792	.853	
e. The products appear to be a bargain. The prices shown for the products are very unacceptable vs. very acceptable	.797	.706	.776	.734	.831

Table 66: Inter-item and Item-to-total Correlation for PV LI Condition 4

(Experiment 1)

*Inter-item and **Item-to-total** Correlation for PI LI Condition 4.*

<u>Items. Very unlikely vs. very likely.</u>	<u>a.</u>	<u>b.</u>	<u>c.</u>	<u>d.</u>
a. How likely is it that you would go to this store?	.885			
b. How likely is it that you would consider purchasing from this store in the next three months?	.867	.949		
c. How likely is it that you would consider purchasing from this store in the next year?	.857	.930	.920	
d. For this purchase, how likely is it that you buy from this store?	.829	.894	.844	.890

*Table 67: Inter-item and Item-to-total Correlation for PI LI Condition 4
(Experiment 1)*

*Inter-item and **Item-to-total** Correlation for Af LI Condition 4.*

<u>Items. Strongly disagree vs. strongly agree.</u>	<u>a.</u>	<u>b.</u>	<u>c.</u>
a. Right now, I feel happy.	.908		
b. Right now, I feel pleased.	.799	.844	
c. Right now, I feel glad.	.882	.841	.872

*Table 68: Inter-item and Item-to-total Correlation for Af LI Condition 4
(Experiment 1)*

*Inter-item and **Item-to-total** Correlation for PP HI Condition 4.*

<u>Items</u>	<u>a.</u>	<u>b.</u>
a. The prices in the shop are low vs. high. (reversed)	.611	
b. The prices shown were reasonable. Strongly disagree vs. strongly agree	.611	.611

Table 69: Inter-item and Item-to-total Correlation for PP HI Condition 4 (Experiment 1)

*Inter-item and **Item-to-total** Correlation for PV HI Condition 4.*

<u>Items</u>	<u>a.</u>	<u>b.</u>	<u>c.</u>	<u>d.</u>	<u>e.</u>
a. The products are poor vs. good value for money	.627				
b. At the prices shown the products are very uneconomical vs. very economical	.462	.643			
c. The products are considered a good buy. Strongly disagree vs. strongly agree	.542	.594	.622		
d. The prices shown for the products are very unacceptable vs. very acceptable	.560	.684	.617	.761	
e. The products appear to be a bargain. The prices shown for the products are very unacceptable vs. very acceptable*	.422	.334	.283	.468	.446

*Table 70: Inter-item and Item-to-total Correlation for PV HI Condition 4
(Experiment 1)*

*Item not dropped because it performed satisfactory for other conditions and the full sample.

Inter-item and Item-to-total Correlation for PI HI Condition 4.

<u>Items. Very unlikely vs. very likely.</u>	<u>a.</u>	<u>b.</u>	<u>c.</u>	<u>d.</u>
a. How likely is it that you would go to this store?	.766			
b. How likely is it that you would consider purchasing from this store in the next three months?	.555	.668		
c. How likely is it that you would consider purchasing from this store in the next year?	.748	.587	.795	
d. For this purchase, how likely is it that you buy from this store?	.736	.686	.753	.835

Table 71: Inter-item and Item-to-total Correlation for PI HI Condition 4

(Experiment 1)

Inter-item and Item-to-total Correlation for Af HI Condition 4.

<u>Items. Strongly disagree vs. strongly agree.</u>	<u>a.</u>	<u>b.</u>	<u>c.</u>
a. Right now, I feel happy.	.906		
b. Right now, I feel pleased.	.900	.931	
c. Right now, I feel glad.	.865	.898	.903

Table 72: Inter-item and Item-to-total Correlation for Af HI Condition 4

(Experiment 1)

Inter-item and Item-to-total Correlation for Per Ext Condition 4.

<u>Items. Strongly disagree vs. strongly agree.</u>	<u>a.</u>	<u>b.</u>	<u>c.</u>	<u>d.</u>
a. I am the life of the party.*	.382			
b. I don't talk a lot. (reversed)*	.059	.305		
c. I talk to a lot of different people at parties.*	.539	.142	.493	
d. I keep in the background. (reversed)	.236	.546	.444	.596

Table 73: Inter-item and Item-to-total Correlation for Per Ext Condition 4

(Experiment 1)

*Items not dropped because they performed satisfactory for other conditions and/or the full sample.

Inter-item and Item-to-total Correlation for Per Ag Condition 4.

<u>Items. Strongly disagree vs. strongly agree.</u>	<u>a.</u>	<u>b.</u>	<u>c.</u>	<u>d.</u>
a. I sympathize with others' feelings.	.794			
b. I am not interested in other people's problems. (reversed)	.631	.755		
c. I feel others' emotions.	.904	.668	.798	
d. I am not interested in others. (reversed)	.403	.629	.389	.510

Table 74: Inter-item and Item-to-total Correlation for Per Ag Condition 4

(Experiment 1)

Inter-item and Item-to-total Correlation for Per Co Condition 4.

<u>Items. Strongly disagree vs. strongly agree.</u>	<u>a.</u>	<u>b.</u>	<u>c.</u>	<u>d.</u>
a. I get chores done right away. (item dropped)	.338			
b. I often forget to put things back in their proper place. (reversed)	.353	.576		
c. I like order.	.287	.463	.468	
d. I make a mess of things. (reversed)	.145	.404	.266	.372

*Table 75: Inter-item and Item-to-total Correlation for Per Co Condition 4
(Experiment 1)*

Inter-item and Item-to-total Correlation for Per Ne Condition 4.

<u>Items. Strongly disagree vs. strongly agree.</u>	<u>a.</u>	<u>b.</u>	<u>c.</u>	<u>d.</u>
a. I have frequent mood swings.	.551			
b. I am relaxed most of the time. (reversed)*	.293	.430		
c. I get upset easily.	.611	.390	.504	
d. I seldom feel blue. (reversed, item dropped)	.258	.271	.079	.256

*Table 76: Inter-item and Item-to-total Correlation for Per Ne Condition 4
(Experiment 1)*

*Item not dropped because it performed satisfactory for other conditions and the full sample.

*Inter-item and **Item-to-total** Correlation for Per In Condition 4.*

<u>Items. Strongly disagree vs. strongly agree.</u>	<u>a.</u>	<u>b.</u>	<u>c.</u>	<u>d.</u>
a. I have a vivid imagination.	.579			
b. I am not interested in abstract ideas. (reversed)*	.443	.490		
c. I have difficulty understanding abstract ideas. (reversed)	.557	.570	.637	
d. I do not have a good imagination. (reversed, item dropped)	.295	.135	.260	.267

*Table 77: Inter-item and Item-to-total Correlation for Per In Condition 4
(Experiment 1)*

*Item not dropped because it performed satisfactory for other conditions and the full sample.

Condition 5: LI: red, HI: blue, non-priming

*Inter-item and **Item-to-total** Correlation for PP LI Condition 5.*

<u>Items</u>	<u>a.</u>	<u>b.</u>
a. The prices in the shop are low vs. high. (reversed)	.776	
b. The prices shown were reasonable. Strongly disagree vs. strongly agree	.776	.776

*Table 78: Inter-item and Item-to-total Correlation for PP LI Condition 5
(Experiment 1)*

Inter-item and Item-to-total Correlation for PV LI Condition 5.

<u>Items</u>	<u>a.</u>	<u>b.</u>	<u>c.</u>	<u>d.</u>	<u>e.</u>
a. The products are poor vs. good value for money	.796				
b. At the prices shown the products are very uneconomical vs. very economical	.589	.691			
c. The products are considered a good buy. Strongly disagree vs. strongly agree	.862	.609	.808		
d. The prices shown for the products are very unacceptable vs. very acceptable	.694	.590	.733	.784	
e. The products appear to be a bargain. The prices shown for the products are very unacceptable vs. very acceptable	.553	.605	.544	.641	.672

Table 79: Inter-item and Item-to-total Correlation for PV LI Condition 5

(Experiment 1)

*Inter-item and **Item-to-total** Correlation for PI LI Condition 5.*

<u>Items. Very unlikely vs. very likely.</u>	<u>a.</u>	<u>b.</u>	<u>c.</u>	<u>d.</u>
a. How likely is it that you would go to this store?	.862			
b. How likely is it that you would consider purchasing from this store in the next three months?	.810	.840		
c. How likely is it that you would consider purchasing from this store in the next year?	.805	.821	.884	
d. For this purchase, how likely is it that you buy from this store?	.771	.707	.806	.813

*Table 80: Inter-item and Item-to-total Correlation for PI LI Condition 5
(Experiment 1)*

*Inter-item and **Item-to-total** Correlation for Af LI Condition 5.*

<u>Items. Strongly disagree vs. strongly agree.</u>	<u>a.</u>	<u>b.</u>	<u>c.</u>
a. Right now, I feel happy.	.748		
b. Right now, I feel pleased.	.698	.812	
c. Right now, I feel glad.	.722	.802	.830

*Table 81: Inter-item and Item-to-total Correlation for Af LI Condition 5
(Experiment 1)*

*Inter-item and **Item-to-total** Correlation for PP HI Condition 5.*

<u>Items</u>	<u>a.</u>	<u>b.</u>
a. The prices in the shop are low vs. high. (reversed)	.586	
b. The prices shown were reasonable. Strongly disagree vs. strongly agree	.586	.586

Table 82: Inter-item and Item-to-total Correlation for PP HI Condition 5 (Experiment 1)

*Inter-item and **Item-to-total** Correlation for PV HI Condition 5.*

<u>Items</u>	<u>a.</u>	<u>b.</u>	<u>c.</u>	<u>d.</u>	<u>e.</u>
a. The products are poor vs. good value for money	.716				
b. At the prices shown the products are very uneconomical vs. very economical	.524	.703			
c. The products are considered a good buy. Strongly disagree vs. strongly agree	.712	.506	.690		
d. The prices shown for the products are very unacceptable vs. very acceptable	.664	.716	.681	.774	
e. The products appear to be a bargain. The prices shown for the products are very unacceptable vs. very acceptable	.431	.557	.383	.463	.527

Table 83: Inter-item and Item-to-total Correlation for PV HI Condition 5 (Experiment 1)

*Inter-item and **Item-to-total** Correlation for PI HI Condition 5.*

<u>Items. Very unlikely vs. very likely.</u>	<u>a.</u>	<u>b.</u>	<u>c.</u>	<u>d.</u>
a. How likely is it that you would go to this store?	.658			
b. How likely is it that you would consider purchasing from this store in the next three months?	.510	.814		
c. How likely is it that you would consider purchasing from this store in the next year?	.527	.887	.740	
d. For this purchase, how likely is it that you buy from this store?	.729	.697	.534	.751

*Table 84: Inter-item and Item-to-total Correlation for PI HI Condition 5
(Experiment 1)*

*Inter-item and **Item-to-total** Correlation for Af HI Condition 5.*

<u>Items. Strongly disagree vs. strongly agree.</u>	<u>a.</u>	<u>b.</u>	<u>c.</u>
a. Right now, I feel happy.	.883		
b. Right now, I feel pleased.	.824	.885	
c. Right now, I feel glad.	.899	.900	.942

*Table 85: Inter-item and Item-to-total Correlation for Af HI Condition 5
(Experiment 1)*

*Inter-item and **Item-to-total** Correlation for Per Ext Condition 5.*

<u>Items. Strongly disagree vs. strongly agree.</u>	<u>a.</u>	<u>b.</u>	<u>c.</u>	<u>d.</u>
a. I am the life of the party.	.572			
b. I don't talk a lot. (reversed)	.540	.726		
c. I talk to a lot of different people at parties.	.542	.571	.573	
d. I keep in the background. (reversed)*	.296	.545	.281	.452

Table 86: Inter-item and Item-to-total Correlation for Per Ext Condition 5

(Experiment 1)

*Item not dropped because it performed well for the full sample.

*Inter-item and **Item-to-total** Correlation for Per Ag Condition 5.*

<u>Items. Strongly disagree vs. strongly agree.</u>	<u>a.</u>	<u>b.</u>	<u>c.</u>	<u>d.</u>
a. I sympathize with others' feelings.	.729			
b. I am not interested in other people's problems. (reversed)	.455	.528		
c. I feel others' emotions.*	.682	.214	.482	
d. I am not interested in others. (reversed)	.634	.775	.447	.790

Table 87: Inter-item and Item-to-total Correlation for Per Ag Condition 5

(Experiment 1)

*Item not dropped because it performed well for the full sample.

*Inter-item and **Item-to-total** Correlation for Per Co Condition 5.*

<u>Items. Strongly disagree vs. strongly agree.</u>	<u>a.</u>	<u>b.</u>	<u>c.</u>	<u>d.</u>
a. I get chores done right away. (item dropped)	.392			
b. I often forget to put things back in their proper place. (reversed)	.277	.586		
c. I like order.	.305	.570	.519	
d. I make a mess of things. (reversed)	.367	.496	.309	.517

*Table 88: Inter-item and Item-to-total Correlation for Per Co Condition 5
(Experiment 1)*

*Inter-item and **Item-to-total** Correlation for Per Ne Condition 5.*

<u>Items. Strongly disagree vs. strongly agree.</u>	<u>a.</u>	<u>b.</u>	<u>c.</u>	<u>d.</u>
a. I have frequent mood swings.	.622			
b. I am relaxed most of the time. (reversed)	.435	.577		
c. I get upset easily.	.541	.554	.529	
d. I seldom feel blue. (reversed, item dropped)	.413	.330	.119	.356

*Table 89: Inter-item and Item-to-total Correlation for Per Ne Condition 5
(Experiment 1)*

Inter-item and Item-to-total Correlation for Per In Condition 5.

<u>Items. Strongly disagree vs. strongly agree.</u>	<u>a.</u>	<u>b.</u>	<u>c.</u>	<u>d.</u>
a. I have a vivid imagination.*	.453			
b. I am not interested in abstract ideas. (reversed)	.366	.620		
c. I have difficulty understanding abstract ideas. (reversed)*	.141	.646	.419	
d. I do not have a good imagination. (reversed, item dropped)	.556	.320	.185	.454

Table 90: Inter-item and Item-to-total Correlation for Per In Condition 5

(Experiment 1)

*Item not dropped because it performed satisfactory for other conditions and the full sample.

Appendix Q: Cronbach's Alpha (Experiment 1)

Perceived price was measured with two separate one-item scales. A Cronbach's alpha of .903 was achieved for low involvement and .820 for high involvement. For the subsequent analysis the mean of the results from Chang and Wildt's (1994) item and Ryu and Han's (2010) item was calculated. The Cronbach's alpha was .920 for perceived value in the low involvement state and .905 for high involvement. Purchase intention showed similar results ($\alpha = .957$ for low involvement and $\alpha = .921$ for high involvement). The scale measuring affect showed very high reliability with $\alpha = .943$ for low involvement and $\alpha = .951$ for high involvement. Although, a Cronbach's alpha of .957 and .951, respectively, is higher than the suggested optimum of .950 all items were used in the subsequent analysis because the scale has been previously established in literature and some researchers suggest that all values above .700 are acceptable.

Cronbach's alpha was calculated for each dimension of the personality scale. Agreeableness ($\alpha = .836$) and Extraversion ($\alpha = .799$) showed the highest reliability whereas Neuroticism ($\alpha = .688$) and Conscientiousness ($\alpha = .714$) the lowest. Cronbach's alpha for Intellect/Imagination was .752. Some of the values indicate low reliability. Consequently, and with the inter-item correlation and item-to-total correlations in mind, the item "I seldom feel blue" was dropped which resulted in an increase of Cronbach's alpha for Neuroticism to .746.

The item “I get chores done right away” was dropped as well, which led to an increased α of .728 for Conscientiousness. Additionally, the item “I do not have a good imagination” was dropped, increasing the Intellect/Imagination α value slightly to .753. The comparably low values for all categories were expected and were likely due to the use of the short form personality test. Tests with more items tend to provide more reliable results. Nevertheless, this master thesis included the short form because of the explorative purpose, i.e. to indicate a possible connection and directions for further research. For the further analysis and the next sections, the values used did not take the items into account which had been dropped.

Appendix R: Descriptive Statistics per Condition (Experiment 1)
Full Sample*Descriptive Statistics*

<u>Measure</u>		<u>Mean</u>	<u>Std.</u> <u>Deviation</u>	<u>Variance</u>	<u>Skewness</u>	<u>Kurtosis</u>
Low Involvement	Perceived Price	3.6304	1.56577	2.452	.446	-.030
	Perceived Value	3.8224	1.39642	1.950	.400	-.146
	Purchase Intention	3.6366	1.80904	3.273	.199	-1.068
	Affect	3.8033	1.42472	2.030	-.112	-.593
High Involvement	Perceived Price	4.6646	1.13850	1.296	-.719	.737
	Perceived Value	4.6683	1.06210	1.128	-.701	.972
	Purchase Intention	3.7547	1.48652	2.210	-.061	-.978
	Affect	3.9358	1.46748	2.153	-.330	-.663
Personality	Extraversion	4.5295	1.18631	1.407	-.518	-.206
	Agreeableness	5.3385	1.12792	1.272	-.871	.759
	Conscientiousness	4.7867	1.24307	1.545	-.254	-.676
	Neuroticism	3.6646	1.25028	1.563	.194	-.456
	Intellect/Imagination	5.1781	1.19782	1.435	-.512	-.482

Table 91: Descriptive Statistics (Experiment 1)

Condition 1: black, non-priming*Descriptive Statistics Condition 1*

<u>Measure</u>		<u>Mean</u>	<u>Std.</u> <u>Deviation</u>	<u>Variance</u>	<u>Skewness</u>	<u>Kurtosis</u>
Low Involvement	Perceived Price	2.8594	1.35738	1.842	-.075	-.977
	Perceived Value	3.0188	1.17211	1.374	-.008	-.888
	Purchase Intention	3.1094	1.63744	2.681	.156	-1.481
	Affect	3.6146	1.32554	1.757	.005	-.707
High Involvement	Perceived Price	3.9531	1.48845	2.215	-.474	-.996
	Perceived Value	3.9438	1.40160	1.964	-.498	-.747
	Purchase Intention	3.2500	1.64856	2.718	.611	-.530
	Affect	3.4479	1.32959	1.768	.204	-.483
Personality	Extraversion	4.4922	1.24836	1.558	-.524	.433
	Agreeableness	5.1484	1.07737	1.161	-.957	1.647
	Conscientiousness	4.6563	1.33732	1.788	-.423	-.338
	Neuroticism	3.7604	1.15232	1.328	.261	-.642
	Intellect/Imagination	5.1354	1.30304	1.698	-.285	-.876

Table 92: Descriptive Statistics Condition 1 (Experiment 1)

Condition 2: blue, priming*Descriptive Statistics Condition 2*

<u>Measure</u>		<u>Mean</u>	<u>Std.</u> <u>Deviation</u>	<u>Variance</u>	<u>Skewness</u>	<u>Kurtosis</u>
Low Involvement	Perceived Price	3.8214	1.39586	1.948	.474	1.299
	Perceived Value	4.1000	1.32162	1.747	.148	1.056
	Purchase Intention	3.9018	1.83628	3.372	-.020	-.998
	Affect	3.9881	1.46981	2.160	.042	-.579
High Involvement	Perceived Price	4.8750	1.06827	1.141	.081	-.668
	Perceived Value	4.8571	.95508	.912	.238	-.820
	Purchase Intention	4.0446	1.55315	2.412	-.280	-.657
	Affect	4.4881	1.45008	2.103	-.703	.095
Personality	Extraversion	4.3839	1.30965	1.715	-.467	-.846
	Agreeableness	5.2232	1.19284	1.423	-.228	-.550
	Conscientiousness	4.4167	1.20570	1.454	-.329	-.773
	Neuroticism	3.3690	1.28409	1.649	.427	-.364
	Intellect/Imagination	5.1786	1.30047	1.691	-.517	-.582

Table 93: Descriptive Statistics Condition 2 (Experiment 1)

Condition 3: red, priming*Descriptive Statistics Condition 3*

<u>Measure</u>		<u>Mean</u>	<u>Std.</u> <u>Deviation</u>	<u>Variance</u>	<u>Skewness</u>	<u>Kurtosis</u>
Low Involvement	Perceived Price	3.9714	1.64917	2.720	.716	-.513
	Perceived Value	4.1600	1.41654	2.007	.598	-.332
	Purchase Intention	3.6571	1.91941	3.684	.246	-1.221
	Affect	3.9905	1.48078	2.193	-.452	-.344
High Involvement	Perceived Price	4.8000	.97166	.944	-.109	-.703
	Perceived Value	4.7429	.97084	.943	-.268	-.507
	Purchase Intention	3.6714	1.54678	2.393	-.313	-1.337
	Affect	4.0762	1.37457	1.889	-.101	-.762
Personality	Extraversion	4.4857	1.29186	1.669	-.673	-.164
	Agreeableness	5.3143	1.21622	1.479	-1.200	1.484
	Conscientiousness	4.5429	1.15494	1.334	.243	-.326
	Neuroticism	3.6952	1.30201	1.695	.035	-.787
	Intellect/Imagination	5.2476	1.11831	1.251	-.323	-.841

Table 94: Descriptive Statistics Condition 3 (Experiment 1)

Condition 4: LI: blue, HI: red, non-priming*Descriptive Statistics Condition 4*

<u>Measure</u>		<u>Mean</u>	<u>Std.</u> <u>Deviation</u>	<u>Variance</u>	<u>Skewness</u>	<u>Kurtosis</u>
Low Involvement	Perceived Price	3.9531	1.64787	2.715	.307	-.293
	Perceived Value	4.0188	1.50299	2.259	.466	-.623
	Purchase Intention	3.8125	1.92919	3.722	.179	-1.073
	Affect	3.4375	1.55298	2.412	.072	-.571
High Involvement	Perceived Price	4.7188	.99950	.999	-.807	2.165
	Perceived Value	4.8000	.75520	.570	-.211	-.319
	Purchase Intention	3.9531	1.24505	1.550	-.212	-.783
	Affect	3.6458	1.54488	2.387	-.534	-.860
Personality	Extraversion	4.6406	.94600	.895	-.140	-.658
	Agreeableness	5.2969	1.15953	1.345	-.783	.675
	Conscientiousness	4.9167	1.16398	1.355	-.145	-1.004
	Neuroticism	3.7500	1.17318	1.376	-.131	-.212
	Intellect/Imagination	5.2292	1.14984	1.322	-.729	-.568

Table 95: Descriptive Statistics Condition 4 (Experiment 1)

Condition 5: LI: red, HI: blue, non-priming*Descriptive Statistics Condition 5*

<u>Measure</u>		<u>Mean</u>	<u>Std.</u> <u>Deviation</u>	<u>Variance</u>	<u>Skewness</u>	<u>Kurtosis</u>
Low Involvement	Perceived Price	3.5441	1.53922	2.369	.521	-.025
	Perceived Value	3.8176	1.30209	1.695	.465	-.451
	Purchase Intention	3.7279	1.71156	2.929	.286	-.896
	Affect	3.9804	1.27905	1.636	-.072	-.504
High Involvement	Perceived Price	4.9706	.84334	.711	-.023	-.135
	Perceived Value	4.9941	.83628	.699	.273	.430
	Purchase Intention	3.8897	1.37233	1.883	.058	-.980
	Affect	4.0686	1.50371	2.261	-.623	-.302
Personality	Extraversion	4.6250	1.16328	1.353	-.400	-.409
	Agreeableness	5.6765	.97997	.960	-1.328	2.689
	Conscientiousness	5.3431	1.20181	1.444	-.738	-.286
	Neuroticism	3.7059	1.36025	1.850	.433	.086
	Intellect/Imagination	5.0980	1.19632	1.431	-.802	.675

Table 96: Descriptive Statistics Condition 5 (Experiment 1)

Appendix S: Test of Normality (Experiment 1)

Shapiro-Wilk test of Normality (p-values per condition with the significant results in bold)

<u>Measure</u>		<u>1</u>	<u>2</u>	<u>3</u>	<u>4</u>	<u>5</u>	<u>4&5</u>
Low Involvement	Perceived Price	.008	.005	.003	.172	.150	.014
	Perceived Value	.063	.148	.022	.100	.362	.020
	Purchase Intention	.009	.218	.018	.054	.238	.009
	Affect	.382	.675	.134	.285	.196	.064
High Involvement	Perceived Price	.020	.441	.144	.029	.262	.005
	Perceived Value	.070	.457	.584	.312	.631	.660
	Purchase Intention	.025	.541	.006	.207	.202	.122
	Affect	.546	.165	.257	.011	.057	.001
<u>All conditions</u> (for the personality test section of the questionnaire did not differ per condition)							
Personality	Extraversion			.001			
	Agreeableness			<.001			
	Conscientiousness			.001			
	Neuroticism			.045			
	Intellect/Imagination			<.001			

Table 97: Shapiro-Wilk test of Normality (Experiment 1)

Appendix T: Rotation of Stimuli (Experiment 1)

For the low involvement state, none of the measures showed significant differences when rotated (all *p*-values well above .050 for all conditions). However, in condition 1 (black prices, non-priming) affect under high involvement was significantly higher if the laptops were shown

second (high involvement stimulus second: $M_{highsecond} = 3.96$, $SD_{highsecond} = 1.38$, high involvement stimulus first: $M_{highfirst} = 2.94$, $SD_{highfirst} = 1.10$, Levene's test for equal variances: $F = .337$, $p = .566$, Student's t -test: $t(30) = 2.320$, $p = .027$). In condition 2 (blue prices, priming), affect under high involvement showed significantly higher results if the stimulus was seen second ($M_{highsecond} = 5.06$, $SD_{highsecond} = 1.08$) than compared to before the low involvement stimulus ($M_{highfirst} = 3.61$, $SD_{highfirst} = 1.55$, Levene's test for equal variances: $F = 3.033$, $p = .093$, Student's t -test: $t(26) = 2.930$, $p = .007$). In condition 3 (red prices, priming), purchase intention (high involvement stimulus shown first: $M_{highfirst} = 4.09$, $SD_{highfirst} = 1.47$, $Mdn_{highfirst} = 2.63$, shown second: $M_{highsecond} = 2.88$, $SD_{highsecond} = 1.42$, $Mdn_{highsecond} = 4.75$) was significantly higher under high involvement if the respective stimulus was shown second (Levene's test for equal variances: $F = .209$, $p = .650$, Student's t -test: $t(33) = 2.341$, $p = .025$, Mann-Whitney test: $U = 72.5$, $n_{highfirst} = 12$, $n_{highsecond} = 23$, $p = .022$). In condition 4 (low involvement: blue, high involvement: red, non-priming), purchase intention was significantly influenced by the rotation under high involvement (shown first: $M_{highfirst} = 3.48$, $SD_{highfirst} = 1.16$, shown second: $M_{highsecond} = 4.48$, $SD_{highsecond} = 1.16$, Levene's test for equal variances: $F = .217$, $p = .645$, Student's t -test: $t(30) = 2.436$, $p = .021$). In the fifth and last condition (low involvement: red, high involvement: blue, non-priming), none of the measures was significantly influenced by order effects (Levene's test suggested use of Student's t -test: all p -values well above .050). The combination of condition 4 and 5, the colour, non-priming condition, resulted in a new, combined condition in which purchase intention under high involvement was significantly influenced by rotation involvement (shown first: $M_{highfirst} = 3.52$, $SD_{highfirst} = 1.27$, $Mdn_{highfirst} = 3.50$, shown second: $M_{highsecond} = 4.28$, $SD_{highsecond} = 1.24$, $Mdn_{highsecond} = 4.28$, Levene's test: $F = .001$, $p = .972$, Student's t -test: $t(64) = 2.464$, $p = .016$, WMW: $U = 344.5$, $n_{highfirst} = 31$, $n_{highsecond} = 35$, $p = .011$)

The results of the personality tests did not show significant differences as result of the different order of stimuli (the instant coffee and laptop advertisements) that were encountered before filling in the test (Levene's test showed equal variances the rotations for all personality dimensions, Student's t -test and Mann-Whitney test: all p -values well above .050).

Appendix U: Statistical Tests (Experiment 1)

The following short forms are used in the tables below: LI = Low Involvement, HI = High Involvement, PP = Perceived Price, PV = Perceived Value, PI = Purchase Intention, Af = Affect. “Without rotation” refers to analysing the data without taking order effects into account, “LI first” to the analysis if the low involvement stimulus was shown first and similarly for “HI first” if the high involvement stimulus was shown first.

Comparison of Condition 1 and Condition 2: black, non-priming vs. blue, priming

Results of Statistical Tests: Condition 1 vs. Condition 2 (Experiment 1)

<u>Involvement</u>	<u>Measure</u>	<u>Results</u>
LI	PP	$M_{black} = 2.86, SD_{black} = 1.36, M_{blue,priming} = 3.82, SD_{blue,priming} = 1.40$, Levene’s test: $F = .628, p = .431$, Student’s t -test: $t(58) = -2.703, p = .009$ $Mdn_{black} = 3.00, Mdn_{blue,priming} = 4.00$, Mann-Whitney test: $U = 277, n_{black} = 32, n_{blue,priming} = 28, p = .010$
LI	PV	$M_{black} = 3.02, SD_{black} = 1.17, M_{blue,priming} = 4.10, SD_{blue,priming} = 1.32$, Levene’s test: $F = .037, p = .849$, Student’s t -test: $t(58) = -3.359, p = .001$
LI	PI	$M_{black} = 3.11, SD_{black} = 1.64, M_{blue,priming} = 3.90, SD_{blue,priming} = 1.84$, Levene’s test: $F = .042, p = .839$, Student’s t -test: $t(38) = -1.767, p = .082$ $Mdn_{black} = 3.00, Mdn_{blue,priming} = 4.00$, Mann-Whitney test: $U = 343.5, n_{black} = 32, n_{blue,priming} = 28, p = .121$
LI	Af	$M_{black} = 3.61, SD_{black} = 1.33, M_{blue,priming} = 3.99, SD_{blue,priming} = 1.47$, Levene’s test: $F = .032, p = .858$, Student’s t -test: $t(38) = -1.035, p = .305$

HI	PP	<p>$M_{black} = 3.95, SD_{black} = 1.49, M_{blue,priming} = 4.88, SD_{blue,priming} = 1.07$, Levene's test: $F = 5.596, p = .021$, Welch's t-test: $t(55.971) = -2.780, p = .007$</p> <p>$Mdn_{black} = 4.50, Mdn_{blue,priming} = 5.00$, Mann-Whitney test: $U = 302.5, n_{black} = 32, n_{blue,priming} = 28, p = .030$</p>
HI	PV	<p>Without rotation: $M_{black} = 3.94, SD_{black} = 1.40, M_{blue,priming} = 4.86, SD_{blue,priming} = .96$, Levene's test: $F = 5.589, p = .020$, Welch's t-test: $t(54.885) = -2.980, p = .004$</p> <p>LI first: $M_{black} = 4.39, SD_{black} = 1.32, M_{blue,priming} = 5.04, SD_{blue,priming} = 1.00$, Shapiro-Wilk test: $W_{black}(16) = .811, p = .004, W_{blue,priming}(17) = .916, p = .128$, Levene's test: $F = .212, p = .648$, Student's t-test: $t(31) = -1.595, p = .121$</p> <p>$Mdn_{black} = 5.00, Mdn_{blue,priming} = 5.20$, Mann-Whitney test: $U = 97, n_{black} = 16, n_{blue,priming} = 17, p = .159$</p> <p>HI first: $M_{black} = 3.50, SD_{black} = 1.38, M_{blue,priming} = 4.58, SD_{blue,priming} = .86$, Shapiro-Wilk test: $W_{black}(16) = .973, p = .886, W_{blue,priming}(11) = .818, p = .016$, Levene's test: $F = 3.628, p = .068$, Student's t-test: $t(25) = -2.311, p = .029$</p> <p>$Mdn_{black} = 3.50, Mdn_{blue,priming} = 4.60$, Mann-Whitney test: $U = 43.5, n_{black} = 16, n_{blue,priming} = 11, p = .028$</p>
HI	PI	<p>$M_{black} = 3.25, SD_{black} = 1.65, M_{blue,priming} = 4.04, SD_{blue,priming} = 1.55$, Levene's test: $F = .571, p = .453$, Student's t-test: $t(31) = -1.913, p = .061$</p> <p>$Mdn_{black} = 4.13, Mdn_{blue,priming} = 2.63$, Levene's test: $F = .571, p = .453$, Mann-Whitney test: $U = 311, n_{black} = 32, n_{blue,priming} = 28, p = .042$</p>

HI	Af	Without rotation: $M_{black} = 3.45$, $SD_{black} = 1.33$, $M_{blue,priming} = 4.49$, $SD_{blue,priming} = 1.45$, Levene's test: $F = .032$, $p = .859$, Student's t -test: $t(58) = -2.898$, $p = .005$ LI first: $M_{black} = 3.96$, $SD_{black} = 1.38$, $M_{blue,priming} = 5.06$, $SD_{blue,priming} = 1.08$, Shapiro-Wilk test: $W_{black}(16) = .978$, $p = .943$, $W_{blue,priming}(17) = .952$, $p = .496$, Levene's test: $F = 1.020$, $p = .320$, Student's t -test: $t(31) = -2.562$, $p = .015$ HI first: $M_{black} = 2.94$, $SD_{black} = 1.30$, $M_{blue,priming} = 3.61$, $SD_{blue,priming} = 1.55$, Shapiro-Wilk test: $W_{black}(16) = .952$, $p = .523$, $W_{blue,priming}(11) = .952$, $p = .667$, Levene's test: $F = 2.084$, $p = .161$, Student's t -test: $t(25) = -1.317$, $p = .200$
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Table 98: Results of Statistical Tests: Condition 1 vs. Condition 2

(Experiment 1)

Comparison of Condition 1 and Condition 3: black, non-priming vs. red, priming

Results of Statistical Tests: Condition 1 vs. Condition 3 (Experiment 1)

<u>Involvement</u>	<u>Measure</u>	<u>Results</u>
LI	PP	<p>$M_{black} = 2.86, SD_{black} = 1.36, M_{red,priming} = 3.97, SD_{red,priming} = 1.65$, Levene's test: $F = .627, p = .431$, Student's t-test: $t(65) = -2.997, p = .004$</p> <p>$Mdn_{black} = 3.00, Mdn_{red,priming} = 4.00$, Mann-Whitney test: $U = 373.5, n_{black} = 32, n_{red,priming} = 35, p = .018$</p>
LI	PV	<p>$M_{black} = 3.02, SD_{black} = 1.17, M_{red,priming} = 4.16, SD_{red,priming} = 1.42$, Levene's test: $F = .563, p = .456$, Student's t-test: $t(65) = -3.574, p = .001$</p> <p>$Mdn_{black} = 3.20, Mdn_{red,priming} = 3.80$, Mann-Whitney test: $U = 318, n_{black} = 32, n_{red,priming} = 35, p = .002$</p>
LI	PI	<p>$M_{black} = 3.11, SD_{black} = 1.64, M_{red,priming} = 3.66, SD_{red,priming} = 1.92$, Levene's test: $F = .695, p = .407$, Student's t-test: $t(65) = -1.251, p = .215$</p> <p>$Mdn_{black} = 3.00, Mdn_{red,priming} = 3.50$, Mann-Whitney test: $U = 472.5, n_{black} = 32, n_{red,priming} = 35, p = .279$</p>
LI	Af	<p>$M_{black} = 3.61, SD_{black} = 1.33, M_{red,priming} = 3.99, SD_{red,priming} = 1.48$, Levene's test: $F = .006, p = .940$, Student's t-test: $t(65) = -1.091, p = .279$</p>
HI	PP	<p>$M_{black} = 3.95, SD_{black} = 1.49, M_{red,priming} = 4.80, SD_{red,priming} = .97$, Levene's test: $F = 9.150, p = .004$, Welch's t-test: $t(52.584) = -2.730, p = .009$</p> <p>$Mdn_{black} = 4.50, Mdn_{red,priming} = 5.00$, Mann-Whitney test: $U = 393, n_{black} = 32, n_{red,priming} = 35, p = .034$</p>

HI	PV	<p>Without rotation: $M_{black} = 3.94$, $SD_{black} = 1.40$, $M_{red,priming} = 4.74$, $SD_{red,priming} = .97$, Levene's test: $F = 6.187$, $p = .015$, Welch's t-test: $t(54.585) = -2.689$, $p = .009$</p> <p>LI first: $M_{black} = 4.39$, $SD_{black} = 1.32$, $M_{red,priming} = 4.90$, $SD_{red,priming} = 1.03$, Levene's test: $F = .348$, $p = .559$, Shapiro-Wilk test: $W_{black}(16) = .811$, $p = .004$, $W_{red,priming}(23) = .948$, $p = .265$, Student's t-test: $t(37) = -1.371$, $p = .179$</p> <p>$Mdn_{black} = 5.00$, $Mdn_{red,priming} = 5.20$, Mann-Whitney test: $U = 140.5$, $n_{black} = 16$, $n_{red,priming} = 23$, $p = .213$</p> <p>HI first: $M_{black} = 3.50$, $SD_{black} = 1.38$, $M_{red,priming} = 4.43$, $SD_{red,priming} = .79$, Levene's test: $F = 3.788$, $p = .063$, Shapiro-Wilk test: $W_{black}(16) = .973$, $p = .886$, $W_{red,priming}(10) = .951$, $p = .649$, Student's t-test: $t(26) = -2.099$, $p = .046$</p>
HI	PI	<p>Without rotation: $M_{black} = 3.25$, $SD_{black} = 1.65$, $M_{red,priming} = 3.67$, $SD_{red,priming} = 1.55$, Levene's test: $F = .065$, $p = .799$, Student's t-test: $t(65) = -1.080$, $p = .284$</p> <p>$Mdn_{black} = 4.40$, $Mdn_{red,priming} = 4.80$, Mann-Whitney test: $U = 463$, $n_{black} = 32$, $n_{red,priming} = 35$, $p = .222$</p> <p>LI first: $M_{black} = 3.69$, $SD_{black} = 1.66$, $M_{red,priming} = 4.09$, $SD_{red,priming} = 1.47$, Levene's test: $F = .615$, $p = .438$, Shapiro-Wilk test: $W_{black}(16) = .907$, $p = .106$, $W_{red,priming}(23) = .877$, $p = .009$, Student's t-test: $t(37) = -.792$, $p = .434$</p> <p>$Mdn_{black} = 4.00$, $Mdn_{red,priming} = 4.75$, Mann-Whitney test: $U = 155$, $n_{black} = 16$, $n_{red,priming} = 23$, $p = .420$</p> <p>HI first: $M_{black} = 2.81$, $SD_{black} = 1.57$, $M_{red,priming} = 2.88$, $SD_{red,priming} = 1.42$, Levene's test: $F = .010$, $p = .677$, Shapiro-Wilk test: $W_{black}(16) = .884$, $p = .045$, $W_{red,priming}(23) = .926$, $p = .339$, Student's t-test: $t(37) = -.109$, $p = .917$</p>

		$Mdn_{black} = 2.63, Mdn_{red,priming} = 2.38, \text{Mann-Whitney test: } U = 90.5, n_{black} = 16, n_{red,priming} = 12, p = .798$
HI	Af	Without rotation: $M_{black} = 3.45, SD_{black} = 1.33, M_{red,priming} = 4.08, SD_{red,priming} = 1.37, \text{Levene's test: } F = .016, p = .899, \text{Student's } t\text{-test: } t(65) = -1.898, p = .062$
		LI first: $M_{black} = 3.96, SD_{black} = 1.38, M_{red,priming} = 4.20, SD_{red,priming} = 1.46, \text{Levene's test: } F = .125, p = .726, \text{Shapiro-Wilk test: } W_{black}(16) = .978, p = .943, W_{red,priming}(23) = .949, p = .282, \text{Student's } t\text{-test: } t(37) = -.527, p = .601$
		HI first: $M_{black} = 2.94, SD_{black} = 1.10, M_{red,priming} = 3.83, SD_{red,priming} = 1.22, \text{Levene's test: } F = .178, p = .677, \text{Shapiro-Wilk test: } W_{black}(16) = .952, p = .523, W_{red,priming}(23) = .911, p = .221, \text{Student's } t\text{-test: } t(26) = -2.040, p = .052$

*Table 99: Results of Statistical Tests: Condition 1 vs. Condition 3
(Experiment 1)*

Comparison of Condition 1 and Condition 4: black, non-priming vs. low involvement: blue, high involvement: red, non-priming

Results of Statistical Tests: Condition 1 vs. Condition 4 (Experiment 1)

<u>Involvement</u>	<u>Measure</u>	<u>Results</u>
LI	PP	<p>$M_{black} = 2.86, SD_{black} = 1.36, M_{blue,non-priming} = 3.95, SD_{blue,non-priming} = 1.65$, Levene's test: $F = .498, p = .483$, Student's t-test: $t(62) = -2.898, p = .005$</p> <p>$Mdn_{black} = 4.00, Mdn_{blue,non-priming} = 3.00$, Mann-Whitney test: $U = 326, n_{black} = 32, n_{blue,non-priming} = 22, p = .012$</p>
LI	PV	<p>$M_{black} = 3.02, SD_{black} = 1.17, M_{blue,non-priming} = 4.02, SD_{blue,non-priming} = 1.50$, Levene's test: $F = 1.751, p = .191$, Student's t-test: $t(62) = -2.968, p = .004$</p>
LI	PI	<p>$M_{black} = 3.11, SD_{black} = 1.64, M_{blue,non-priming} = 3.81, SD_{blue,non-priming} = 1.93$, Levene's test: $F = .467, p = .497$, Student's t-test: $t(62) = -1.572, p = .121$</p> <p>$Mdn_{black} = 3.75, Mdn_{blue,non-priming} = 3.00$, Mann-Whitney test: $U = 413, n_{black} = 32, n_{blue,non-priming} = 32, p = .183$</p>
LI	Af	<p>$M_{black} = 3.61, SD_{black} = 1.33, M_{blue,non-priming} = 3.44, SD_{blue,non-priming} = 1.55$, Levene's test: $F = .367, p = .547$, Student's t-test: $t(62) = .491, p = .625$</p>
HI	PP	<p>$M_{black} = 3.95, SD_{black} = 1.49, M_{red,non-priming} = 4.7, SD_{red,non-priming} = 1.00$, Levene's test: $F = 9.193, p = .004$, Welch's t-test: $t(54.233) = -2.416, p = .019$</p> <p>$Mdn_{black} = 4.50, Mdn_{red,non-priming} = 4.75$, Mann-Whitney test: $U = 377.5, n_{black} = 32, n_{red,non-priming} = 32, p = .068$</p>

HI	PV	<p>Without rotation: $M_{black} = 3.94$, $SD_{black} = 1.40$, $M_{blue,non-priming} = 4.80$, $SD_{blue,non-priming} = .76$, Levene's test: $F = 14.127$ $p < .001$, Welch's t-test: $t(47.601) = -3.042$, $p = .004$</p> <p>LI first: $M_{black} = 4.39$, $SD_{black} = 1.32$, $M_{red,non-priming} = 4.89$, $SD_{red,non-priming} = .83$, Levene's test: $F = 1.364$, $p = .252$, Shapiro-Wilk test: $W_{black}(16) = .811$, $p = .004$, $W_{red,non-priming}(15) = .951$, $p = .541$, Student's t-test: $t(29) = -1.264$, $p = .216$</p> <p>$Mdn_{black} = 5.00$, $Mdn_{red,non-priming} = 5.00$, Mann-Whitney test: $U = 96$, $n_{black} = 16$, $n_{red,non-priming} = 15$, $p = .340$</p> <p>HI first: $M_{black} = 3.50$, $SD_{black} = 1.38$, $M_{red,non-priming} = 4.72$, $SD_{red,non-priming} = .69$, Levene's test: $F = 6.514$, $p = .016$, Shapiro-Wilk test: $W_{black}(16) = .973$, $p = .886$, $W_{red,non-priming}(17) = .970$, $p = .817$, , Welch's t-test: $t(21.850) = -3.180$, $p = .004$</p>
HI	PI	<p>Without rotation: $M_{black} = 3.25$, $SD_{black} = 1.65$, $M_{red,non-priming} = 3.95$, $SD_{red,non-priming} = 1.25$, Levene's test: $F = 5.015$, $p = .029$, Welch's t-test: $t(57.683) = -1.925$, $p = .059$</p> <p>$Mdn_{black} = 2.63$, $Mdn_{red,non-priming} = 4.00$, Mann-Whitney test: $U = 365.5$, $n_{black} = 32$, $n_{red,non-priming} = 32$, $p = .048$</p> <p>LI first: $M_{black} = 3.69$, $SD_{black} = 1.66$, $M_{red,non-priming} = 4.48$, $SD_{red,non-priming} = 1.16$, Levene's test: $F = 4.759$, $p = .037$, Shapiro-Wilk test: $W_{black}(16) = .907$, $p = .106$, $W_{red,non-priming}(17) = .959$, $p = .668$, Welch's t-test: $t(26.833) = -1.557$, $p = .131$</p> <p>HI first: $M_{black} = 2.81$, $SD_{black} = 1.57$, $M_{red,non-priming} = 3.49$, $SD_{red,non-priming} = 1.16$, Levene's test: $F = .485$, $p = .491$, Shapiro-Wilk test: $W_{black}(16) = .884$, $p = .045$, $W_{red,non-priming}(17) = .959$, $p = .668$, Welch's t-test: $t(26.833) = -1.557$, $p = .131$</p>

$priming(17) = .917, p = .129$, Student's t -test: $t(31) = -1.409, p = .169$

$Mdn_{black} = 2.38, Mdn_{red,non-priming} = 3.50$, Mann-Whitney test: $U = 90, n_{black} = 16, n_{red,non-priming} = 17, p = .096$

HI

Af

Without rotation: $M_{black} = 3.45, SD_{black} = 1.33, M_{red,non-priming} = 3.65, SD_{red,non-priming} = 1.54$, Levene's test: $F = .767, p = .384, W_{red,non-priming}(15) = .951, p = .541$, Student's t -test: $t(62) = -.549, p = .585$

$Mdn_{black} = 3.67, Mdn_{red,non-priming} = 4.00$, Mann-Whitney test: $U = 449.5, n_{black} = 32, n_{red,non-priming} = 32, p = .399$

LI first: $M_{black} = 3.93, SD_{black} = 1.38, M_{red,non-priming} = 3.93, SD_{red,non-priming} = 1.50$, Levene's test: $F = .002, p = .966$, Shapiro-Wilk test: $W_{black}(16) = .978, p = .943, W_{red,non-priming}(15) = .898, p = .088$, Student's t -test: $t(29) = .048, p = .962$

HI first: $M_{black} = 2.94, SD_{black} = 1.10, M_{red,non-priming} = 3.39, SD_{red,non-priming} = 1.58$, Levene's test: $F = 4.907, p = .034$, Shapiro-Wilk test: $W_{black}(16) = .952, p = .523, W_{red,non-priming}(17) = .902, p = .075$, Welch's t -test: $t(29.568) = -.964, p = .343$

Table 100: Results of Statistical Tests: Condition 1 vs. Condition 4

(Experiment 1)

Comparison of Condition 1 and Condition 5: black, non-priming vs. low involvement: red, high involvement: blue, non-priming

Results of Statistical Tests: Condition 1 vs. Condition 5 (Experiment 1)

<u>Involvement</u>	<u>Measure</u>	<u>Results</u>
LI	PP	<p>$M_{black} = 2.86$, $SD_{black} = 1.36$, $M_{red,non-priming} = 3.54$, $SD_{red,non-priming} = 1.54$, Levene's test: $F = .300$, $p = .586$, Student's t-test: $t(64) = -1.912$, $p = .060$</p> <p>$Mdn_{black} = 3.00$, $Mdn_{red,non-priming} = 3.50$, Mann-Whitney test: $U = 426$, $n_{black} = 32$, $n_{red,non-priming} = 34$, $p = .127$</p>
LI	PV	<p>$M_{black} = 3.02$, $SD_{black} = 1.17$, $M_{red,non-priming} = 3.82$, $SD_{red,non-priming} = 1.30$, Levene's test: $F = .559$, $p = .457$, Student's t-test: $t(64) = -2.614$, $p = .011$</p>
LI	PI	<p>$M_{black} = 3.11$, $SD_{black} = 1.64$, $M_{red,non-priming} = 3.73$, $SD_{red,non-priming} = 1.30$, Levene's test: $F = .041$, $p = .841$, Student's t-test: $t(64) = -1.498$, $p = .139$</p> <p>$Mdn_{black} = 3.00$, $Mdn_{red,non-priming} = 3.63$, Mann-Whitney test: $U = 432.5$, $n_{black} = 32$, $n_{red,non-priming} = 34$, $p = .152$</p>
LI	Af	<p>$M_{black} = 3.61$, $SD_{black} = 1.33$, $M_{red,non-priming} = 3.98$, $SD_{red,non-priming} = 1.28$, Levene's test: $F = .131$, $p = .718$, Student's t-test: $t(64) = -1.141$, $p = .258$</p>
HI	PP	<p>$M_{black} = 3.95$, $SD_{black} = 1.49$, $M_{blue,non-priming} = 4.98$, $SD_{red,non-priming} = .84$, Levene's test: $F = 15.882$, $p < .001$, Welch's t-test: $t(48.411) = -3.389$, $p = .001$</p> <p>$Mdn_{black} = 4.50$, $Mdn_{blue,non-priming} = 5.00$, Mann-Whitney test: $U = 341$, $n_{black} = 32$, $n_{blue,non-priming} = 34$, $p = .008$</p>

HI	PV	$M_{black} = 3.94, SD_{black} = 1.40, M_{blue,non-priming} = 4.99, SD_{red,non-priming} = .84,$ Levene's test: $F = 12.532, p = .001,$ Welch's t -test: $t(49.983) = -3.669, p = .001$
HI	PI	$M_{black} = 3.25, SD_{black} = 1.65, M_{blue,non-priming} = 3.89, SD_{red,non-priming} = 1.37,$ Levene's test: $F = 1.601, p = .210,$ Student's t -test: $t(17) = -1.717, p = .091$ $Mdn_{black} = 2.63, Mdn_{blue,non-priming} = 3.88,$ Mann-Whitney test: $U = 390.5, n_{black} = 32, n_{blue,non-priming} = 34, p = .048$
HI	Af	<p>Without rotation: $M_{black} = 3.45, SD_{black} = 1.33, M_{blue,non-priming} = 4.07, SD_{red,non-priming} = 1.50,$ Levene's test: $F = .155, p = .695,$ Student's t-test: $t(17) = -1.772, p = .081$</p> <p>LI first: $M_{black} = 3.96, SD_{black} = 1.38, M_{blue,non-priming} = 4.03, SD_{red,non-priming} = 1.75,$ Levene's test: $F = 1.579, p = .217,$ Shapiro-Wilk test: $W_{black}(16) = .978, p = .943, W_{blue,non-priming}(20) = .922, p = .108,$ Student's t-test: $t(34) = -.140, p = .889$</p> <p>HI first: $M_{black} = 2.94, SD_{black} = 1.10, M_{blue,non-priming} = 4.12, SD_{red,non-priming} = 1.12,$ Levene's test: $F = .089, p = .768,$ Shapiro-Wilk test: $W_{black}(16) = .952, p = .523, W_{blue,non-priming}(14) = .920, p = .217,$ Student's t-test: $t(28) = -2.913, p = .007$</p>

*Table 101: Results of Statistical Tests: Condition 1 vs. Condition 5
(Experiment 1)*

Comparison of Condition 1 and Condition 4/5: black, non-priming vs. colour, non-priming

Results of Statistical Tests: Condition 1 vs. Condition 4 and 5 (Experiment 1)

<u>Involvement</u>	<u>Measure</u>	<u>Results</u>
LI	PP	<p>$M_{black} = 2.86$, $SD_{black} = 1.36$, $M_{colour,non-priming} = 3.74$, $SD_{colour,non-priming} = 1.59$, Levene's test: $F = .695$, $p = .407$, Student's t-test: $t(96) = -2.694$, $p = .008$</p> <p>$Mdn_{black} = 3.00$, $Mdn_{colour,non-priming} = 3.75$, Mann-Whitney test: $U = 752$, $n_{black} = 32$, $n_{colour,non-priming} = 66$, $p = .020$</p>
LI	PV	<p>$M_{black} = 3.02$, $SD_{black} = 1.17$, $M_{colour,non-priming} = 3.92$, $SD_{colour,non-priming} = 1.40$, Levene's test: $F = 1.503$, $p = .223$, Student's t-test: $t(96) = -3.134$, $p = .002$</p> <p>$Mdn_{black} = 3.20$, $Mdn_{colour,non-priming} = 3.60$, Mann-Whitney test: $U = 714.5$, $n_{black} = 32$, $n_{colour,non-priming} = 66$, $p = .010$</p>
LI	PI	<p>$M_{black} = 3.11$, $SD_{black} = 1.64$, $M_{colour,non-priming} = 3.77$, $SD_{colour,non-priming} = 1.81$, Levene's test: $F = .075$, $p = .785$, Student's t-test: $t(96) = -1.746$, $p = .084$</p> <p>$Mdn_{black} = 3.00$, $Mdn_{colour,non-priming} = 3.63$, Mann-Whitney test: $U = 845.5$, $n_{black} = 32$, $n_{colour,non-priming} = 66$, $p = .110$</p>
LI	Af	<p>$M_{black} = 3.61$, $SD_{black} = 1.33$, $M_{colour,non-priming} = 3.72$, $SD_{colour,non-priming} = 1.43$, Levene's test: $F = .099$, $p = .754$, Student's t-test: $t(96) = -.340$, $p = .734$</p>

HI	PP	<p>$M_{black} = 3.95$, $SD_{black} = 1.49$, $M_{colour,non-priming} = 4.85$, $SD_{colour,non-priming} = .92$, Levene's test: $F = 16.919$, $p < .001$, Welch's t-test: $t(42.949) = -3.124$, $p = .003$</p> <p>$Mdn_{black} = 4.50$, $Mdn_{colour,non-priming} = 5.00$, Mann-Whitney test: $U = 718.5$, $n_{black} = 32$, $n_{colour,non-priming} = 66$, $p = .010$</p>
HI	PV	<p>$M_{black} = 3.94$, $SD_{black} = 1.40$, $M_{colour,non-priming} = 4.90$, $SD_{colour,non-priming} = .80$, Levene's test: $F = 19.643$, $p < .001$, Welch's t-test: $t(41.024) = -3.588$, $p = .001$</p>
HI	PI	<p>Without rotation: $M_{black} = 3.25$, $SD_{black} = 1.65$, $M_{colour,non-priming} = 3.92$, $SD_{colour,non-priming} = 1.30$, Levene's test: $F = 4.228$, $p = .042$, Welch's t-test: $t(50.402) = -2.016$, $p = .049$</p> <p>$Mdn_{black} = 2.63$, $Mdn_{colour,non-priming} = 4.00$, Mann-Whitney test: $U = 756$, $n_{black} = 32$, $n_{colour,non-priming} = 66$, $p = .023$</p> <p>LI first: $M_{black} = 3.96$, $SD_{black} = 1.66$, $M_{colour,non-priming} = 4.28$, $SD_{colour,non-priming} = 1.24$, Levene's test: $F = 3.809$, $p = .057$, Shapiro-Wilk test: $W_{black}(16) = .907$, $p = .106$, $W_{colour,non-priming}(35) = .946$, $p = .084$, Student's t-test: $t(49) = -1.415$, $p = .163$</p> <p>HI first: $M_{black} = 2.81$, $SD_{black} = 1.57$, $M_{colour,non-priming} = 3.52$, $SD_{colour,non-priming} = 1.27$, Levene's test: $F = .284$, $p = .596$, Shapiro-Wilk test: $W_{black}(16) = .884$, $p = .045$, $W_{colour,non-priming}(31) = .965$, $p = .388$, Student's t-test: $t(45) = -1.664$, $p = .103$</p> <p>$Mdn_{black} = 2.38$, $Mdn_{colour,non-priming} = 3.50$, Mann-Whitney test: $U = 163.5$, $n_{black} = 16$, $n_{colour,non-priming} = 31$, $p = .057$</p>
HI	Af	<p>$M_{black} = 3.45$, $SD_{black} = 1.33$, $M_{colour,non-priming} = 3.86$, $SD_{colour,non-priming} = 1.53$, Levene's test: $F = .462$, $p = .498$, Student's t-test: $t(96) = -1.316$, $p = .191$</p>

$Mdn_{black} = 3.67$, $Mdn_{colour,non-priming} = 4.00$, Mann-Whitney test: $U = 846$, $n_{black} = 32$, $n_{colour,non-priming} = 66$, $p = .110$

Table 102: Results of Statistical Tests: Condition 1 vs. Condition 4 and 5
(Experiment 1)

Influence of Priming Blue Prices

Results of Statistical Tests: Priming Blue (Experiment 1)

<u>Involvement</u>	<u>Measure</u>	<u>Results</u>
LI	PP	<p>$M_{blue,priming} = 3.82$, $SD_{blue,priming} = 1.40$, $M_{blue,non-priming} = 3.95$, $SD_{blue,non-priming} = 1.65$, Levene's test: $F = 1.651$, $p = .204$, Student's t-test: $t(58) = -.331$, $p = .742$</p> <p>$Mdn_{blue,priming} = 4.00$, $Mdn_{blue,non-priming} = 4.00$, Mann-Whitney test: $U = 427.5$, $n_{blue,priming} = 28$, $n_{blue,non-priming} = 32$, $p = .758$</p>
LI	PV	<p>$M_{blue,priming} = 4.10$, $SD_{blue,priming} = 1.32$, $M_{blue,non-priming} = 4.02$, $SD_{blue,non-priming} = 1.50$, Levene's test: $F = 1.595$, $p = .212$, Student's t-test: $t(58) = .221$, $p = .826$</p>
LI	PI	<p>$M_{blue,priming} = 43.90$, $SD_{blue,priming} = 1.84$, $M_{blue,non-priming} = 3.81$, $SD_{blue,non-priming} = 1.93$, Levene's test: $F = .157$, $p = .694$, Student's t-test: $t(58) = .183$, $p = .856$</p>
LI	Af	<p>$M_{blue,priming} = 3.99$, $SD_{blue,priming} = 1.47$, $M_{blue,non-priming} = 3.44$, $SD_{blue,non-priming} = 1.55$, Levene's test: $F = .135$, $p = .715$, Student's t-test: $t(58) = 1.405$, $p = .165$</p>
HI	PP	<p>$M_{blue,priming} = 4.88$, $SD_{blue,priming} = 1.07$, $M_{blue,non-priming} = 4.97$, $SD_{blue,non-priming} = .84$, Levene's test: $F = 2.010$, $p = .161$, Student's t-test: $t(60) = -.394$, $p = .695$</p>
HI	PV	<p>$M_{blue,priming} = 4.86$, $SD_{blue,priming} = .96$, $M_{blue,non-priming} = 4.99$, $SD_{blue,non-priming} = .84$, Levene's test: $F = 1.433$, $p = .236$, Student's t-test: $t(60) = -.602$, $p = .549$</p>

HI	PI	$M_{blue,priming} = 4.04$, $SD_{blue,priming} = 1.55$, $M_{blue,non-priming} = 3.88$, $SD_{blue,non-priming} = 1.37$, Levene's test: $F = .099$, $p = .755$, Student's t -test: $t(60) = .417$, $p = .678$
HI	Af	Without rotation: $M_{blue,priming} = 4.49$, $SD_{blue,priming} = 1.45$, $M_{blue,non-priming} = 4.07$, $SD_{blue,non-priming} = 1.50$, Levene's test: F $= .036$, $p = .851$, Student's t -test: $t(60) = 1.111$, $p = .271$ LI first: $M_{blue,priming} = 3.61$, $SD_{blue,priming} = 1.55$, $M_{blue,non-priming}$ $= 4.12$, $SD_{blue,non-priming} = 1.12$, Levene's test: $F = 2.222$, $p =$ $.150$, Shapiro-Wilk test: $W_{blue,priming}(11) = .952$, $p = .667$, $W_{blue,non-priming}(14) = .920$, $p = .217$, Student's t -test: $t(23) = -$ $.962$, $p = .346$ HI first: $M_{blue,priming} = 5.06$, $SD_{blue,priming} = 1.08$, $M_{blue,non-priming}$ $= 4.03$, $SD_{blue,non-priming} = 1.75$, Levene's test: $F = 5.440$, $p =$ $.026$, Shapiro-Wilk test: $W_{blue,priming}(17) = .952$, $p = .496$, $W_{blue,non-priming}(20) = .922$, $p = .108$, Welch's t -test: $t(32.193)$ $= 2.177$, $p = .037$

Table 103: Results of Statistical Tests: Priming Blue (Experiment 1)

Influence of Priming Red Prices

Results of Statistical Tests: Priming Red (Experiment 1)

<u>Involvement</u>	<u>Measure</u>	<u>Results</u>
LI	PP	$M_{red,priming} = 3.97$, $SD_{red,priming} = 1.65$, $M_{red,non-priming} = 3.54$, $SD_{red,non-priming} = 1.54$, Levene's test: $F = .069$, $p = .793$, Student's t -test: $t(67) = 1.112$, $p = .270$ $Mdn_{red,priming} = 4.00$, $Mdn_{red,non-priming} = 3.50$, Mann-Whitney test: $U = 521$, $n_{red,priming} = 35$, $n_{red,non-priming} = 34$, $p = .370$

LI	PV	<p>$M_{red,priming} = 4.16$, $SD_{red,priming} = 1.42$, $M_{red,non-priming} = 3.82$, $SD_{red,non-priming} = 1.30$, Levene's test: $F = .008$, $p = .927$, Student's t-test: $t(67) = 1.044$, $p = .300$</p> <p>$Mdn_{red,priming} = 3.80$, $Mdn_{red,non-priming} = 3.50$, Mann-Whitney test: $U = 510.5$, $n_{red,priming} = 35$, $n_{red,non-priming} = 34$, $p = .309$</p>
LI	PI	<p>$M_{red,priming} = 3.66$, $SD_{red,priming} = 1.92$, $M_{red,non-priming} = 3.73$, $SD_{red,non-priming} = 1.71$, Levene's test: $F = .880$, $p = .352$, Student's t-test: $t(67) = -.162$, $p = .872$</p> <p>$Mdn_{red,priming} = 3.50$, $Mdn_{red,non-priming} = 3.63$, Mann-Whitney test: $U = 574.5$, $n_{red,priming} = 35$, $n_{red,non-priming} = 34$, $p = .805$</p>
LI	Af	<p>$M_{red,priming} = 3.99$, $SD_{red,priming} = 1.48$, $M_{red,non-priming} = 3.98$, $SD_{red,non-priming} = 1.28$, Levene's test: $F = .149$, $p = .701$, Student's t-test: $t(67) = .030$, $p = .976$</p>
HI	PP	<p>$M_{red,priming} = 4.80$, $SD_{red,priming} = .97$, $M_{red,non-priming} = 4.72$, $SD_{red,non-priming} = 1.00$, Levene's test: $F = .151$, $p = .699$, Student's t-test: $t(65) = .337$, $p = .737$</p> <p>$Mdn_{red,priming} = 5.00$, $Mdn_{red,non-priming} = 4.75$, Mann-Whitney test: $U = 543.5$, $n_{red,priming} = 35$, $n_{red,non-priming} = 32$, $p = .834$</p>
HI	PV	<p>$M_{red,priming} = 4.74$, $SD_{red,priming} = .97$, $M_{red,non-priming} = 4.80$, $SD_{red,non-priming} = .76$, Levene's test: $F = 1.929$, $p = .170$, Student's t-test: $t(65) = -.267$, $p = .790$</p>
HI	PI	<p>Without rotation: $M_{red,priming} = 3.67$, $SD_{red,priming} = 1.55$, $M_{red,non-priming} = 3.95$, $SD_{red,non-priming} = 1.25$, Levene's test: $F = 5.011$, $p = .029$, Welch's t-test: $t(64.008) = -.824$, $p = .413$</p> <p>$Mdn_{red,priming} = 3.50$, $Mdn_{red,non-priming} = 4.00$, Mann-Whitney test: $U = 524$, $n_{red,priming} = 35$, $n_{red,non-priming} = 32$, $p = .650$</p> <p>LI first: $M_{red,priming} = 4.09$, $SD_{red,priming} = 1.47$, $M_{red,non-priming} = 4.48$, $SD_{red,non-priming} = 1.16$, Levene's test: $F = 2.642$, $p =$</p>

.113, Shapiro-Wilk test: $W_{red,priming}(23) = .877, p = .009$, $W_{red,non-priming}(15) = .959, p = .668$, Student's t -test: $t(36) = -.880, p = .385$

$Mdn_{red,priming} = 4.75, Mdn_{red,non-priming} = 4.50$, Mann-Whitney test: $U = 150.5, n_{red,priming} = 23, n_{red,non-priming} = 15, p = .516$

HI first: $M_{red,priming} = 2.88, SD_{red,priming} = 1.42, M_{red,non-priming} = 3.49, SD_{red,non-priming} = 1.16$, Levene's test: $F = 2.642, p = .113$, Shapiro-Wilk test: $W_{red,priming}(12) = .926, p = .339$, $W_{red,non-priming}(17) = .917, p = .129$, Student's t -test: $t(27) = -1.273, p = .214$

HI Af $M_{red,priming} = 4.08, SD_{red,priming} = 1.37, M_{red,non-priming} = 3.65, SD_{red,non-priming} = 1.54$, Levene's test: $F = .569, p = .454$, Student's t -test: $t(65) = 1.207, p = .232$

$Mdn_{red,priming} = 4.00, Mdn_{red,non-priming} = 4.00$, Mann-Whitney test: $U = 489, n_{red,priming} = 35, n_{red,non-priming} = 32, p = .371$

Table 104: Results of Statistical Tests: Priming Red (Experiment 1)

Full Sample: Analysis of the Personality Test

The following outlines the results of the WMW tests for the link between favourite colour and personality traits: Subjects who selected blue as their favourite colour showed higher levels of Extraversion compared to subjects who chose red ($Mdn_{blue} = 5.00, Mdn_{red} = 4.25$, Mann-Whitney test: $U = 247.5, n_{blue} = 61, n_{red} = 13, p = .057$) or black ($Mdn_{blue} = 5.00, Mdn_{black} = 4.25$, Mann-Whitney test: $U = 260, n_{blue} = 61, n_{black} = 14, p = .023$) as well as higher levels of Intellect/Imagination than respondents who's favourite colour was green ($Mdn_{blue} = 5.67, Mdn_{green} = 4.67$, Mann-Whitney test: $U = 494, n_{blue} = 61, n_{green} = 24, p = .019$) or purple ($Mdn_{blue} = 5.67, Mdn_{purple} = 4.33$, Mann-Whitney test: $U = 112, n_{blue} = 61, n_{purple} = 8, p = .013$).

Appendix V: Two-Way ANOVA Gender (Experiment 1)

Black and Blue Prices, Low Involvement

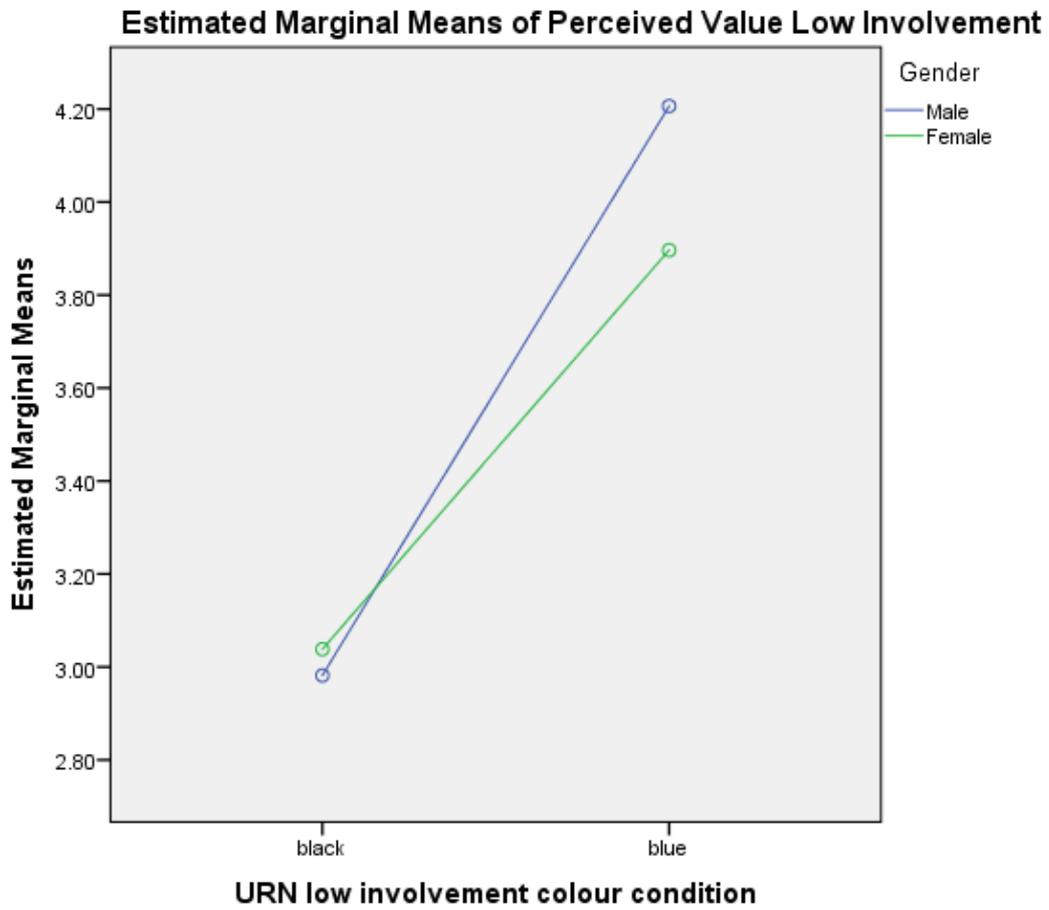


Figure 2: ANOVA Gender, Black, Blue, Low Involvement (Experiment 1)

Black and Blue Prices, High Involvement

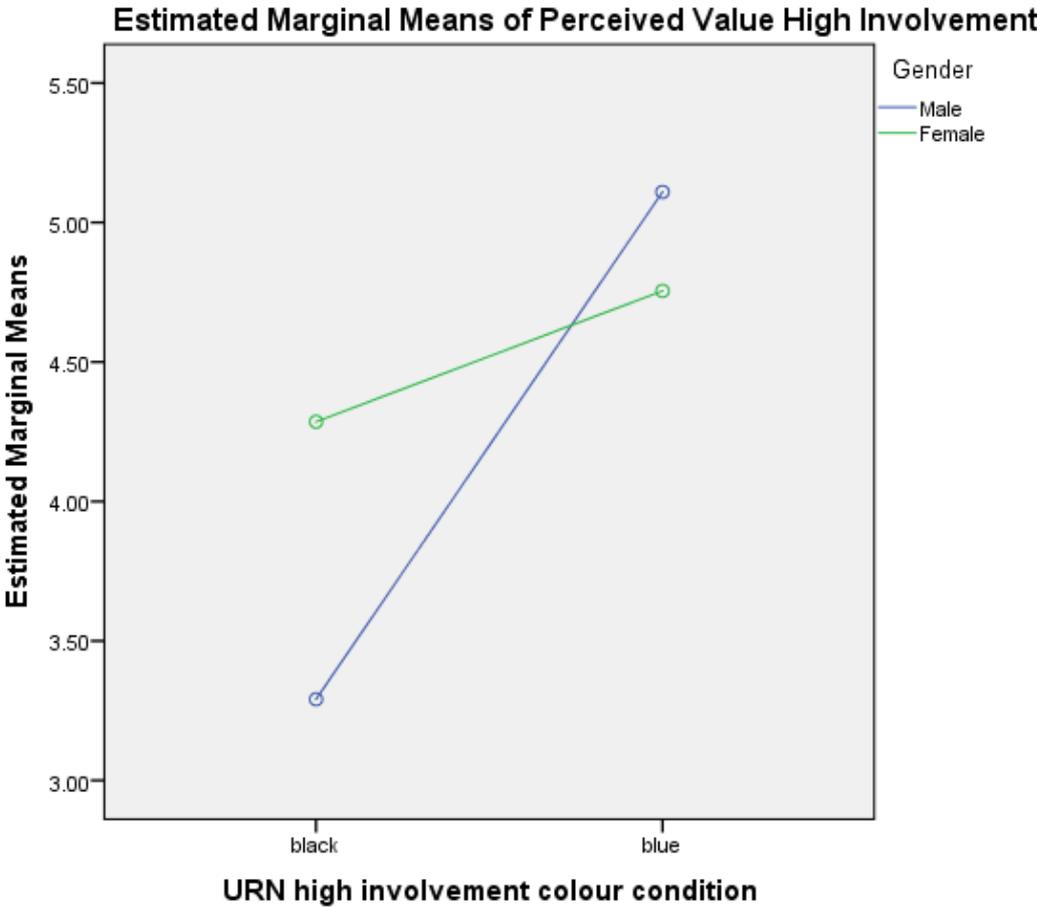


Figure 3: ANOVA Gender, Black, Blue, High Involvement (Experiment 1)

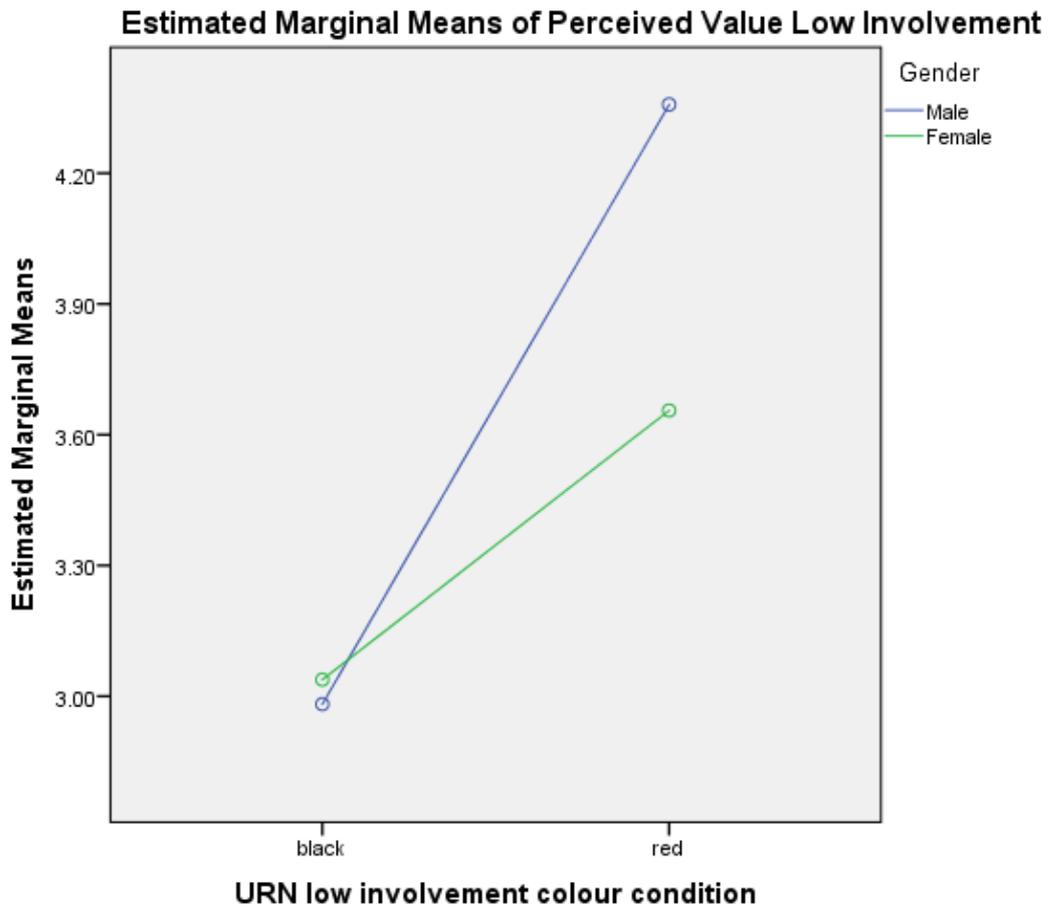
Black and Red Prices, Low Involvement

Figure 4: ANOVA Gender, Black, Red, Low Involvement (Experiment 1)

Black and Red Prices, High Involvement

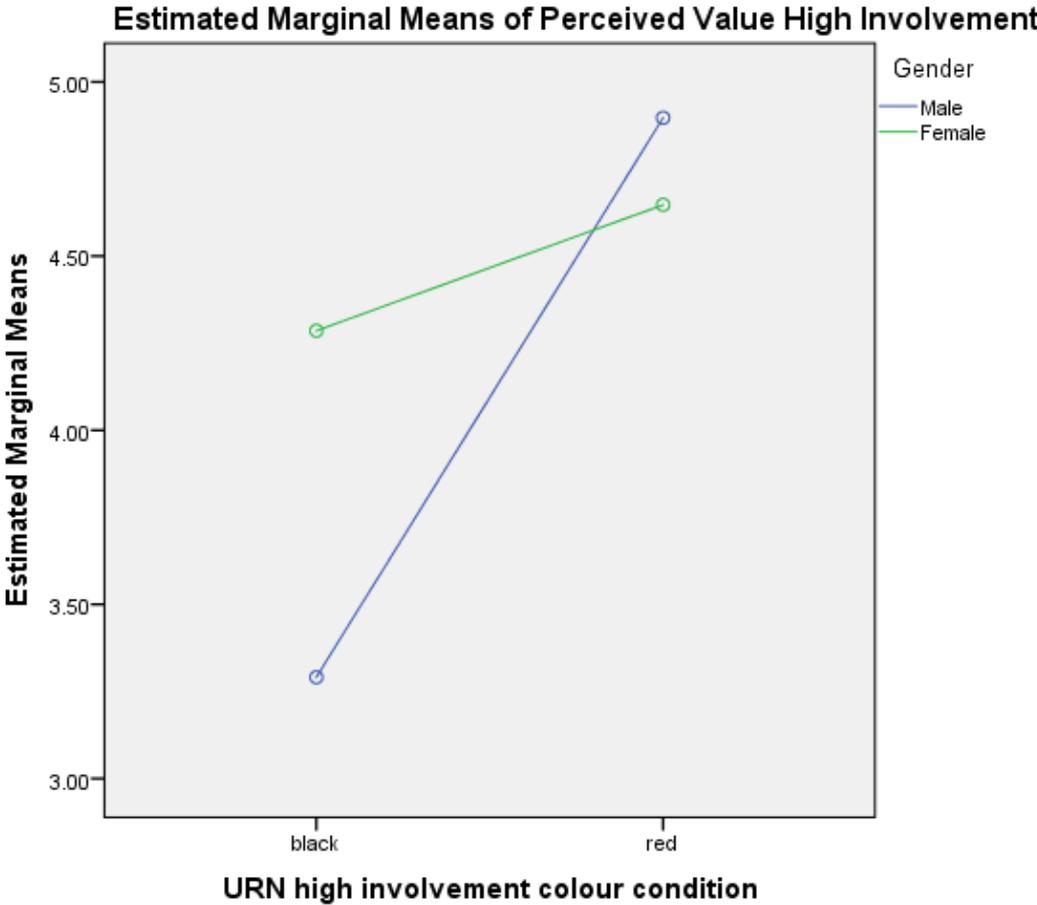


Figure 5: ANOVA Gender, Black, Red, High Involvement (Experiment 1)

Appendix W: Two-Way ANOVA Affect (Experiment 1)

Low Involvement: Blue and Black

ANOVA Affect, Blue and Black, Perceived Value, Low Involvement (Experiment 1)

	<u>Type III Sum of</u>				
<u>Source</u>	<u>Squares</u>	<u>df</u>	<u>Mean Square</u>	<u>F</u>	<u>Sig.</u>
Corrected Model	88.351	28	3.155	2.115	.007
Intercept	556.957	1	556.957	373.251	.000
Low Involvement	12.220	1	12.220	8.190	.006
Colour LICO					
Affect Low	52.832	17	3.108	2.083	.019
Involvement AFLI					
LICO * AFLI	8.110	10	.811	.543	.853
Error	94.007	63	1.492		
Total	1438.880	92			
Corrected Total	182.358	91			

Table 105: ANOVA Affect, Blue and Black, Perceived Value, Low Involvement (Experiment 1)

Low Involvement: Red and Black

ANOVA Affect, Red and Black, Perceived Value, Low Involvement (Experiment 1)

	<u>Type III Sum of</u>				
<u>Source</u>	<u>Squares</u>	<u>df</u>	<u>Mean Square</u>	<u>F</u>	<u>Sig.</u>
Corrected Model	94.852	28	3.388	2.578	.001
Intercept	676.670	1	676.670	514.963	.000
Low Involvement	7.594	1	7.594	5.780	.019
Colour LICO					
Affect Low	50.481	15	3.365	2.561	.004
Involvement AFLI					
LICO * AFLI	9.923	12	.827	.629	.810
Error	94.609	72	1.314		

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Total	1559.600	101
Corrected Total	189.461	100

Table 106: ANOVA Affect, Red and Black, Perceived Value, Low Involvement (Experiment 1)

High Involvement: Blue and Black

The interaction of blue price colour ($M_{blue} = 4.93$, $SD_{blue} = .89$) and affect leads to significantly higher perceived value compared to black prices ($M_{black} = 3.94$, $SD_{black} = 1.40$).

ANOVA Affect, Blue and Black, Perceived Value, High Involvement (Experiment 1)

	<u>Type III Sum of</u>				
<u>Source</u>	<u>Squares</u>	<u>df</u>	<u>Mean Square</u>	<u>F</u>	<u>Sig.</u>
Corrected Model	86.222	29	2.973	5.227	.000
Intercept	1050.223	1	1050.223	1846.377	.000
High Involvement	42.521	16	2.658	4.672	.000
Colour HICO					
Affect High	1.139	1	1.139	2.003	.161
Involvement AFHI					
HICO * AFHI	30.171	12	2.514	4.420	.000
Error	39.247	69	.569		
Total	2132.920	99			
Corrected Total	125.469	98			

Table 107: ANOVA Affect, Blue and Black, Perceived Value, High Involvement (Experiment 1)

High Involvement: Red and Black

The interaction of red price colour ($M_{red} = 4.77$, $SD_{red} = .87$) and affect led to significantly higher perceived value compared to black prices ($M_{black} = 3.94$, $SD_{black} = 1.40$).

ANOVA Affect, Red and Black, Perceived Value, High Involvement (Experiment 1)

<u>Source</u>	<u>Type III Sum of Squares</u>	<u>df</u>	<u>Mean Square</u>	<u>F</u>	<u>Sig.</u>
Corrected Model	97.826a	32	3.057	5.884	.000
Intercept	945.063	1	945.063	1819.034	.000
High Involvement	53.455	18	2.970	5.716	.000
Colour HICO					
Affect High	4.147	1	4.147	7.983	.006
Involvement AFHI					
HICO * AFHI	17.005	13	1.308	2.518	.008
Error	31.692	61	.520		
Total	2114.880	94			
Corrected Total	129.518	93			

Table 108: ANOVA Affect, Red and Black, Perceived Value, High Involvement (Experiment 1)

*Appendix X: Linear Regression Analysis of Personality Traits
(Experiment 1)*

*Linear Regression Analysis of Personality Traits, Dependent Variable: Perceived Value
High Involvement Red*

<u>Model</u>	Unstandardized		Standardized		
	<u>B</u>	<u>Std. Error</u>	<u>Beta</u>	<u>t</u>	<u>Sig.</u>
(Constant)	4.277	.762		5.610	<.001
Extraversion	.046	.104	.060	.437	.664
Agreeableness	.023	.104	.031	.219	.827
Conscientiousness	-.159	.093	-.213	-1.703	.094
Neuroticism	.180	.086	.259	2.113	.039
Intellect/ Imagination	.045	.117	.058	.383	.703

*Table 109: Linear Regression Analysis of Personality Traits
(Experiment 1)*

Appendix Y: Control Variables (Experiment 1)

*Control Variables p-values: Effect of Control Variable on Influence of Price Colour on the
Dependent Variable (ANCOVA)*

		<u>LI</u>	<u>LI</u>	<u>LI</u>	<u>HI</u>	<u>HI</u>	<u>HI</u>
		<u>PP</u>	<u>PV</u>	<u>PI</u>	<u>PP</u>	<u>PV</u>	<u>PI</u>
Age	25 and under	.310	.957	.329	.753	.076	.669
	26-35	.164	.708	.185	.953	.200	.615
	46-55	.308	.329	.346	.239	.088	.854
Disposable Household Income	Below €1,000	.228	.671	.688	.594	.613	.987
	€1,000-€1,999	.056	.124	.111	.075	.184	.339

	€2,000-€2,999	.471	.930	.555	.110	.136	.375
	€3,000-€3,999	.312	.956	.799	.405	.847	.917
	€4,000 and above	.244	.315	.692	.852	.273	.610
Country	Australia	.308	.161	.254	.893	.995	.674
	Brazil	.907	.987	.071	.438	.518	.446
	Czech Republic	.907	.380	.492	.089	.147	.549
	Denmark	.833	.987	.071	.258	.061	.442
	France	.231	.362	.160	.089	.147	.200
	Germany	.753	.404	.893	.402	.820	.541
	Greece	.926	.774	.937	.374	.452	.606
	Italy	.576	.583	.885	.798	.791	.301
	Kenya	.656	.778	.492	.285	.582	.051
	Luxembourg	.883	.643	.492	.884	.342	.148
	Netherlands	.965	.296	.964	.183	.195	.352
	Norway	.642	.936	.825	.262	.717	.390
	Portugal	.576	.285	.408	.583	.506	.149
	Spain	.833	.446	.882	.438	.453	.351
	Sweden	.712	.418	.922	.583	.752	.403
	Switzerland	.385	.289	.206	.125	.342	.202
	United States of America	.484	.712	.836	.622	.764	.438

Employment	Employed for wages	.660	.600	.342	.859	.799	.720
	Out of work and looking for work	.385	.446	.584	.884	.725	.270
	Self-employed	.764	.734	.910	.656	.229	.543
	Student	.334	.453	.397	.870	.314	.996
	Other	.453	.977	.795	.583	.212	.344
Sale Colour	Red	.673	.750	.664	.698	.221	.051
	Orange	.307	.245	.600	.731	.241	.456
	Yellow	.239	.184	.067	.472	.221	.789
	Green	.708	.851	.658	.233	.102	.660
	Blue	.348	.381	.417	.594	.323	.133
	Black	.667	.342	.612	.952	.674	.855
	White	.868	.734	.703	.835	.355	.079

Note. LI = low involvement, HI = high involvement, PP = perceived price, PV = perceived value, PI = purchase intention

Table 110: Control Variables p-values (Experiment 1)

Appendix Z: Advertising Stimuli Online (Experiment 2)

<p>www.....</p> <table border="1"> <tr> <th>Nescafé Original</th> <th>Nescafé Cap Colombie</th> <th>Nescafé Café Parisien</th> </tr> <tr> <td></td> <td></td> <td></td> </tr> <tr> <td>Has a medium-dark roast that gives it a full flavour and wonderfully invigorating taste. (100g)</td> <td>Made from 100% Arabica beans and has a medium bodied coffee taste with a wonderful honey finish. (100g)</td> <td>We've blended fine Arabica and Robusta beans to create a taste of true Parisien excellence. (100g)</td> </tr> <tr> <td style="text-align: center;">€4.49</td> <td style="text-align: center;">€5.99</td> <td style="text-align: center;">€6.99</td> </tr> </table>	Nescafé Original	Nescafé Cap Colombie	Nescafé Café Parisien				Has a medium-dark roast that gives it a full flavour and wonderfully invigorating taste. (100g)	Made from 100% Arabica beans and has a medium bodied coffee taste with a wonderful honey finish. (100g)	We've blended fine Arabica and Robusta beans to create a taste of true Parisien excellence. (100g)	€4.49	€5.99	€6.99	<p>www.....</p> <table border="1"> <tr> <th>Hewlett-Packard 15b</th> <th>Hewlett-Packard 250</th> <th>Hewlett-Packard 355</th> </tr> <tr> <td></td> <td></td> <td></td> </tr> <tr> <td>15.6 inch screen, 4GB RAM, 8 hours battery life.</td> <td>15.6 inch screen, 8GB RAM, 6 hours battery life.</td> <td>15.6 inch screen, 8GB RAM, 8 hours battery life.</td> </tr> <tr> <td style="text-align: center;">€349</td> <td style="text-align: center;">€399</td> <td style="text-align: center;">€549</td> </tr> </table>	Hewlett-Packard 15b	Hewlett-Packard 250	Hewlett-Packard 355				15.6 inch screen, 4GB RAM, 8 hours battery life.	15.6 inch screen, 8GB RAM, 6 hours battery life.	15.6 inch screen, 8GB RAM, 8 hours battery life.	€349	€399	€549
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Figure 6: Advertising Stimuli Experiment 2

Appendix AA: Sample Details per Condition (Experiment 2)

Age per Condition: Frequency (Percent)

<u>Age Group</u>	<u>All</u> (n = 103)	<u>Condition 1</u> (n = 24)	<u>Condition 2</u> (n = 16)	<u>Condition 3</u> (n = 21)	<u>Condition 4</u> (n = 25)	<u>Condition 5</u> (n = 17)
25 or under	90 (87.4%)	19 (79.2%)	13 (81.3%)	19 (90.5%)	24 (96.0%)	15 (88.2%)
26-35	1 (10.7%)	5 (20.8%)	2 (12.5%)	2 (9.5%)	1 (4.0%)	1 (5.9%)
46-55	1 (1.0%)					1 (5.9%)
Prefer not to say	1 (1.0%)		1 (6.3%)			

Table 111: Age Group per Condition (Experiment 2)

Gender per Condition: Frequency (Percent)

<u>Gender</u>	<u>All</u> (n = 103)	<u>Condition 1</u> (n = 24)	<u>Condition 2</u> (n = 16)	<u>Condition 3</u> (n = 21)	<u>Condition 4</u> (n = 25)	<u>Condition 5</u> (n = 17)
Male	57 (55.3%)	11 (45.8%)	10 (62.5%)	13 (61.9%)	15 (60.0%)	8 (47.1%)
Female	44 (42.7%)	13 (54.2%)	5 (31.3%)	7 (33.3%)	10 (40.0%)	9 (52.9%)
Prefer not to say	2 (1.9%)		1 (6.3%)	1 (4.8%)		

Table 112: Gender per Condition (Experiment 2)

Disposable Household Income per Condition: Frequency (Percent)

<u>Disposable Household Income</u>	<u>All</u> (<i>n</i> = 103)	<u>Condition 1</u> (<i>n</i> = 24)	<u>Condition 2</u> (<i>n</i> = 16)	<u>Condition 3</u> (<i>n</i> = 21)	<u>Condition 4</u> (<i>n</i> = 25)	<u>Condition 5</u> (<i>n</i> = 17)
Below €1,000	53 (51.5%)	13 (54.2%)	5 (31.3%)	9 (42.9%)	17 (68.0%)	9 (52.9%)
€1,000-€1,999	21 (20.4%)	5 (20.8%)	4 (25.0%)	6 (28.6%)	5 (20.0%)	1 (5.9%)
€2,000-€2,999	9 (8.7%)	2 (8.3%)	4 (25.0%)	2 (9.5%)	1 (4.0%)	
€3,000-€3,999	1 (1.0%)			1 (4.8%)		
€4,000 and above	8 (7.8%)	3 (12.5%)	1 (6.3%)	1 (4.8%)		3 (17.6%)
Prefer not to say	11 (10.7%)	1 (4.2%)	2 (12.5%)	2 (9.5%)	2 (8.0%)	4 (23.5%)

*Table 113: Disposable Household Income per Condition (Experiment 2)**Country (currently living in) per Condition: Frequency (Percent)*

<u>Country</u>	<u>All</u> (<i>n</i> = 103)	<u>Condition 1</u> (<i>n</i> = 24)	<u>Condition 2</u> (<i>n</i> = 16)	<u>Condition 3</u> (<i>n</i> = 21)	<u>Condition 4</u> (<i>n</i> = 25)	<u>Condition 5</u> (<i>n</i> = 17)
Austria	2 (1.9%)		1 (6.3%)		1 (4.0%)	
Canada	1 (1.0%)				1 (4.0%)	
Denmark	2 (1.9%)			1 (4.8%)	1 (4.0%)	
Finnland	2 (1.9%)		1 (6.3%)			1 (5.9%)

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France	1 (1.0%)					1 (5.9%)
Germany	53 (51.5%)	16 (66.7%)	6 (37.5%)	10 (47.6%)	12 (48.0%)	9 (52.9%)
Morocco	1 (1.0%)	1 (4.2%)				
Norway	26 (25.2%)	4 (16.7%)	4 (25.0%)	7 (33.3%)	7 (28.0%)	4 (23.5%)
Portugal	1 (1.0%)			1 (4.8%)		
Slovenia	1 (1.0%)				1 (4.0%)	
Spain	3 (2.9%)		1 (6.3%)		2 (8.0%)	
Sweden	1 (1.0%)	1 (4.2%)				
Switzerland	2 (1.9%)	1 (4.2%)		1 (4.8%)		
United Kingdom of Great Briatin and Northern Ireland	3 (2.9%)		1 (6.3%)	1 (4.8%)		1 (5.9%)
United States of America	2 (1.9%)	1 (4.2%)	1 (6.3%)			
Prefer not to say	2 (1.9%)		1 (6.3%)			1 (5.9%)

Table 114: Country per Condition (Experiment 2)

Employment per Condition: Frequency (Percent)

<u>Employment</u>	<u>All</u> (n = 103)	<u>Condition 1</u> (n = 24)	<u>Condition 2</u> (n = 16)	<u>Condition 3</u> (n = 21)	<u>Condition 4</u> (n = 25)	<u>Condition 5</u> (n = 17)
Employed for wages	11 (10.7%)	5 (20.8%)	2 (12.5%)	1 (4.8%)	2 (8.0%)	1 (5.9%)
Out of work but not currently looking for work	1 (1.0%)		1 (6.3%)			
Self-employed	3 (2.9%)	1 (4.2%)			1 (4.0%)	1 (5.9%)
Student	87 (84.5%)	17 (70.8%)	13 (81.3%)	20 (95.2%)	22 (88.0%)	15 (88.2%)
Other	1 (1.0%)	1 (4.2%)				

*Table 115: Employment per Condition (Experiment 2)**Appendix AB: Harman's Single-Factor Test (Experiment 2)**Harman's Single-Factor Test. Per condition. Brackets: After item(s) dropped.*

	<u>1</u>	<u>2</u>	<u>3</u>	<u>4</u>	<u>5</u>	<u>4 and 5</u>
Highest Percent of Variance Explained by a Single Factor	26.799 (30.130)	30.404 (33.436)	26.451 (28.160)	22.731 (24.411)	22.689 (23.501)	20.112 (21.977)

Table 116: Harman's Single-Factor Test (Experiment 2)

Appendix AC: IIC, ITTC, Cronbach's Alpha (Experiment 2)

The following short forms are used in the tables below: LI = Low Involvement, HI = High Involvement, Per = Personality, PP = Perceived Price, PV = Perceived Value, PI = Purchase Intention, Af = Affect, Ext = Extraversion, Ag = Agreeableness, Co = Conscientiousness, Ne = Neuroticism, In = Intellect/Imagination. Items that are dropped performed unsatisfactory in the analysis of the full sample.

Full Sample

Inter-item and Item-to-total Correlation for PP LI Full Sample.

<u>Items</u>	<u>a.</u>	<u>b.</u>
a. The prices in the shop are low vs. high. (reversed)	.906	
b. The prices shown were reasonable. Strongly disagree vs. strongly agree	.906	.906

*Table 117: Inter-item and Item-to-total Correlation for PP LI Full Sample
(Experiment 2)*

*Inter-item and **Item-to-total** Correlation for PV LI Full Sample.*

<u>Items</u>	<u>a.</u>	<u>b.</u>	<u>c.</u>	<u>d.</u>	<u>e.</u>
a. The products are poor vs. good value for money	.839				
b. At the prices shown the products are very uneconomical vs. very economical	.527	.585			
c. The products are considered a good buy. Strongly disagree vs. strongly agree	.780	.488	.798		
d. The prices shown for the products are very unacceptable vs. very acceptable	.805	.549	.814	.850	
e. The products appear to be a bargain. The prices shown for the products are very unacceptable vs. very acceptable	.726	.543	.648	.705	.757

*Table 118: Inter-item and Item-to-total Correlation for PV LI Full Sample
(Experiment 2)*

*Inter-item and **Item-to-total** Correlation for PI LI Full Sample.*

<u>Items. Very unlikely vs. very likely.</u>	<u>a.</u>	<u>b.</u>	<u>c.</u>	<u>d.</u>
a. How likely is it that you would go to this store?	.851			
b. How likely is it that you would consider purchasing from this store in the next three months?	.804	.900		
c. How likely is it that you would consider purchasing from this store in the next year?	.833	.878	.875	
d. For this purchase, how likely is it that you buy from this store?	.725	.785	.705	.781

*Table 119: Inter-item and Item-to-total Correlation for PI LI Full Sample
(Experiment 2)*

*Inter-item and **Item-to-total** Correlation for Af LI Full Sample.*

<u>Items. Strongly disagree vs. strongly agree.</u>	<u>a.</u>	<u>b.</u>	<u>c.</u>
a. Right now, I feel happy.	.865		
b. Right now, I feel pleased.	.780	.847	
c. Right now, I feel glad.	.894	.871	.936

*Table 120: Inter-item and Item-to-total Correlation for Af LI Full Sample
(Experiment 2)*

*Inter-item and **Item-to-total** Correlation for PP HI Full Sample.*

<u>Items</u>	<u>a.</u>	<u>b.</u>
a. The prices in the shop are low vs. high. (reversed)	.849	
b. The prices shown were reasonable. Strongly disagree vs. strongly agree	.849	.849

Table 121: Inter-item and Item-to-total Correlation for PP HI Full Sample (Experiment 2)

*Inter-item and **Item-to-total** Correlation for PV HI Full Sample.*

<u>Items</u>	<u>a.</u>	<u>b.</u>	<u>c.</u>	<u>d.</u>	<u>e.</u>
a. The products are poor vs. good value for money	.805				
b. At the prices shown the products are very uneconomical vs. very economical	.637	.678			
c. The products are considered a good buy. Strongly disagree vs. strongly agree	.719	.458	.740		
d. The prices shown for the products are very unacceptable vs. very acceptable	.754	.632	.759	.824	
e. The products appear to be a bargain. The prices shown for the products are very unacceptable vs. very acceptable	.573	.605	.572	.605	.679

*Table 122: Inter-item and Item-to-total Correlation for PV HI Full Sample
(Experiment 2)*

*Inter-item and **Item-to-total** Correlation for PI HI Full Sample.*

<u>Items. Very unlikely vs. very likely.</u>	<u>a.</u>	<u>b.</u>	<u>c.</u>	<u>d.</u>
a. How likely is it that you would go to this store?	.817			
b. How likely is it that you would consider purchasing from this store in the next three months?	.661	.775		
c. How likely is it that you would consider purchasing from this store in the next year?	.770	.807	.852	
d. For this purchase, how likely is it that you buy from this store?	.781	.660	.712	.790

*Table 123: Inter-item and Item-to-total Correlation for PI HI Full Sample
(Experiment 2)*

*Inter-item and **Item-to-total** Correlation for Af HI Full Sample.*

<u>Items. Strongly disagree vs. strongly agree.</u>	<u>a.</u>	<u>b.</u>	<u>c.</u>
a. Right now, I feel happy.	.863		
b. Right now, I feel pleased.	.808	.863	
c. Right now, I feel glad.	.856	.856	.900

*Table 124: Inter-item and Item-to-total Correlation for Af HI Full Sample
(Experiment 2)*

Inter-item and Item-to-total Correlation for Per Ext Full Sample.

<u>Items. Strongly disagree vs. strongly agree.</u>	<u>a.</u>	<u>b.</u>	<u>c.</u>	<u>d.</u>
a. I am the life of the party.	.582			
b. I don't talk a lot. (reversed, item dropped)*	.409	.521		
c. I talk to a lot of different people at parties. (item dropped)	.502	.292	.518	
d. I keep in the background. (reversed)	.472	.576	.469	.653

Table 125: Inter-item and Item-to-total Correlation for Per Ext Full Sample (Experiment 2)

*Item dropped because it performed very poorly in condition 5.

Inter-item and Item-to-total Correlation for Per Ag Full Sample.

<u>Items. Strongly disagree vs. strongly agree.</u>	<u>a.</u>	<u>b.</u>	<u>c.</u>	<u>d.</u>
a. I sympathize with others' feelings.	.779			
b. I am not interested in other people's problems. (reversed)	.629	.661		
c. I feel others' emotions.	.719	.436	.607	
d. I am not interested in others. (reversed)	.535	.598	.396	.596

Table 126: Inter-item and Item-to-total Correlation for Per Ag Full Sample (Experiment 2)

*Inter-item and **Item-to-total** Correlation for Per Co Full Sample.*

<u>Items. Strongly disagree vs. strongly agree.</u>	<u>a.</u>	<u>b.</u>	<u>c.</u>	<u>d.</u>
a. I get chores done right away. (item dropped)	.287			
b. I often forget to put things back in their proper place. (reversed)	.288	.522		
c. I like order. (item dropped)	.099	.217	.252	
d. I make a mess of things. (reversed)	.238	.544	.251	.520

Table 127: Inter-item and Item-to-total Correlation for Per Co Full Sample (Experiment 2)

*Inter-item and **Item-to-total** Correlation for Per Ne Full Sample.*

<u>Items. Strongly disagree vs. strongly agree.</u>	<u>a.</u>	<u>b.</u>	<u>c.</u>	<u>d.</u>
a. I have frequent mood swings.	.742			
b. I am relaxed most of the time. (reversed)	.600	.639		
c. I get upset easily.	.625	.619	.626	
d. I seldom feel blue. (reversed, item dropped)	.495	.312	.263	.416

Table 128: Inter-item and Item-to-total Correlation for Per Ne Full Sample (Experiment 2)

Inter-item and Item-to-total Correlation for Per In Full Sample.

<u>Items. Strongly disagree vs. strongly agree.</u>	<u>a.</u>	<u>b.</u>	<u>c.</u>	<u>d.</u>
a. I have a vivid imagination.	.515			
b. I am not interested in abstract ideas. (reversed)	.355	.524		
c. I have difficulty understanding abstract ideas. (reversed, item dropped)	.233	.490	.403	
d. I do not have a good imagination. (reversed, item dropped)	.587	.323	.203	.485

*Table 129: Inter-item and Item-to-total Correlation for Per In Full Sample
(Experiment 2)*

Cronbach's alpha was .950 for perceived price, .905 for perceived value, .937 for purchase intention, and .943 for affect in the low involvement state. For the high involvement state α was .918, .895, .916, and .940, respectively. The personality measures showed lower, but acceptable reliability for four out of five dimensions (Extraversion: .641, Agreeableness: .831, Conscientiousness: .701, Neuroticism: .827, and Intellect/Imagination: .523).

Condition 1: black, non-priming

Inter-item and Item-to-total Correlation for PP LI Condition 1.

<u>Items</u>	<u>a.</u>	<u>b.</u>
a. The prices in the shop are low vs. high. (reversed)	.914	
b. The prices shown were reasonable. Strongly disagree vs. strongly agree	.914	.914

*Table 130: Inter-item and Item-to-total Correlation for PP LI Condition 1
(Experiment 2)*

Inter-item and Item-to-total Correlation for PV LI Condition 1.

<u>Items</u>	<u>a.</u>	<u>b.</u>	<u>c.</u>	<u>d.</u>	<u>e.</u>
a. The products are poor vs. good value for money	.805				
b. At the prices shown the products are very uneconomical vs. very economical	.467	.539			
c. The products are considered a good buy. Strongly disagree vs. strongly agree	.782	.464	.818		
d. The prices shown for the products are very unacceptable vs. very acceptable	.814	.475	.870	.842	
e. The products appear to be a bargain. The prices shown for the products are very unacceptable vs. very acceptable	.676	.532	.664	.694	.748

Table 131: Inter-item and Item-to-total Correlation for PV LI Condition 1

(Experiment 2)

*Inter-item and **Item-to-total** Correlation for PI LI Condition 1.*

<u>Items. Very unlikely vs. very likely.</u>	<u>a.</u>	<u>b.</u>	<u>c.</u>	<u>d.</u>
a. How likely is it that you would go to this store?	.841			
b. How likely is it that you would consider purchasing from this store in the next three months?	.780	.913		
c. How likely is it that you would consider purchasing from this store in the next year?	.726	.856	.812	
d. For this purchase, how likely is it that you buy from this store?	.855	.869	.701	.872

*Table 132: Inter-item and Item-to-total Correlation for PI LI Condition 1
(Experiment 2)*

*Inter-item and **Item-to-total** Correlation for Af LI Condition 1.*

<u>Items. Strongly disagree vs. strongly agree.</u>	<u>a.</u>	<u>b.</u>	<u>c.</u>
a. Right now, I feel happy.	.862		
b. Right now, I feel pleased.	.807	.886	
c. Right now, I feel glad.	.877	.912	.940

*Table 133: Inter-item and Item-to-total Correlation for Af LI Condition 1
(Experiment 2)*

*Inter-item and **Item-to-total** Correlation for PP HI Condition 1.*

<u>Items</u>	<u>a.</u>	<u>b.</u>
a. The prices in the shop are low vs. high. (reversed)	.923	
b. The prices shown were reasonable. Strongly disagree vs. strongly agree	.923	.923

Table 134: Inter-item and Item-to-total Correlation for PP HI Condition 1 (Experiment 2)

*Inter-item and **Item-to-total** Correlation for PV HI Condition 1.*

<u>Items</u>	<u>a.</u>	<u>b.</u>	<u>c.</u>	<u>d.</u>	<u>e.</u>
a. The products are poor vs. good value for money	.859				
b. At the prices shown the products are very uneconomical vs. very economical	.680	.751			
c. The products are considered a good buy. Strongly disagree vs. strongly agree	.821	.458	.712		
d. The prices shown for the products are very unacceptable vs. very acceptable	.795	.694	.713	.833	
e. The products appear to be a bargain. The prices shown for the products are very unacceptable vs. very acceptable	.614	.797	.483	.642	.717

Table 135: Inter-item and Item-to-total Correlation for PV HI Condition 1 (Experiment 2)

*Inter-item and **Item-to-total** Correlation for PI HI Condition 1.*

<u>Items. Very unlikely vs. very likely.</u>	<u>a.</u>	<u>b.</u>	<u>c.</u>	<u>d.</u>
a. How likely is it that you would go to this store?	.863			
b. How likely is it that you would consider purchasing from this store in the next three months?	.758	.855		
c. How likely is it that you would consider purchasing from this store in the next year?	.723	.903	.819	
d. For this purchase, how likely is it that you buy from this store?	.874	.671	.636	.782

*Table 136: Inter-item and Item-to-total Correlation for PI HI Condition 1
(Experiment 2)*

*Inter-item and **Item-to-total** Correlation for Af HI Condition 1.*

<u>Items. Strongly disagree vs. strongly agree.</u>	<u>a.</u>	<u>b.</u>	<u>c.</u>
a. Right now, I feel happy.	.916		
b. Right now, I feel pleased.	.855	.870	
c. Right now, I feel glad.	.903	.842	.907

*Table 137: Inter-item and Item-to-total Correlation for Af HI Condition 1
(Experiment 2)*

Inter-item and Item-to-total Correlation for Per Ext Condition 1.

<u>Items. Strongly disagree vs. strongly agree.</u>	<u>a.</u>	<u>b.</u>	<u>c.</u>	<u>d.</u>
a. I am the life of the party.*	.433			
b. I don't talk a lot. (reversed, item dropped)	.424	.514		
c. I talk to a lot of different people at parties. (item dropped)	.056	-.134	-.108	
d. I keep in the background. (reversed)*	.350	.680	-.169	.468

Table 138: Inter-item and Item-to-total Correlation for Per Ext Condition 1 (Experiment 2)

*Items are acceptable because the other two items were already dropped.

Inter-item and Item-to-total Correlation for Per Ag Condition 1.

<u>Items. Strongly disagree vs. strongly agree.</u>	<u>a.</u>	<u>b.</u>	<u>c.</u>	<u>d.</u>
a. I sympathize with others' feelings.	.760			
b. I am not interested in other people's problems. (reversed)	.742	.719		
c. I feel others' emotions.	.798	.492	.613	
d. I am not interested in others. (reversed)*	.293	.505	.290	.419

Table 139: Inter-item and Item-to-total Correlation for Per Ag Condition 1 (Experiment 2)

*Item not dropped because it performed satisfactory for the full sample.

*Inter-item and **Item-to-total** Correlation for Per Co Condition 1.*

<u>Items. Strongly disagree vs. strongly agree.</u>	<u>a.</u>	<u>b.</u>	<u>c.</u>	<u>d.</u>
a. I get chores done right away. (item dropped)	.384			
b. I often forget to put things back in their proper place. (reversed)	.431	.691		
c. I like order. (item dropped)	.179	.398	.439	
d. I make a mess of things. (reversed)	.322	.693	.469	.679

Table 140: Inter-item and Item-to-total Correlation for Per Co Condition 1 (Experiment 2)

*Inter-item and **Item-to-total** Correlation for Per Ne Condition 1.*

<u>Items. Strongly disagree vs. strongly agree.</u>	<u>a.</u>	<u>b.</u>	<u>c.</u>	<u>d.</u>
a. I have frequent mood swings.	.659			
b. I am relaxed most of the time. (reversed)	.591	.726		
c. I get upset easily.	.501	.705	.527	
d. I seldom feel blue. (reversed, item dropped)	.415	.325	.078	.316

Table 141: Inter-item and Item-to-total Correlation for Per Ne Condition 1 (Experiment 2)

*Inter-item and **Item-to-total** Correlation for Per In Condition 1.*

<u>Items. Strongly disagree vs. strongly agree.</u>	<u>a.</u>	<u>b.</u>	<u>c.</u>	<u>d.</u>
a. I have a vivid imagination.	.578			
b. I am not interested in abstract ideas. (reversed)	.357	.601		
c. I have difficulty understanding abstract ideas. (reversed, item dropped)	.268	.665	.454	
d. I do not have a good imagination. (reversed, item dropped)	.713	.328	.115	.470

*Table 142: Inter-item and Item-to-total Correlation for Per In Condition 1
(Experiment 2)*

Condition 2: blue, priming

*Inter-item and **Item-to-total** Correlation for PP LI Condition 2.*

<u>Items</u>	<u>a.</u>	<u>b.</u>
a. The prices in the shop are low vs. high. (reversed)	.886	
b. The prices shown were reasonable. Strongly disagree vs. strongly agree	.886	.886

*Table 143: Inter-item and Item-to-total Correlation for PP LI Condition 2
(Experiment 2)*

Inter-item and Item-to-total Correlation for PV LI Condition 2.

<u>Items</u>	<u>a.</u>	<u>b.</u>	<u>c.</u>	<u>d.</u>	<u>e.</u>
a. The products are poor vs. good value for money	.805				
b. At the prices shown the products are very uneconomical vs. very economical	.543	.723			
c. The products are considered a good buy. Strongly disagree vs. strongly agree	.767	.707	.832		
d. The prices shown for the products are very unacceptable vs. very acceptable	.724	.735	.705	.801	
e. The products appear to be a bargain. The prices shown for the products are very unacceptable vs. very acceptable	.741	.560	.695	.630	.746

Table 144: Inter-item and Item-to-total Correlation for PV LI Condition 2

(Experiment 2)

*Inter-item and **Item-to-total** Correlation for PI LI Condition 2.*

<u>Items. Very unlikely vs. very likely.</u>	<u>a.</u>	<u>b.</u>	<u>c.</u>	<u>d.</u>
a. How likely is it that you would go to this store?	.867			
b. How likely is it that you would consider purchasing from this store in the next three months?	.858	.929		
c. How likely is it that you would consider purchasing from this store in the next year?	.855	.902	.896	
d. For this purchase, how likely is it that you buy from this store?	.678	.769	.701	.749

*Table 145: Inter-item and Item-to-total Correlation for PI LI Condition 2
(Experiment 2)*

*Inter-item and **Item-to-total** Correlation for Af LI Condition 2.*

<u>Items. Strongly disagree vs. strongly agree.</u>	<u>a.</u>	<u>b.</u>	<u>c.</u>
a. Right now, I feel happy.	.852		
b. Right now, I feel pleased.	.700	.773	
c. Right now, I feel glad.	.942	.827	.957

*Table 146: Inter-item and Item-to-total Correlation for Af LI Condition 2
(Experiment 2)*

*Inter-item and **Item-to-total** Correlation for PP HI Condition 2.*

<u>Items</u>	<u>a.</u>	<u>b.</u>
a. The prices in the shop are low vs. high. (reversed)	.907	
b. The prices shown were reasonable. Strongly disagree vs. strongly agree	.907	.907

Table 147: Inter-item and Item-to-total Correlation for PP HI Condition 2 (Experiment 2)

*Inter-item and **Item-to-total** Correlation for PV HI Condition 2.*

<u>Items</u>	<u>a.</u>	<u>b.</u>	<u>c.</u>	<u>d.</u>	<u>e.</u>
a. The products are poor vs. good value for money	.789				
b. At the prices shown the products are very uneconomical vs. very economical	.643	.657			
c. The products are considered a good buy. Strongly disagree vs. strongly agree	.825	.513	.828		
d. The prices shown for the products are very unacceptable vs. very acceptable	.681	.604	.810	.833	
e. The products appear to be a bargain. The prices shown for the products are very unacceptable vs. very acceptable	.589	.570	.671	.735	.740

Table 148: Inter-item and Item-to-total Correlation for PV HI Condition 2 (Experiment 2)

*Inter-item and **Item-to-total** Correlation for PI HI Condition 2.*

<u>Items. Very unlikely vs. very likely.</u>	<u>a.</u>	<u>b.</u>	<u>c.</u>	<u>d.</u>
a. How likely is it that you would go to this store?	.835			
b. How likely is it that you would consider purchasing from this store in the next three months?	.694	.843		
c. How likely is it that you would consider purchasing from this store in the next year?	.770	.965	.923	
d. For this purchase, how likely is it that you buy from this store?	.906	.756	.854	.906

*Table 149: Inter-item and Item-to-total Correlation for PI HI Condition 2
(Experiment 2)*

*Inter-item and **Item-to-total** Correlation for Af HI Condition 2.*

<u>Items. Strongly disagree vs. strongly agree.</u>	<u>a.</u>	<u>b.</u>	<u>c.</u>
a. Right now, I feel happy.	.730		
b. Right now, I feel pleased.	.661	.778	
c. Right now, I feel glad.	.721	.788	.827

*Table 150: Inter-item and Item-to-total Correlation for Af HI Condition 2
(Experiment 2)*

*Inter-item and **Item-to-total** Correlation for Per Ext Condition 2.*

<u>Items. Strongly disagree vs. strongly agree.</u>	<u>a.</u>	<u>b.</u>	<u>c.</u>	<u>d.</u>
a. I am the life of the party.	.664			
b. I don't talk a lot. (reversed, item dropped)	.598	.670		
c. I talk to a lot of different people at parties. (item dropped)	.459	.454	.612	
d. I keep in the background. (reversed)	.654	.680	.695	.828

Table 151: Inter-item and Item-to-total Correlation for Per Ext Condition 2 (Experiment 2)

*Inter-item and **Item-to-total** Correlation for Per Ag Condition 2.*

<u>Items. Strongly disagree vs. strongly agree.</u>	<u>a.</u>	<u>b.</u>	<u>c.</u>	<u>d.</u>
a. I sympathize with others' feelings.	.790			
b. I am not interested in other people's problems. (reversed)	.719	.842		
c. I feel others' emotions.	.926	.802	.908	
d. I am not interested in others. (reversed)	.381	.674	.537	.550

Table 152: Inter-item and Item-to-total Correlation for Per Ag Condition 2 (Experiment 2)

Inter-item and Item-to-total Correlation for Per Co Condition 2.

<u>Items. Strongly disagree vs. strongly agree.</u>	<u>a.</u>	<u>b.</u>	<u>c.</u>	<u>d.</u>
a. I get chores done right away. (item dropped)	.372			
b. I often forget to put things back in their proper place. (reversed)	.479	.807		
c. I like order. (item dropped)	.164	.709	.702	
d. I make a mess of things. (reversed)	.332	.737	.851	.802

*Table 153: Inter-item and Item-to-total Correlation for Per Co Condition
2 (Experiment 2)*

Inter-item and Item-to-total Correlation for Per Ne Condition 2.

<u>Items. Strongly disagree vs. strongly agree.</u>	<u>a.</u>	<u>b.</u>	<u>c.</u>	<u>d.</u>
a. I have frequent mood swings.*	.459			
b. I am relaxed most of the time. (reversed)*	.282	.375		
c. I get upset easily.	.487	.621	.533	
d. I seldom feel blue. (reversed, item dropped)	.075	-.216	-.103	-.088

*Table 154: Inter-item and Item-to-total Correlation for Per Ne Condition
2 (Experiment 2)*

*Items not dropped because they performed satisfactory for the full sample.

Inter-item and Item-to-total Correlation for Per In Condition 2.

<u>Items. Strongly disagree vs. strongly agree.</u>	<u>a.</u>	<u>b.</u>	<u>c.</u>	<u>d.</u>
a. I have a vivid imagination.*	.236			
b. I am not interested in abstract ideas. (reversed)	.265	.522		
c. I have difficulty understanding abstract ideas. (reversed, item dropped)	.096	.665	.354	
d. I do not have a good imagination. (reversed, item dropped)	.136	-.069	-.076	.000

*Table 155: Inter-item and Item-to-total Correlation for Per In Condition 2
(Experiment 2)*

*Item not dropped because it performed satisfactory for the full sample and item c and d were already dropped.

Condition 3: red, priming

Inter-item and Item-to-total Correlation for PP LI Condition 3.

<u>Items</u>	<u>a.</u>	<u>b.</u>
a. The prices in the shop are low vs. high. (reversed)	.917	
b. The prices shown were reasonable. Strongly disagree vs. strongly agree	.917	.917

*Table 156: Inter-item and Item-to-total Correlation for PP LI Condition 3
(Experiment 2)*

*Inter-item and **Item-to-total** Correlation for PV LI Condition 3.*

<u>Items</u>	<u>a.</u>	<u>b.</u>	<u>c.</u>	<u>d.</u>	<u>e.</u>
a. The products are poor vs. good value for money	.902				
b. At the prices shown the products are very uneconomical vs. very economical	.695	.774			
c. The products are considered a good buy. Strongly disagree vs. strongly agree	.907	.755	.937		
d. The prices shown for the products are very unacceptable vs. very acceptable	.894	.695	.926	.887	
e. The products appear to be a bargain. The prices shown for the products are very unacceptable vs. very acceptable	.784	.758	.797	.729	.825

Table 157: Inter-item and Item-to-total Correlation for PV LI Condition 3

(Experiment 2)

*Inter-item and **Item-to-total** Correlation for PI LI Condition 3.*

<u>Items. Very unlikely vs. very likely.</u>	<u>a.</u>	<u>b.</u>	<u>c.</u>	<u>d.</u>
a. How likely is it that you would go to this store?	.965			
b. How likely is it that you would consider purchasing from this store in the next three months?	.988	.957		
c. How likely is it that you would consider purchasing from this store in the next year?	.922	.906	.916	
d. For this purchase, how likely is it that you buy from this store?	.840	.831	.812	.845

*Table 158: Inter-item and Item-to-total Correlation for PI LI Condition 3
(Experiment 2)*

*Inter-item and **Item-to-total** Correlation for Af LI Condition 3.*

<u>Items. Strongly disagree vs. strongly agree.</u>	<u>a.</u>	<u>b.</u>	<u>c.</u>
a. Right now, I feel happy.	.895		
b. Right now, I feel pleased.	.868	.926	
c. Right now, I feel glad.	.894	.939	.947

*Table 159: Inter-item and Item-to-total Correlation for Af LI Condition 3
(Experiment 2)*

*Inter-item and **Item-to-total** Correlation for PP HI Condition 3.*

<u>Items</u>	<u>a.</u>	<u>b.</u>
a. The prices in the shop are low vs. high. (reversed)	.858	
b. The prices shown were reasonable. Strongly disagree vs. strongly agree	.858	.858

Table 160: Inter-item and Item-to-total Correlation for PP HI Condition 3 (Experiment 2)

*Inter-item and **Item-to-total** Correlation for PV HI Condition 3.*

<u>Items</u>	<u>a.</u>	<u>b.</u>	<u>c.</u>	<u>d.</u>	<u>e.</u>
a. The products are poor vs. good value for money	.836				
b. At the prices shown the products are very uneconomical vs. very economical	.714	.725			
c. The products are considered a good buy. Strongly disagree vs. strongly agree	.624	.548	.751		
d. The prices shown for the products are very unacceptable vs. very acceptable	.847	.618	.676	.773	
e. The products appear to be a bargain. The prices shown for the products are very unacceptable vs. very acceptable	.656	.638	.721	.552	.733

Table 161: Inter-item and Item-to-total Correlation for PV HI Condition 3

(Experiment 2)

*Inter-item and **Item-to-total** Correlation for PI HI Condition 3.*

<u>Items. Very unlikely vs. very likely.</u>	<u>a.</u>	<u>b.</u>	<u>c.</u>	<u>d.</u>
a. How likely is it that you would go to this store?	.600			
b. How likely is it that you would consider purchasing from this store in the next three months?	.354	.681		
c. How likely is it that you would consider purchasing from this store in the next year?	.751	.766	.913	
d. For this purchase, how likely is it that you buy from this store?	.557	.768	.776	.798

*Table 162: Inter-item and Item-to-total Correlation for PI HI Condition 3
(Experiment 2)*

*Inter-item and **Item-to-total** Correlation for Af HI Condition 3.*

<u>Items. Strongly disagree vs. strongly agree.</u>	<u>a.</u>	<u>b.</u>	<u>c.</u>
a. Right now, I feel happy.	.824		
b. Right now, I feel pleased.	.780	.888	
c. Right now, I feel glad.	.834	.917	.930

*Table 163: Inter-item and Item-to-total Correlation for Af HI Condition 3
(Experiment 2)*

*Inter-item and **Item-to-total** Correlation for Per Ext Condition 3.*

<u>Items. Strongly disagree vs. strongly agree.</u>	<u>a.</u>	<u>b.</u>	<u>c.</u>	<u>d.</u>
a. I am the life of the party.	.832			
b. I don't talk a lot. (reversed, item dropped)	.746	.657		
c. I talk to a lot of different people at parties. (item dropped)	.655	.552	.688	
d. I keep in the background. (reversed)	.641	.362	.546	.600

Table 164: Inter-item and Item-to-total Correlation for Per Ext Condition 3 (Experiment 2)

*Inter-item and **Item-to-total** Correlation for Per Ag Condition 3.*

<u>Items. Strongly disagree vs. strongly agree.</u>	<u>a.</u>	<u>b.</u>	<u>c.</u>	<u>d.</u>
a. I sympathize with others' feelings.	.765			
b. I am not interested in other people's problems. (reversed)	.719	.748		
c. I feel others' emotions.*	.443	.154	.239	
d. I am not interested in others. (reversed)	.585	.817	.121	.663

Table 165: Inter-item and Item-to-total Correlation for Per Ag Condition 3 (Experiment 2)

*Item not dropped because it performed satisfactory for the full sample.

Inter-item and Item-to-total Correlation for Per Co Condition 3.

<u>Items. Strongly disagree vs. strongly agree.</u>	<u>a.</u>	<u>b.</u>	<u>c.</u>	<u>d.</u>
a. I get chores done right away. (item dropped)	.368			
b. I often forget to put things back in their proper place. (reversed)	-.070	.507		
c. I like order. (item dropped)	-.329	-.183	.544	
d. I make a mess of things. (reversed)*	-.156	.384	-.280	.371

*Table 166: Inter-item and Item-to-total Correlation for Per Co Condition
3 (Experiment 2)*

*Item not dropped because it performed satisfactory for the full sample and items a and c were already dropped.

Inter-item and Item-to-total Correlation for Per Ne Condition 3.

<u>Items. Strongly disagree vs. strongly agree.</u>	<u>a.</u>	<u>b.</u>	<u>c.</u>	<u>d.</u>
a. I have frequent mood swings.	.880			
b. I am relaxed most of the time. (reversed)	.682	.697		
c. I get upset easily.	.799	.717	.754	
d. I seldom feel blue. (reversed, item dropped)	.660	.382	.378	.529

*Table 167: Inter-item and Item-to-total Correlation for Per Ne Condition
3 (Experiment 2)*

Inter-item and Item-to-total Correlation for Per In Condition 3.

<u>Items. Strongly disagree vs. strongly agree.</u>	<u>a.</u>	<u>b.</u>	<u>c.</u>	<u>d.</u>
a. I have a vivid imagination.*	.424			
b. I am not interested in abstract ideas. (reversed)*	.397	.456		
c. I have difficulty understanding abstract ideas. (reversed, item dropped)	.365	.110	.174	
d. I do not have a good imagination. (reversed, item dropped)	.630	.664	.338	.619

Table 168: Inter-item and Item-to-total Correlation for Per In Condition 3

(Experiment 2)

*Items not dropped because they performed satisfactory for the full sample.

Condition 4: LI: blue, HI: red, non-priming

Inter-item and Item-to-total Correlation for PP LI Condition 4.

<u>Items</u>	<u>a.</u>	<u>b.</u>
a. The prices in the shop are low vs. high. (reversed)	.907	
b. The prices shown were reasonable. Strongly disagree vs. strongly agree	.907	.907

Table 169: Inter-item and Item-to-total Correlation for PP LI Condition 4

(Experiment 2)

*Inter-item and **Item-to-total** Correlation for PV LI Condition 4.*

<u>Items</u>	<u>a.</u>	<u>b.</u>	<u>c.</u>	<u>d.</u>	<u>e.</u>
a. The products are poor vs. good value for money	.777				
b. At the prices shown the products are very uneconomical vs. very economical*	.362	.394			
c. The products are considered a good buy. Strongly disagree vs. strongly agree	.632	.205	.608		
d. The prices shown for the products are very unacceptable vs. very acceptable	.757	.474	.678	.841	
e. The products appear to be a bargain. The prices shown for the products are very unacceptable vs. very acceptable	.655	.321	.463	.652	.649

*Table 170: Inter-item and Item-to-total Correlation for PV LI Condition 4
(Experiment 2)*

*Item was not dropped because it performed satisfactory for all other conditions and the full sample.

*Inter-item and **Item-to-total** Correlation for PI LI Condition 4.*

<u>Items. Very unlikely vs. very likely.</u>	<u>a.</u>	<u>b.</u>	<u>c.</u>	<u>d.</u>
a. How likely is it that you would go to this store?	.932			
b. How likely is it that you would consider purchasing from this store in the next three months?	.914	.967		
c. How likely is it that you would consider purchasing from this store in the next year?	.936	.975	.970	
d. For this purchase, how likely is it that you buy from this store?	.881	.920	.903	.920

*Table 171: Inter-item and Item-to-total Correlation for PI LI Condition 4
(Experiment 2)*

*Inter-item and **Item-to-total** Correlation for Af LI Condition 3.*

<u>Items. Strongly disagree vs. strongly agree.</u>	<u>a.</u>	<u>b.</u>	<u>c.</u>
a. Right now, I feel happy.	.872		
b. Right now, I feel pleased.	.813	.881	
c. Right now, I feel glad.	.886	.896	.936

*Table 172: Inter-item and Item-to-total Correlation for Af LI Condition 4
(Experiment 2)*

*Inter-item and **Item-to-total** Correlation for PP HI Condition 4.*

<u>Items</u>	<u>a.</u>	<u>b.</u>
a. The prices in the shop are low vs. high. (reversed)	.853	
b. The prices shown were reasonable. Strongly disagree vs. strongly agree	.853	.853

Table 173: Inter-item and Item-to-total Correlation for PP HI Condition 4 (Experiment 2)

*Inter-item and **Item-to-total** Correlation for PV HI Condition 4.*

<u>Items</u>	<u>a.</u>	<u>b.</u>	<u>c.</u>	<u>d.</u>	<u>e.</u>
a. The products are poor vs. good value for money	.777				
b. At the prices shown the products are very uneconomical vs. very economical*	.448	.390			
c. The products are considered a good buy. Strongly disagree vs. strongly agree	.771	.365	.846		
d. The prices shown for the products are very unacceptable vs. very acceptable	.735	.412	.871	.850	
e. The products appear to be a bargain. The prices shown for the products are very unacceptable vs. very acceptable	.444	.136	.549	.525	.518

Table 174: Inter-item and Item-to-total Correlation for PV HI Condition 4 (Experiment 2)

*Item was not dropped because it performed well for all other conditions and for the full sample.

*Inter-item and **Item-to-total** Correlation for PI HI Condition 4.*

<u>Items. Very unlikely vs. very likely.</u>	<u>a.</u>	<u>b.</u>	<u>c.</u>	<u>d.</u>
a. How likely is it that you would go to this store?	.844			
b. How likely is it that you would consider purchasing from this store in the next three months?	.700	.667		
c. How likely is it that you would consider purchasing from this store in the next year?	.755	.651	.778	
d. For this purchase, how likely is it that you buy from this store?	.668	.421	.590	.626

*Table 175: Inter-item and Item-to-total Correlation for PI HI Condition 4
(Experiment 2)*

*Inter-item and **Item-to-total** Correlation for Af HI Condition 4.*

<u>Items. Strongly disagree vs. strongly agree.</u>	<u>a.</u>	<u>b.</u>	<u>c.</u>
a. Right now, I feel happy.	.891		
b. Right now, I feel pleased.	.847	.864	
c. Right now, I feel glad.	.850	.814	.866

*Table 176: Inter-item and Item-to-total Correlation for Af HI Condition 4
(Experiment 2)*

Inter-item and Item-to-total Correlation for Per Ext Condition 4.

<u>Items. Strongly disagree vs. strongly agree.</u>	<u>a.</u>	<u>b.</u>	<u>c.</u>	<u>d.</u>
a. I am the life of the party.	.558			
b. I don't talk a lot. (reversed, item dropped)	.316	.437		
c. I talk to a lot of different people at parties. (item dropped)	.524	.315	.574	
d. I keep in the background. (reversed)	.546	.458	.522	.662

Table 177: Inter-item and Item-to-total Correlation for Per Ext Condition 4 (Experiment 2)

Inter-item and Item-to-total Correlation for Per Ag Condition 4.

<u>Items. Strongly disagree vs. strongly agree.</u>	<u>a.</u>	<u>b.</u>	<u>c.</u>	<u>d.</u>
a. I sympathize with others' feelings.	.806			
b. I am not interested in other people's problems. (reversed)	.598	.500		
c. I feel others' emotions.*	.471	.133	.405	
d. I am not interested in others. (reversed)	.792	.552	.441	.766

Table 178: Inter-item and Item-to-total Correlation for Per Ag Condition 4 (Experiment 2)

*Item not dropped because it performed satisfactory for the full sample.

Inter-item and Item-to-total Correlation for Per Co Condition 4.

<u>Items. Strongly disagree vs. strongly agree.</u>	<u>a.</u>	<u>b.</u>	<u>c.</u>	<u>d.</u>
a. I get chores done right away. (item dropped)	.300			
b. I often forget to put things back in their proper place. (reversed)*	.197	.326		
c. I like order. (item dropped)	.133	-.084	.111	
d. I make a mess of things. (reversed)	.283	.497	.202	.535

Table 179: Inter-item and Item-to-total Correlation for Per Co Condition 4 (Experiment 2)

*Item not dropped because it performed satisfactory for the full sample.

Inter-item and Item-to-total Correlation for Per Ne Condition 4.

<u>Items. Strongly disagree vs. strongly agree.</u>	<u>a.</u>	<u>b.</u>	<u>c.</u>	<u>d.</u>
a. I have frequent mood swings.	.684			
b. I am relaxed most of the time. (reversed)	.563	.573		
c. I get upset easily.	.639	.650	.699	
d. I seldom feel blue. (reversed, item dropped)	.359	.152	.300	.310

Table 180: Inter-item and Item-to-total Correlation for Per Ne Condition 4 (Experiment 2)

*Inter-item and **Item-to-total** Correlation for Per In Condition 4.*

<u>Items. Strongly disagree vs. strongly agree.</u>	<u>a.</u>	<u>b.</u>	<u>c.</u>	<u>d.</u>
a. I have a vivid imagination.*	.458			
b. I am not interested in abstract ideas. (reversed)*	.303	.431		
c. I have difficulty understanding abstract ideas. (reversed, item dropped)	.062	.571	.388	
d. I do not have a good imagination. (reversed, item dropped)	.649	.071	.257	.450

*Table 181: Inter-item and Item-to-total Correlation for Per In Condition 4
(Experiment 2)*

*Items not dropped because they performed satisfactory for the full sample.

Condition 5: LI: red, HI: blue, non-priming

*Inter-item and **Item-to-total** Correlation for PP LI Condition 5.*

<u>Items</u>	<u>a.</u>	<u>b.</u>
a. The prices in the shop are low vs. high. (reversed)	.855	
b. The prices shown were reasonable. Strongly disagree vs. strongly agree	.855	.855

*Table 182: Inter-item and Item-to-total Correlation for PP LI Condition 5
(Experiment 2)*

Inter-item and Item-to-total Correlation for PV LI Condition 5.

<u>Items</u>	<u>a.</u>	<u>b.</u>	<u>c.</u>	<u>d.</u>	<u>e.</u>
a. The products are poor vs. good value for money	.904				
b. At the prices shown the products are very uneconomical vs. very economical	.681	.550			
c. The products are considered a good buy. Strongly disagree vs. strongly agree	.808	.436	.803		
d. The prices shown for the products are very unacceptable vs. very acceptable	.754	.421	.850	.821	
e. The products appear to be a bargain. The prices shown for the products are very unacceptable vs. very acceptable	.782	.487	.607	.733	.757

Table 183: Inter-item and Item-to-total Correlation for PV LI Condition 5

(Experiment 2)

Inter-item and Item-to-total Correlation for PI LI Condition 5.

<u>Items. Very unlikely vs. very likely.</u>	<u>a.</u>	<u>b.</u>	<u>c.</u>	<u>d.</u>
a. How likely is it that you would go to this store?*	.441			
b. How likely is it that you would consider purchasing from this store in the next three months?	.208	.632		
c. How likely is it that you would consider purchasing from this store in the next year?	.575	.680	.677	
d. For this purchase, how likely is it that you buy from this store?*	.290	.559	.351	.479

*Table 184: Inter-item and Item-to-total Correlation for PI LI Condition 5
(Experiment 2)*

*Items not dropped because they performed satisfactory for the full sample.

Inter-item and Item-to-total Correlation for Af LI Condition 5.

<u>Items. Strongly disagree vs. strongly agree.</u>	<u>a.</u>	<u>b.</u>	<u>c.</u>
a. Right now, I feel happy.	.871		
b. Right now, I feel pleased.	.717	.732	
c. Right now, I feel glad.	.896	.709	.859

*Table 185: Inter-item and Item-to-total Correlation for Af LI Condition 5
(Experiment 2)*

*Inter-item and **Item-to-total** Correlation for PP HI Condition 5.*

<u>Items</u>	<u>a.</u>	<u>b.</u>
a. The prices in the shop are low vs. high. (reversed)	.607	
b. The prices shown were reasonable. Strongly disagree vs. strongly agree	.607	.607

Table 186: Inter-item and Item-to-total Correlation for PP HI Condition 5 (Experiment 2)

*Inter-item and **Item-to-total** Correlation for PV HI Condition 5.*

<u>Items</u>	<u>a.</u>	<u>b.</u>	<u>c.</u>	<u>d.</u>	<u>e.</u>
a. The products are poor vs. good value for money	.682				
b. At the prices shown the products are very uneconomical vs. very economical	.733	.683			
c. The products are considered a good buy. Strongly disagree vs. strongly agree	.469	.396	.666		
d. The prices shown for the products are very unacceptable vs. very acceptable	.587	.660	.797	.809	
e. The products appear to be a bargain. The prices shown for the products are very unacceptable vs. very acceptable	.494	.523	.532	.538	.623

Table 187: Inter-item and Item-to-total Correlation for PV HI Condition 5

(Experiment 2)

*Inter-item and **Item-to-total** Correlation for PI HI Condition 5.*

<u>Items. Very unlikely vs. very likely.</u>	<u>a.</u>	<u>b.</u>	<u>c.</u>	<u>d.</u>
a. How likely is it that you would go to this store?	.937			
b. How likely is it that you would consider purchasing from this store in the next three months?	.880	.905		
c. How likely is it that you would consider purchasing from this store in the next year?	.908	.840	.882	
d. For this purchase, how likely is it that you buy from this store?	.838	.845	.762	.848

*Table 188: Inter-item and Item-to-total Correlation for PI HI Condition 5
(Experiment 2)*

*Inter-item and **Item-to-total** Correlation for Af HI Condition 5.*

<u>Items. Strongly disagree vs. strongly agree.</u>	<u>a.</u>	<u>b.</u>	<u>c.</u>
a. Right now, I feel happy.	.922		
b. Right now, I feel pleased.	.863	.911	
c. Right now, I feel glad.	.957	.940	.983

*Table 189: Inter-item and Item-to-total Correlation for Af HI Condition 5
(Experiment 2)*

Inter-item and Item-to-total Correlation for Per Ext Condition 5.

<u>Items. Strongly disagree vs. strongly agree.</u>	<u>a.</u>	<u>b.</u>	<u>c.</u>	<u>d.</u>
a. I am the life of the party.*	.367			
b. I don't talk a lot. (reversed, item dropped)	-.014	.232		
c. I talk to a lot of different people at parties. (item dropped)	.691	.070	.688	
d. I keep in the background. (reversed)	.117	.582	.649	.634

Table 190: Inter-item and Item-to-total Correlation for Per Ext Condition 5 (Experiment 2)

*Item not dropped because it performed satisfactory for the full sample.

Inter-item and Item-to-total Correlation for Per Ag Condition 5.

<u>Items. Strongly disagree vs. strongly agree.</u>	<u>a.</u>	<u>b.</u>	<u>c.</u>	<u>d.</u>
a. I sympathize with others' feelings.	.885			
b. I am not interested in other people's problems. (reversed)	.580	.635		
c. I feel others' emotions.	.932	.682	.910	
d. I am not interested in others. (reversed)	.871	.557	.793	.815

Table 191: Inter-item and Item-to-total Correlation for Per Ag Condition 5 (Experiment 2)

Inter-item and Item-to-total Correlation for Per Co Condition 5.

<u>Items. Strongly disagree vs. strongly agree.</u>	<u>a.</u>	<u>b.</u>	<u>c.</u>	<u>d.</u>
a. I get chores done right away. (item dropped)	.743			
b. I often forget to put things back in their proper place. (reversed)*	.505	.454		
c. I like order. (item dropped)	.518	.175	.285	
d. I make a mess of things. (reversed)*	.519	.351	.036	.397

Table 192: Inter-item and Item-to-total Correlation for Per Co Condition 5 (Experiment 2)

*Item not dropped because it performed satisfactory for the full sample.

Inter-item and Item-to-total Correlation for Per Ne Condition 5.

<u>Items. Strongly disagree vs. strongly agree.</u>	<u>a.</u>	<u>b.</u>	<u>c.</u>	<u>d.</u>
a. I have frequent mood swings.	.869			
b. I am relaxed most of the time. (reversed)	.798	.721		
c. I get upset easily.	.577	.358	.548	
d. I seldom feel blue. (reversed, item dropped)	.787	.700	.575	.813

Table 193: Inter-item and Item-to-total Correlation for Per Ne Condition 5 (Experiment 2)

*Inter-item and **Item-to-total** Correlation for Per In Condition 5.*

<u>Items. Strongly disagree vs. strongly agree.</u>	<u>a.</u>	<u>b.</u>	<u>c.</u>	<u>d.</u>
a. I have a vivid imagination.	.727			
b. I am not interested in abstract ideas. (reversed)	.542	.746		
c. I have difficulty understanding abstract ideas. (reversed, item dropped)	.564	.791	.685	
d. I do not have a good imagination. (reversed, item dropped)	.758	.537	.376	.632

Table 194: Inter-item and Item-to-total Correlation for Per In Condition 5

(Experiment 2)

Appendix AD: Descriptive Statistics (Experiment 2)
Full Sample

Descriptive Statistics Full Sample

<u>Measure</u>		<u>Mean</u>	<u>Std.</u> <u>Deviation</u>	<u>Variance</u>	<u>Skewness</u>	<u>Kurtosis</u>
Low Involvement	Perceived Price	3.3447	1.34862	1.819	.283	.013
	Perceived Value	3.5243	1.17461	1.380	.127	.113
	Purchase Intention	2.6189	1.44204	2.079	.783	-.124
	Affect	4.0712	1.19881	1.437	-.222	-.520
High Involvement	Perceived Price	4.7282	1.12846	1.273	-.487	.088
	Perceived Value	4.6136	1.00010	1.000	-.208	.105
	Purchase Intention	3.3956	1.48709	2.211	.073	-.753
	Affect	4.2168	1.14114	1.302	-.329	-.405
Personality	Extraversion	4.4628	1.22717	1.506	-.154	-.508
	Agreeableness	5.2549	1.15681	1.338	-.990	1.180
	Conscientiousness	4.7233	1.38573	1.920	-.552	-.408
	Neuroticism	3.4790	1.36775	1.871	.238	-.591
	Intellect/Imagination	5.3916	1.04624	1.095	-.489	-.347

Table 195: Descriptive Statistics Full Sample (Experiment 2)

Condition 1: black, non-priming*Descriptive Statistics Condition 1*

<u>Measure</u>		<u>Mean</u>	<u>Std.</u> <u>Deviation</u>	<u>Variance</u>	<u>Skewness</u>	<u>Kurtosis</u>
Low Involvement	Perceived Price	2.8750	1.36135	1.853	.104	-.948
	Perceived Value	3.1667	1.14613	1.314	.029	-.634
	Purchase Intention	2.2813	1.25610	1.578	1.062	.102
	Affect	3.9444	1.34655	1.813	-.023	-.941
High Involvement	Perceived Price	4.4583	1.59426	2.542	-.084	-1.022
	Perceived Value	4.3000	1.33840	1.791	.048	-.440
	Purchase Intention	3.1250	1.57252	2.473	.680	-.266
	Affect	4.1250	1.32902	1.766	.021	-.948
Personality	Extraversion	4.6944	1.06284	1.130	-.214	-.316
	Agreeableness	5.4688	1.15935	1.344	-1.694	3.537
	Conscientiousness	4.4792	1.71616	2.945	-.320	-.869
	Neuroticism	3.7222	1.44016	2.074	.395	-.780
	Intellect/Imagination	5.5556	1.12360	1.262	-.673	-.674

Table 196: Descriptive Statistics Condition 1 (Experiment 2)

Condition 2: blue, priming*Descriptive Statistics Condition 2*

<u>Measure</u>		<u>Mean</u>	<u>Std.</u> <u>Deviation</u>	<u>Variance</u>	<u>Skewness</u>	<u>Kurtosis</u>
Low Involvement	Perceived Price	3.6250	1.27148	1.617	.570	.090
	Perceived Value	3.7750	1.04275	1.087	.291	.796
	Purchase Intention	2.7656	1.56649	2.454	.834	-.274
	Affect	4.1458	1.45026	2.103	-.606	-.218
High Involvement	Perceived Price	4.9688	1.00778	1.016	-.852	1.511
	Perceived Value	4.9000	.96609	.933	.047	.894
	Purchase Intention	3.3594	1.88849	3.566	.225	-.927
	Affect	4.3542	1.13835	1.296	-.566	-.277
Personality	Extraversion	3.9167	1.46313	2.141	.014	-.786
	Agreeableness	5.1563	1.30344	1.699	-.943	.955
	Conscientiousness	5.0938	1.24122	1.541	-.812	-.141
	Neuroticism	3.1875	1.04682	1.096	-.481	-.883
	Intellect/Imagination	5.2917	.84218	.709	-.378	1.306

Table 197: Descriptive Statistics Condition 2 (Experiment 2)

Condition 3: red, priming*Descriptive Statistics Condition 3*

<u>Measure</u>		<u>Mean</u>	<u>Std.</u> <u>Deviation</u>	<u>Variance</u>	<u>Skewness</u>	<u>Kurtosis</u>
Low Involvement	Perceived Price	3.8571	1.53414	2.354	.424	-.013
	Perceived Value	3.9524	1.37391	1.888	.292	-.034
	Purchase Intention	3.1429	1.70765	2.916	.596	-.495
	Affect	3.9048	1.09109	1.190	-.088	.056
High Involvement	Perceived Price	4.7143	1.17868	1.389	-.167	-.596
	Perceived Value	4.6190	.91193	.832	.089	-.927
	Purchase Intention	3.3571	1.21339	1.472	-.486	-.389
	Affect	3.8889	1.13203	1.281	-.293	1.071
Personality	Extraversion	4.6349	1.29488	1.677	-.158	-.453
	Agreeableness	5.3214	.97514	.951	-.221	-.215
	Conscientiousness	4.5476	1.27382	1.623	-.579	-.339
	Neuroticism	3.4127	1.54166	2.377	.010	-.711
	Intellect/Imagination	5.1111	1.28812	1.659	-.234	-1.228

Table 198: Descriptive Statistics Condition 3 (Experiment 2)

Condition 4: LI: blue, HI: red, non-priming*Descriptive Statistics Condition 4*

<u>Measure</u>		<u>Mean</u>	<u>Std.</u> <u>Deviation</u>	<u>Variance</u>	<u>Skewness</u>	<u>Kurtosis</u>
Low Involvement	Perceived Price	3.2200	1.30767	1.710	.507	-.055
	Perceived Value	3.4000	1.07238	1.150	.067	.193
	Purchase Intention	2.5000	1.45057	2.104	.787	-.247
	Affect	4.4000	1.17851	1.389	-.425	-.362
High Involvement	Perceived Price	4.9200	.77298	.598	-1.108	2.913
	Perceived Value	4.7920	.75604	.572	-.122	-.064
	Purchase Intention	3.7400	1.33362	1.779	-.354	-.424
	Affect	4.5333	.93294	.870	-.345	-.875
Personality	Extraversion	4.2267	1.12513	1.266	.117	-.419
	Agreeableness	5.1600	1.10132	1.213	-.338	-.377
	Conscientiousness	4.7600	1.29196	1.669	-.379	-.719
	Neuroticism	3.8267	1.31628	1.733	.114	-.985
	Intellect/Imagination	5.3333	.97658	.954	-.465	1.068

Table 199: Descriptive Statistics Condition 4 (Experiment 2)

Condition 5: LI: red, HI: blue, non-priming*Descriptive Statistics Condition 5*

<u>Measure</u>		<u>Mean</u>	<u>Std.</u> <u>Deviation</u>	<u>Variance</u>	<u>Skewness</u>	<u>Kurtosis</u>
Low Involvement	Perceived Price	3.2941	1.06153	1.127	-1.160	.785
	Perceived Value	3.4471	1.13033	1.278	-.696	.226
	Purchase Intention	2.4853	1.13699	1.293	-.255	-1.505
	Affect	3.9020	.86414	.747	-.243	-.958
High Involvement	Perceived Price	4.6176	.80096	.642	-.331	-.194
	Perceived Value	4.5176	.86040	.740	-.128	-.658
	Purchase Intention	3.3529	1.54631	2.391	-.032	-1.219
	Affect	4.1569	1.14332	1.307	-.614	-.349
Personality	Extraversion	4.7843	1.16632	1.360	-.056	-.709
	Agreeableness	5.1029	1.36947	1.875	-1.401	2.467
	Conscientiousness	4.8824	1.31731	1.735	-.919	1.098
	Neuroticism	2.9804	1.30953	1.715	.779	.808
	Intellect/Imagination	5.6863	.86177	.743	-.442	-.334

Table 200: Descriptive Statistics Condition 5 (Experiment 2)

Appendix AE: Test of Normality (Experiment 2)

Shapiro-Wilk test of Normality (p-values per condition with the significant results in bold)

<u>Measure</u>		<u>1</u>	<u>2</u>	<u>3</u>	<u>4</u>	<u>5</u>	<u>4&5</u>
Low Involvement	Perceived Price	.178	.392	.132	.345	.011	.132
	Perceived Value	.619	.271	.089	.913	.421	.690
	Purchase Intention	.003	.087	.110	.007	.021	.002
	Affect	.100	.256	.145	.132	.076	.101
High Involvement	Perceived Price	.125	.083	.688	.003	.417	.007
	Perceived Value	.135	.870	.485	.788	.791	.387
	Purchase Intention	.031	.240	.387	.513	.325	.085
	Affect	.254	.515	.346	.058	.063	.009

All conditions (for the personality test section of the questionnaire did not differ per condition)

Personality	Extraversion	.123
	Agreeableness	<.001
	Conscientiousness	.001
	Neuroticism	.063
	Intellect/Imagination	.001

Table 201: Shapiro-Wilk test of Normality (Experiment 2)

Appendix AF: Analysis of Rotation (Experiment 2)

In condition 1, the results of the purchase intention measure were significantly influenced by rotation in the high involvement state, with a lower purchase intention if the stimulus was shown first ($M_{highfirst} = 2.45$, $SD_{highfirst} = 1.12$, $Mdn_{highfirst} = 2.00$) compared to second ($M_{highsecond} = 4.67$, $SD_{highsecond} = 1.53$, $Mdn_{highsecond} = 4.75$), Levene's test: $F = .235$, $p = .633$, Student's t -test: $t(22) = 1.090$, $p = .001$, WMW test: $U = 17$, $n_{highfirst} = 16$, $n_{highsecond} = 8$, $p = .004$. In condition 2, there was no significant influence of stimulus rotation on the dependent variables. However, in condition 3, rotation significantly influenced perceived price ($M_{lowfirst} = 4.65$, $SD_{lowfirst} = 1.53$, $M_{lowsecond} = 3.14$, $SD_{lowsecond} = 1.19$, Levene's test: $F = .054$, $p = .820$, Student's t -test: $t(19) = 2.550$, $p = .020$) and perceived value ($M_{lowfirst} = 4.68$, $SD_{lowfirst} = 1.28$, $M_{lowsecond} = 3.29$, $SD_{lowsecond} = 1.14$, Levene's test: $F = .003$, $p = .954$, Student's t -test: $t(19) = 2.636$, $p = .016$) in the low involvement state. In condition 4, affect in the low involvement state was significantly higher if the respective stimulus was shown first, $M_{lowfirst} = 5.13$, $SD_{lowfirst} = .65$, $M_{lowsecond} = 3.91$, $SD_{lowsecond} = 1.21$, Levene's test: $F = 1.863$, $p = .186$, Student's t -test: $t(23) = 2.908$, $p = .008$. Also, purchase intention for high involvement products was significantly influenced by rotation, $M_{highfirst} = 3.30$, $SD_{highfirst} = 1.48$, $M_{highsecond} = 4.40$, $SD_{highsecond} = .72$, Levene's test: $F = 6.750$, $p = .016$, Welch's t -test: $t(21.462) = 2.471$, $p = .022$. Finally, in condition 5, purchase intention under low involvement was significantly lower if the low involvement stimulus was shown first ($M_{lowfirst} = 2.05$, $SD_{lowfirst} = 1.08$, $Mdn_{lowfirst} = 2.00$) compared to shown second ($M_{lowsecond} = 3.29$, $SD_{lowsecond} = .78$, $Mdn_{lowsecond} = 3.38$), Levene's test: $F = 2.946$, $p = .107$, Student's t -test: $t(15) = -2.484$, $p = .025$, WMW test: $U = 12.5$, $n_{lowfirst} = 11$, $n_{lowsecond} = 6$, $p = .036$. In the combined condition (condition 4 and 5), there was no significant influence of order effects (all Student's t -test and, where required, all WMW test p -values $> .050$).

Appendix AG: Statistical Tests (Experiment 2)

The following short forms are used in the tables below: LI = Low Involvement, HI = High Involvement, PP = Perceived Price, PV = Perceived Value, PI = Purchase Intention, Af = Affect. “Without rotation” refers to analysing the data without taking order effects into account, “LI first” to the analysis if the low involvement stimulus was shown first and similarly for “HI first” if the high involvement stimulus was shown first.

Comparison of Condition 1 and Condition 2: black, non-priming vs. blue, priming

Results of Statistical Tests: Condition 1 vs. Condition 2 (Experiment 2)

<u>Involvement</u>	<u>Measure</u>	<u>Results</u>
LI	PP	$M_{black} = 2.88$, $SD_{black} = 1.36$, $M_{blue,priming} = 3.63$, $SD_{blue,priming} = 1.27$, Levene’s test: $F = .269$, $p = .607$, Student’s t -test: $t(38) = -1.752$, $p = .088$
LI	PV	$M_{black} = 3.17$, $SD_{black} = 1.15$, $M_{blue,priming} = 3.78$, $SD_{blue,priming} = 1.04$, Levene’s test: $F = .556$, $p = .460$, Student’s t -test: $t(38) = -1.703$, $p = .097$
LI	PI	$M_{black} = 2.28$, $SD_{black} = 1.26$, $M_{blue,priming} = 2.77$, $SD_{blue,priming} = 1.57$, Levene’s test: $F = .843$, $p = .364$, Student’s t -test: $t(38) = -1.082$, $p = .286$ $Mdn_{black} = 3.00$, $Mdn_{blue,priming} = 3.50$, Mann-Whitney test: $U = 136.5$, $n_{black} = 24$, $n_{blue,priming} = 16$, $p = .122$
LI	Af	$M_{black} = 3.94$, $SD_{black} = 1.35$, $M_{blue,priming} = 4.15$, $SD_{blue,priming} = 1.45$, Levene’s test: $F = .200$, $p = .657$, Student’s t -test: $t(38) = -.449$, $p = .656$
HI	PP	$M_{black} = 4.46$, $SD_{black} = 1.59$, $M_{blue,priming} = 4.97$, $SD_{blue,priming} = 1.01$, Levene’s test: $F = 5.620$, $p = .023$, Welch’s t -test: $t(37.937) = -1.240$, $p = .223$

HI	PV	$M_{black} = 4.30, SD_{black} = 1.34, M_{blue,priming} = 4.90, SD_{blue,priming} = .97,$ Levene's test: $F = 2.614, p = .114,$ Student's t -test: $t(38) = -1.542, p = .131$
HI	PI	Without rotation: $M_{black} = 3.13, SD_{black} = 1.57, M_{blue,priming} = 3.36,$ $SD_{blue,priming} = 1.89,$ Levene's test: $F = .953, p = .335,$ Student's t -test: $t(38) = -.426, p = .672$ $Mdn_{black} = 2.63, Mdn_{blue,priming} = 3.25,$ Mann-Whitney test: $U = 176.5,$ $n_{black} = 24, n_{blue,priming} = 16, p = .667$ LI first: $M_{black} = 4.47, SD_{black} = 1.53, M_{blue,priming} = 3.52,$ $SD_{blue,priming} = 2.09,$ Levene's test: $F = 2.140, p = .164,$ Shapiro-Wilk test: $W_{black}(8) = .910, p = .357, W_{blue,priming}(9) = .933,$ $p = .509,$ Student's t -test: $t(15) = 1.048, p = .311$ HI first: $M_{black} = 2.45, SD_{black} = 1.12, M_{blue,priming} = 3.14,$ $SD_{blue,priming} = 1.73,$ Levene's test: $F = 4.010, p = .058,$ Shapiro-Wilk test: $W_{black}(16) = .894, p = .065, W_{blue,priming}(7) = .868,$ $p = .179,$ Student's t -test: $t(21) = -1.148, p = .264$
HI	Af	$M_{black} = 4.13, SD_{black} = 1.33, M_{blue,priming} = 4.35, SD_{blue,priming} = 1.14,$ Levene's test: $F = .727, p = .399,$ Student's t -test: $t(38) = -.565, p = .576$

*Table 202: Results of Statistical Tests: Condition 1 vs. Condition 2
(Experiment 2)*

Comparison of Condition 1 and Condition 3: black, non-priming vs. red, priming

Results of Statistical Tests: Condition 1 vs. Condition 3 (Experiment 2)

<u>Involvement</u>	<u>Measure</u>	<u>Results</u>
LI	PP	Without rotation: $M_{black} = 3.86$, $SD_{black} = 1.53$, $M_{red,priming} = 2.88$, $SD_{red,priming} = 1.36$, Levene's test: $F = .012$, $p = .912$, Student's t -test: $t(43) = -2.276$, $p = .028$
		LI first: $M_{black} = 3.50$, $SD_{black} = 1.51$, $M_{red,priming} = 4.65$, $SD_{red,priming} = 1.53$, Levene's test: $F = .001$, $p = .974$, Shapiro-Wilk test: $W_{black}(8) = .967$, $p = .877$, $W_{red,priming}(10) = .927$, $p = .452$, Student's t -test: $t(16) = -1.594$, $p = .131$
		HI first: $M_{black} = 2.56$, $SD_{black} = 1.21$, $M_{red,priming} = 3.14$, $SD_{red,priming} = 1.19$, Levene's test: $F = .013$, $p = .910$, Shapiro-Wilk test: $W_{black}(16) = .911$, $p = .122$, $W_{red,priming}(11) = .921$, $p = .329$, Student's t -test: $t(25) = -1.221$, $p = .233$
LI	PV	Without rotation: $M_{black} = 3.17$, $SD_{black} = 1.15$, $M_{red,priming} = 3.95$, $SD_{red,priming} = 1.37$, Levene's test: $F = .058$, $p = .811$, Student's t -test: $t(43) = -2.092$, $p = .042$
		$Mdn_{black} = 3.20$, $Mdn_{red,priming} = 4.00$, Mann-Whitney: $U = 166.5$, $n_{red,priming} = 21$, $n_{black} = 24$, $p = .050$
		LI first: $M_{black} = 3.73$, $SD_{black} = 1.45$, $M_{red,priming} = 4.68$, $SD_{red,priming} = 1.28$, Shapiro-Wilk test: $W_{black}(8) = .916$, $p = .397$, $W_{red,priming}(10) = .931$, $p = .459$, Levene's test: $F = .096$, $p = .761$, Student's t -test: $t(16) = -1.486$, $p = .157$
		HI first: $M_{black} = 2.89$, $SD_{black} = .89$, $M_{red,priming} = 3.29$, $SD_{red,priming} = 1.14$, Shapiro-Wilk test: $W_{black}(16) = .946$, $p = .431$, $W_{red,priming}(11) = .854$, $p = .048$, Levene's test: $F = 2.091$, $p = .161$, Student's t -test: $t(25) = -1.035$, $p = .310$

		<p>$Mdn_{black} = 3.00, Mdn_{red,priming} = 3.80, \text{Mann-Whitney test: } U = 67.5, n_{red,priming} = 16, n_{black} = 11, p = .306$</p>
LI	PI	<p>$M_{black} = 2.28, SD_{black} = 1.26, M_{red,priming} = 3.14, SD_{red,priming} = 1.71, \text{Levene's test: } F = 2.400, p = .129, \text{Student's } t\text{-test: } t(43) = -1.944, p = .058$</p> <p>$Mdn_{black} = 2.00, Mdn_{red,priming} = 3.00, \text{Mann-Whitney test: } U = 176.5, n_{red,priming} = 21, n_{black} = 27, p = .083$</p>
LI	Af	<p>$M_{black} = 3.94, SD_{black} = 1.35, M_{red,priming} = 3.90, SD_{red,priming} = 1.09, \text{Levene's test: } F = 1.254, p = .269, \text{Student's } t\text{-test: } t(43) = .108, p = .915$</p>
HI	PP	<p>$M_{black} = 4.46, SD_{black} = 1.59, M_{red,priming} = 4.71, SD_{red,priming} = 1.18, \text{Levene's test: } F = 2.096, p = .155, \text{Student's } t\text{-test: } t(43) = -.605, p = .548$</p>
HI	PV	<p>$M_{black} = 4.30, SD_{black} = 1.34, M_{red,priming} = 4.62, SD_{red,priming} = .91, \text{Levene's test: } F = 2.625, p = .112, \text{Student's } t\text{-test: } t(43) = -921, p = .362$</p>
HI	PI	<p>Without rotation: $M_{black} = 3.13, SD_{black} = 1.57, M_{red,priming} = 3.36, SD_{red,priming} = 1.21, \text{Levene's test: } F = 3.158, p = .083, \text{Student's } t\text{-test: } t(43) = -.548, p = .586$</p> <p>$Mdn_{black} = 2.63, Mdn_{red,priming} = 3.25, \text{Mann-Whitney test: } U = 217, n_{black} = 24, n_{red,priming} = 21, p = .424$</p> <p>LI first: $M_{black} = 4.47, SD_{black} = 1.53, M_{red,priming} = 3.35, SD_{red,priming} = 1.63, \text{Levene's test: } F = .939, p = .347, \text{Shapiro-Wilk test: } W_{black}(8) = .910, p = .357, W_{red,priming}(10) = .869, p = .097, \text{Student's } t\text{-test: } t(16) = 1.486, p = .157$</p> <p>HI first: $M_{black} = 2.45, SD_{black} = 1.12, M_{red,priming} = 3.36, SD_{red,priming} = .74, \text{Levene's test: } F = 2.006, p = .169, \text{Shapiro-}$</p>

Wilk test: $W_{black}(16) = .894, p = .065, W_{red,priming}(11) = .933, p = .442$, Student's t -test: $t(25) = -2.357, p = .027$

HI Af $M_{black} = 4.13, SD_{black} = 1.33, M_{red,priming} = 3.89, SD_{red,priming} = 1.13$, Levene's test: $F = 1.089, p = .302$, Student's t -test: $t(43) = -.637, p = .528$

Table 203: Results of Statistical Tests: Condition 1 vs. Condition 3
(Experiment 2)

Comparison of Condition 1 and Condition 4: black, non-priming vs. low involvement: blue, high involvement: red, non-priming

Results of Statistical Tests: Condition 1 vs. Condition 4 (Experiment 2)

<u>Involvement</u>	<u>Measure</u>	<u>Results</u>
LI	PP	$M_{black} = 2.88, SD_{black} = 1.36, M_{blue,non-priming} = 3.22, SD_{blue,non-priming} = 1.31$, Levene's test: $F = .180, p = .673$, Student's t -test: $t(47) = -.905, p = .370$
LI	PV	$M_{black} = 3.17, SD_{black} = 1.15, M_{blue,non-priming} = 3.40, SD_{blue,non-priming} = 1.07$, Levene's test: $F = .320, p = .574$, Student's t -test: $t(47) = -.736, p = .465$
LI	PI	$M_{black} = 2.28, SD_{black} = 1.26, M_{blue,non-priming} = 2.50, SD_{blue,non-priming} = 1.45$, Levene's test: $F = .372, p = .545$, Student's t -test: $t(47) = -.563, p = .576$ $Mdn_{black} = 2.00, Mdn_{blue,non-priming} = 3.00$, Mann-Whitney test: $U = 276, n_{black} = 24, n_{blue,non-priming} = 24, p = .627$
LI	Af	Without rotation: $M_{black} = 3.94, SD_{black} = 1.35, M_{blue,non-priming} = 4.40, SD_{blue,non-priming} = 1.18$, Levene's test: $F = .320, p = .574$, Student's t -test: $t(47) = -1.262, p = .213$ LI first: $M_{black} = 4.38, SD_{black} = 1.23, M_{blue,non-priming} = 5.13, SD_{blue,non-priming} = .65$, Shapiro-Wilk test: $W_{black}(8) = .913, p =$

.373, $W_{red,non-priming}(10) = .158$, Levene's test: $F = 1.383$, $p = .257$, Student's t -test: $t(16) = -1.687$, $p = .111$

HI first: $M_{black} = 3.73$, $SD_{black} = 1.39$, $M_{blue,non-priming} = 3.91$, $SD_{blue,non-priming} = 1.21$, Shapiro-Wilk test: $W_{black}(16) = .935$, $p = .289$, $W_{red,non-priming}(15) = .944$, $p = .438$, Levene's test: $F = .731$, $p = .399$, Student's t -test: $t(29) = -.388$, $p = .701$

HI PP $M_{black} = 4.46$, $SD_{black} = 1.59$, $M_{blue,non-priming} = 4.92$, $SD_{blue,non-priming} = .77$, Levene's test: $F = 13.990$, $p < .001$, $p = .545$, Welch's t -test: $t(32.945) = -1.281$, $p = .209$

$Mdn_{black} = 4.75$, $Mdn_{red,non-priming} = 5.00$, Mann-Whitney test: $U = 245.5$, $n_{black} = 24$, $n_{red,non-priming} = 25$, $p = .262$

HI PV $M_{black} = 4.30$, $SD_{black} = 1.34$, $M_{red,non-priming} = 4.79$, $SD_{red,non-priming} = .76$, Levene's test: $F = 7.708$, $p = .008$, Welch's t -test: $t(36.011) = -1.576$, $p = .124$

HI PI Without rotation: $M_{black} = 3.13$, $SD_{black} = 1.57$, $M_{red,non-priming} = 3.74$, $SD_{red,non-priming} = 1.33$, Levene's test: $F = 1.537$, $p = .221$, Student's t -test: $t(47) = -1.479$, $p = .146$

$Mdn_{black} = 2.63$, $Mdn_{red,non-priming} = 4.00$, Mann-Whitney test: $U = 227.5$, $n_{black} = 24$, $n_{red,non-priming} = 25$, $p = .146$

LI first: $M_{black} = 4.47$, $SD_{black} = 1.53$, $M_{red,non-priming} = 4.40$, $SD_{red,non-priming} = .72$, Levene's test: $F = 2.195$, $p = .158$, Shapiro-Wilk test: $W_{black}(8) = .910$, $p = .357$, $W_{red,non-priming}(10) = .956$, $p = .737$, Student's t -test: $t(16) = .127$, $p = .901$

HI first: $M_{black} = 2.45$, $SD_{black} = 1.12$, $M_{red,non-priming} = 3.30$, $SD_{red,non-priming} = 1.48$, Levene's test: $F = 1.742$, $p = .197$, Shapiro-Wilk test: $W_{black}(16) = .894$, $p = .065$, $W_{red,non-priming}(10) = .956$, $p = .737$, Student's t -test: $t(16) = .127$, $p = .901$

$priming(15) = .976, p = .934$, Student's t -test: $t(29) = -1.800, p = .082$

HI Af $M_{black} = 4.13, SD_{black} = 1.33, M_{red,non-priming} = 4.53, SD_{red,non-priming} = .93$, Levene's test: $F = 2.279, p = .138$, Student's t -test: $t(47) = -1.249, p = .218$

Table 204: Results of Statistical Tests: Condition 1 vs. Condition 4
(Experiment 2)

Comparison of Condition 1 and Condition 5: black, non-priming vs. low involvement: red, high involvement: blue, non-priming

Results of Statistical Tests: Condition 1 vs. Condition 5 (Experiment 2)

<u>Involvement</u>	<u>Measure</u>	<u>Results</u>
LI	PP	$M_{black} = 2.88, SD_{black} = 1.36, M_{red,non-priming} = 3.29, SD_{red,non-priming} = 1.06$, Levene's test: $F = 2.006, p = .165$, Student's t -test: $t(39) = -1.060, p = .296$ $Mdn_{black} = 3.00, Mdn_{red,non-priming} = 3.50$, Mann-Whitney test: $U = 161.5, n_{black} = 24, n_{red,non-priming} = 17, p = .255$
LI	PV	$M_{black} = 3.17, SD_{black} = 1.15, M_{red,non-priming} = 3.45, SD_{red,non-priming} = 1.13$, Levene's test: $F = .108, p = .745$, Student's t -test: $t(39) = -.776, p = .442$
LI	PI	Without rotation: $M_{black} = 2.28, SD_{black} = 1.26, M_{red,non-priming} = 2.49, SD_{red,non-priming} = 1.14$, Levene's test: $F = .003, p = .953$, Student's t -test: $t(39) = -.533, p = .597$ $Mdn_{black} = 2.00, Mdn_{red,non-priming} = 3.00$, Mann-Whitney test: $U = 184.5, n_{black} = 24, n_{red,non-priming} = 17, p = .602$ LI first: $M_{black} = 2.84, SD_{black} = 1.56, M_{red,non-priming} = 2.04, SD_{red,non-priming} = 1.08$, Shapiro-Wilk test: $W_{black}(8) = .911, p$

$= .360$, $W_{red,non-priming}(11) = .800$, $p = .009$, Levene's test: $F = 1.937$, $p = .182$, Student's t -test: $t(17) = -1.325$, $p = .203$

$Mdn_{black} = 2.25$, $Mdn_{red,non-priming} = 2.00$, Mann-Whitney test: $U = 30$, $n_{black} = 8$, $n_{red,non-priming} = 11$, $p = .239$

HI first: $M_{black} = 2.00$, $SD_{black} = 1.02$, $M_{red,non-priming} = 3.29$, $SD_{red,non-priming} = .78$, Shapiro-Wilk test: $W_{black}(16) = .845$, $p = .011$, $W_{red,non-priming}(6) = .874$, $p = .241$, Levene's test: $F = .257$, $p = .618$, Student's t -test: $t(20) = -2.802$, $p = .011$

$Mdn_{black} = 1.75$, $Mdn_{red,non-priming} = 3.38$, Mann-Whitney test: $U = 15.5$, $n_{black} = 16$, $n_{red,non-priming} = 6$, $p = .016$

LI Af $M_{black} = 3.94$, $SD_{black} = 1.35$, $M_{red,non-priming} = 3.90$, $SD_{red,non-priming} = .86$, Levene's test: $F = 2.715$, $p = .107$, Student's t -test: $t(39) = .114$, $p = .910$

HI PP $M_{black} = 4.46$, $SD_{black} = 1.59$, $M_{blue,non-priming} = 4.62$, $SD_{blue,non-priming} = .80$, Levene's test: $F = 8.580$, $p = .006$, Welch's t -test: $t(38.710) = -.420$, $p = .677$

HI PV $M_{black} = 4.30$, $SD_{black} = 1.34$, $M_{blue,non-priming} = 4.45$, $SD_{blue,non-priming} = .86$, Levene's test: $F = 3.351$, $p = .075$, Student's t -test: $t(39) = -.589$, $p = .559$

HI PI Without rotation: $M_{black} = 3.13$, $SD_{black} = 1.57$, $M_{blue,non-priming} = 3.35$, $SD_{blue,non-priming} = 1.55$, Levene's test: $F = .002$, $p = .966$, Student's t -test: $t(39) = -.460$, $p = .648$

$Mdn_{black} = 2.63$, $Mdn_{blue,non-priming} = 3.00$, Mann-Whitney test: $U = 180.5$, $n_{black} = 24$, $n_{blue,non-priming} = 17$, $p = .532$

LI first: $M_{black} = 4.47$, $SD_{black} = 1.53$, $M_{blue,non-priming} = 3.61$, $SD_{red,non-priming} = 1.65$, Levene's test: $F = .885$, $p = .360$, Shapiro-Wilk test: $W_{black}(8) = .910$, $p = .357$, $W_{blue,non-priming}(8) = .910$, $p = .357$

$priming(11) = .927, p = .348$, Student's t -test: $t(17) = 1.151, p = .266$

HI first: $M_{black} = 2.45, SD_{black} = 1.12, M_{blue,non-priming} = 2.88, SD_{red,non-priming} = 1.34$, Levene's test: $F = .257, p = .618$, Shapiro-Wilk test: $W_{black}(16) = .894, p = .065, W_{blue,non-priming}(6) = .955, p = .778$, Student's t -test: $t(20) = -.747, p = .464$

HI Af $M_{black} = 4.13, SD_{black} = 1.33, M_{blue,non-priming} = 4.16, SD_{blue,non-priming} = 1.14$, Levene's test: $F = .336, p = .565$, Student's t -test: $t(39) = -.080, p = .937$

Table 205: Results of Statistical Tests: Condition 1 vs. Condition 5
(Experiment 2)

Comparison of Condition 1 and Condition 4 and 5: black, non-priming vs. colour, non-priming

Results of Statistical Tests: Condition 1 vs. Condition 4 and 5 (Experiment 2)

<u>Involvement</u>	<u>Measure</u>	<u>Results</u>
LI	PP	$M_{black} = 2.88, SD_{black} = 1.36, M_{colour,non-priming} = 3.25, SD_{colour,non-priming} = 1.20$, Levene's test: $F = .901, p = .346$, Student's t -test: $t(64) = -1.162, p = .249$
LI	PV	$M_{black} = 3.17, SD_{black} = 1.15, M_{colour,non-priming} = 3.42, SD_{colour,non-priming} = 1.08$, Levene's test: $F = .278, p = .600$, Student's t -test: $t(64) = -.892, p = .376$
LI	PI	$M_{black} = 2.28, SD_{black} = 1.26, M_{colour,non-priming} = 2.49, SD_{colour,non-priming} = 1.32$, Levene's test: $F = .169, p = .683$, Student's t -test: $t(64) = -.642, p = .523$
		$Mdn_{black} = 2.00, Mdn_{colour,non-priming} = 2.38$, Mann-Whitney test: $U = 460.5, n_{black} = 24, n_{colour,non-priming} = 42, p = .557$

LI	Af	$M_{black} = 3.94$, $SD_{black} = 1.35$, $M_{colour,non-priming} = 4.20$, $SD_{colour,non-priming} = 1.08$, Levene's test: $F = 1.667$, $p = .306$, Student's t -test: $t(64) = -.839$, $p = .404$
HI	PP	$M_{black} = 4.46$, $SD_{black} = 1.59$, $M_{colour,non-priming} = 4.80$, $SD_{colour,non-priming} = .79$, Levene's test: $F = 17.134$, $p < .001$, Welch's t -test: $t(29.565) = -.976$, $p = .337$ $Mdn_{black} = 4.75$, $Mdn_{colour,non-priming} = 5.00$, Mann-Whitney test: $U = 443$, $n_{black} = 24$, $n_{colour,non-priming} = 42$, $p = .406$
HI	PV	$M_{black} = 4.30$, $SD_{black} = 1.34$, $M_{colour,non-priming} = 4.68$, $SD_{colour,non-priming} = .80$, Levene's test: $F = 8.207$, $p = .006$, Student's t -test: $t(32.619) = -1.270$, $p = .213$
HI	PI	$M_{black} = 3.13$, $SD_{black} = 1.57$, $M_{colour,non-priming} = 3.58$, $SD_{colour,non-priming} = 1.42$, Levene's test: $F = .547$, $p = .462$, Student's t -test: $t(64) = -1.214$, $p = .229$ $Mdn_{black} = 2.63$, $Mdn_{colour,non-priming} = 4.00$, Mann-Whitney test: $U = 408$, $n_{black} = 24$, $n_{colour,non-priming} = 42$, $p = .199$
HI	Af	$M_{black} = 4.13$, $SD_{black} = 1.33$, $M_{colour,non-priming} = 4.38$, $SD_{colour,non-priming} = 1.03$, Levene's test: $F = 1.616$, $p = .208$, Student's t -test: $t(64) = -.874$, $p = .385$ $Mdn_{black} = 4.00$, $Mdn_{colour,non-priming} = 4.83$, Mann-Whitney test: $U = 449.5$, $n_{black} = 24$, $n_{colour,non-priming} = 42$, $p = .385$

*Table 206: Results of Statistical Tests: Condition 1 vs. Condition 4 and 5
(Experiment 2)*

Influence of Priming Blue Prices

Results of Statistical Tests: Priming Blue (Experiment 2)

<u>Involvement</u>	<u>Measure</u>	<u>Results</u>
LI	PP	$M_{blue,priming} = 3.63$, $SD_{blue,priming} = 1.27$, $M_{blue,non-priming} = 3.22$, $SD_{blue,non-priming} = 1.31$, Levene's test: $F = .017$, $p = .897$, Student's t -test: $t(39) = .978$, $p = .334$
LI	PV	$M_{blue,priming} = 3.78$, $SD_{blue,priming} = 1.04$, $M_{blue,non-priming} = 3.40$, $SD_{blue,non-priming} = 1.07$, Levene's test: $F = .058$, $p = .811$, Student's t -test: $t(39) = 1.104$, $p = .276$
LI	PI	$M_{blue,priming} = 2.77$, $SD_{blue,priming} = 1.57$, $M_{blue,non-priming} = 2.50$, $SD_{blue,non-priming} = 1.45$, Levene's test: $F = .121$, $p = .729$, Student's t -test: $t(39) = .555$, $p = .582$ $Mdn_{blue,priming} = 2.38$, $Mdn_{blue,non-priming} = 2.25$, Mann-Whitney test: $U = 182$, $n_{blue,priming} = 16$, $n_{blue,non-priming} = 25$, $p = .627$
LI	Af	Without rotation: $M_{blue,priming} = 4.15$, $SD_{blue,priming} = 1.45$, $M_{blue,non-priming} = 4.40$, $SD_{blue,non-priming} = 1.18$, Levene's test: $F = 1.012$, $p = .321$, Student's t -test: $t(39) = -.615$, $p = .542$ LI first: $M_{blue,priming} = 4.19$, $SD_{blue,priming} = 1.09$, $M_{blue,non-priming} = 5.13$, $SD_{blue,non-priming} = .65$, Levene's test: $F = 3.654$, $p = .073$, Shapiro-Wilk test: $W_{blue,priming}(9) = .855$, $p = .085$, $W_{blue,non-priming}(10) = .887$, $p = .158$, Student's t -test: $t(17) = -2.324$, $p = .033$ HI first: $M_{blue,priming} = 4.10$, $SD_{blue,priming} = 1.91$, $M_{blue,non-priming} = 3.91$, $SD_{blue,non-priming} = 1.21$, Levene's test: $F = 2.450$, $p = .133$, Shapiro-Wilk test: $W_{blue,priming}(7) = .888$, $p = .267$, $W_{blue,non-priming}(15) = .944$, $p = .438$, Student's t -test: $t(20) = .276$, $p = .785$

HI	PP	$M_{blue,priming} = 4.97$, $SD_{blue,priming} = 1.01$, $M_{blue,non-priming} = 4.62$, $SD_{blue,non-priming} = .80$, Levene's test: $F = .084$, $p = .773$, Student's t -test: $t(31) = 1.111$, $p = .275$
HI	PV	$M_{blue,priming} = 4.90$, $SD_{blue,priming} = .97$, $M_{blue,non-priming} = 4.52$, $SD_{blue,non-priming} = .86$, Levene's test: $F = .003$, $p = .957$, Student's t -test: $t(31) = 1.202$, $p = .238$
HI	PI	Without rotation: $M_{blue,priming} = 3.36$, $SD_{blue,priming} = 1.89$, $M_{blue,non-priming} = 3.35$, $SD_{blue,non-priming} = 1.55$, Levene's test: $F = .916$, $p = .346$, Student's t -test: $t(31) = .011$, $p = .992$ LI first: $M_{blue,priming} = 3.53$, $SD_{blue,priming} = 2.09$, $M_{blue,non-priming} = 3.61$, $SD_{blue,non-priming} = 1.65$, Levene's test: $F = .802$, $p = .382$, Shapiro-Wilk test: $W_{blue,priming}(9) = .933$, $p = .509$, $W_{blue,non-priming}(11) = .927$, $p = .384$, Student's t -test: $t(18) = -.103$, $p = .919$ HI first: $M_{blue,priming} = 3.14$, $SD_{blue,priming} = 1.73$, $M_{blue,non-priming} = 2.88$, $SD_{blue,non-priming} = 1.34$, Levene's test: $F = 1.332$, $p = .273$, Shapiro-Wilk test: $W_{blue,priming}(16) = .894$, $p = .065$, $W_{blue,non-priming}(6) = .955$, $p = .778$, Student's t -test: $t(11) = .308$, $p = .764$
HI	Af	$M_{blue,priming} = 4.35$, $SD_{blue,priming} = 1.14$, $M_{blue,non-priming} = 4.16$, $SD_{blue,non-priming} = 1.14$, Levene's test: $F = .104$, $p = .749$, Student's t -test: $t(31) = .496$, $p = .623$

Table 207: Results of Statistical Tests: Priming Blue (Experiment 2)

Influence of Priming Red Prices

Results of Statistical Tests: Priming Red (Experiment 2)

<u>Involvement</u>	<u>Measure</u>	<u>Results</u>
LI	PP	<p>Without rotation: $M_{red,priming} = 3.86$, $SD_{red,priming} = 1.53$, $M_{red,non-priming} = 3.29$, $SD_{red,non-priming} = 1.06$, Levene's test: $F = 1.501$, $p = .228$, Student's t-test: $t(36) = 1.283$, $p = .208$</p> <p>$Mdn_{red,priming} = 4.00$, $Mdn_{red,non-priming} = 3.50$, Mann-Whitney test: $U = 140$, $n_{red,priming} = 21$, $n_{red,non-priming} = 17$, $p = .252$</p> <p>LI first: $M_{red,priming} = 4.65$, $SD_{red,priming} = 1.53$, $M_{red,non-priming} = 3.18$, $SD_{red,non-priming} = 1.25$, Levene's test: $F = .038$, $p = .848$, Shapiro-Wilk test: $W_{red,priming}(10) = .922$, $p = .374$, $W_{red,non-priming}(11) = .803$, $p = .010$, Student's t-test: $t(19) = 2.419$, $p = .026$</p> <p>$Mdn_{red,priming} = 4.50$, $Mdn_{red,non-priming} = 4.00$, Mann-Whitney test: $U = 24$, $n_{red,priming} = 10$, $n_{red,non-priming} = 11$, $p = .025$</p> <p>HI first: $M_{red,priming} = 3.14$, $SD_{red,priming} = 1.19$, $M_{red,non-priming} = 3.50$, $SD_{red,non-priming} = .63$, Levene's test: $F = 5.897$, $p = .028$, Shapiro-Wilk test: $W_{red,priming}(11) = .921$, $p = .329$, $W_{red,non-priming}(6) = .831$, $p = .110$, Welch's t-test: $t(14.994) = -.825$, $p = .422$</p>
LI	PV	<p>Without rotation: $M_{red,priming} = 3.95$, $SD_{red,priming} = 1.37$, $M_{red,non-priming} = 3.44$, $SD_{red,non-priming} = 1.13$, Levene's test: $F = .212$, $p = .648$, Student's t-test: $t(36) = 1.218$, $p = .231$</p> <p>LI first: $M_{red,priming} = 4.68$, $SD_{red,priming} = 1.28$, $M_{red,non-priming} = 3.40$, $SD_{red,non-priming} = 1.31$, Levene's test: $F < .001$, $p = .987$, Shapiro-Wilk test: $W_{red,priming}(10) = .931$, $p = .459$, $W_{red,non-priming}(11) = .925$, $p = .361$, Student's t-test: $t(19) = 2.260$, $p = .036$</p>

HI first: $M_{red,priming} = 3.29$, $SD_{red,priming} = 1.14$, $M_{red,non-priming} = 3.53$, $SD_{red,non-priming} = .79$, Levene's test: $F = 2.370$, $p = .145$, Shapiro-Wilk test: $W_{red,priming}(11) = .854$, $p = .048$, $W_{red,non-priming}(6) = .927$, $p = .557$, Student's t -test: $t(15) = -.461$, $p = .651$

$Mdn_{red,priming} = 3.80$, $Mdn_{red,non-priming} = 3.60$, Mann-Whitney test: $U = 25.5$, $n_{red,priming} = 11$, $n_{red,non-priming} = 6$, $p = .445$

LI

PI

Without rotation: $M_{red,priming} = 3.14$, $SD_{red,priming} = 1.71$, $M_{red,non-priming} = 2.49$, $SD_{red,non-priming} = 1.14$, Levene's test: $F = 2.461$, $p = .125$, Student's t -test: $t(36) = 1.361$, $p = .182$

$Mdn_{red,priming} = 3.00$, $Mdn_{red,non-priming} = 2.25$, Mann-Whitney test: $U = 141$, $n_{red,priming} = 21$, $n_{red,non-priming} = 17$, $p = .267$

LI first: $M_{red,priming} = 2.88$, $SD_{red,priming} = 2.07$, $M_{red,non-priming} = 2.05$, $SD_{red,non-priming} = 1.08$, Levene's test: $F = 2.158$, $p = .158$, Shapiro-Wilk test: $W_{red,priming}(10) = .808$, $p = .018$, $W_{red,non-priming}(11) = .800$, $p = .009$, Student's t -test: $t(19) = 1.167$, $p = .258$

$Mdn_{red,priming} = 2.25$, $Mdn_{red,non-priming} = 2.00$, Mann-Whitney test: $U = 46$, $n_{red,priming} = 10$, $n_{red,non-priming} = 11$, $p = .509$

HI first: $M_{red,priming} = 3.39$, $SD_{red,priming} = 1.35$, $M_{red,non-priming} = 3.29$, $SD_{red,non-priming} = .78$, Levene's test: $F = 2.839$, $p = .113$, Shapiro-Wilk test: $W_{red,priming}(11) = .941$, $p = .529$, $W_{red,non-priming}(6) = .874$, $p = .241$, Student's t -test: $t(15) = .156$, $p = .878$

$Mdn_{red,priming} = 3.50$, $Mdn_{red,non-priming} = 3.38$, Mann-Whitney test: $U = 29$, $n_{red,priming} = 11$, $n_{red,non-priming} = 6$, $p = .685$

LI	Af	$M_{red,priming} = 3.90$, $SD_{red,priming} = 1.09$, $M_{red,non-priming} = 3.90$, $SD_{red,non-priming} = .86$, Levene's test: $F = .265$, $p = .610$, Student's t -test: $t(36) = .009$, $p = .993$
HI	PP	$M_{red,priming} = 4.71$, $SD_{red,priming} = 1.18$, $M_{red,non-priming} = 4.92$, $SD_{red,non-priming} = .77$, Levene's test: $F = 6.420$, $p = .015$, Welch's t -test: $t(33.425) = -.685$, $p = .498$ $Mdn_{red,priming} = 5.00$, $Mdn_{red,non-priming} = 5.00$, Mann-Whitney test: $U = 239$, $n_{red,priming} = 21$, $n_{red,non-priming} = 25$, $p = .596$
HI	PV	$M_{red,priming} = 4.62$, $SD_{red,priming} = .91$, $M_{red,non-priming} = 4.79$, $SD_{red,non-priming} = .76$, Levene's test: $F = 1.871$, $p = .178$, Student's t -test: $t(44) = -.704$, $p = .485$
HI	PI	Without rotation: $M_{red,priming} = 3.36$, $SD_{red,priming} = 1.21$, $M_{red,non-priming} = 3.74$, $SD_{red,non-priming} = 1.33$, Levene's test: F $= .334$, $p = .566$, Student's t -test: $t(44) = -1.010$, $p = .318$ LI first: $M_{red,priming} = 3.35$, $SD_{red,priming} = 1.63$, $M_{red,non-priming} =$ 4.40 , $SD_{red,non-priming} = .72$, Levene's test: $F = 13.594$, $p =$ $.002$, Shapiro-Wilk test: $W_{red,priming}(10) = .869$, $p = .097$, $W_{red,non-priming}(10) = .956$, $p = .737$, Welch's t -test: $t(12.358)$ $= -1.860$, $p = .087$ HI first: $M_{red,priming} = 3.36$, $SD_{red,priming} = .74$, $M_{red,non-priming} =$ 3.30 , $SD_{red,non-priming} = 1.48$, Levene's test: $F = 6.441$, $p =$ $.018$, Shapiro-Wilk test: $W_{red,priming}(11) = .933$, $p = .442$, $W_{red,non-priming}(15) = .976$, $p = .934$, Welch's t -test: $t(21.582)$ $= .144$, $p = .887$
HI	Af	$M_{red,priming} = 3.89$, $SD_{red,priming} = 1.13$, $M_{red,non-priming} = 4.53$, $SD_{red,non-priming} = .93$, Levene's test: $F = .039$, $p = .844$, Student's t -test: $t(44) = -2.117$, $p = .040$

Table 208: Results of Statistical Tests: Priming Red (Experiment 2)

*Appendix AH: Results for Gender, Affect, Personality (Experiment 2)***Full Sample: Analysis of Gender Differences***Black and Blue Prices, Low and High Involvement*

The interaction effect of price colour and gender on perceived value was insignificant for low involvement ($F(1,61) = .444, p = .508$) and for high involvement ($F(1,53) = .182, p = .671$).

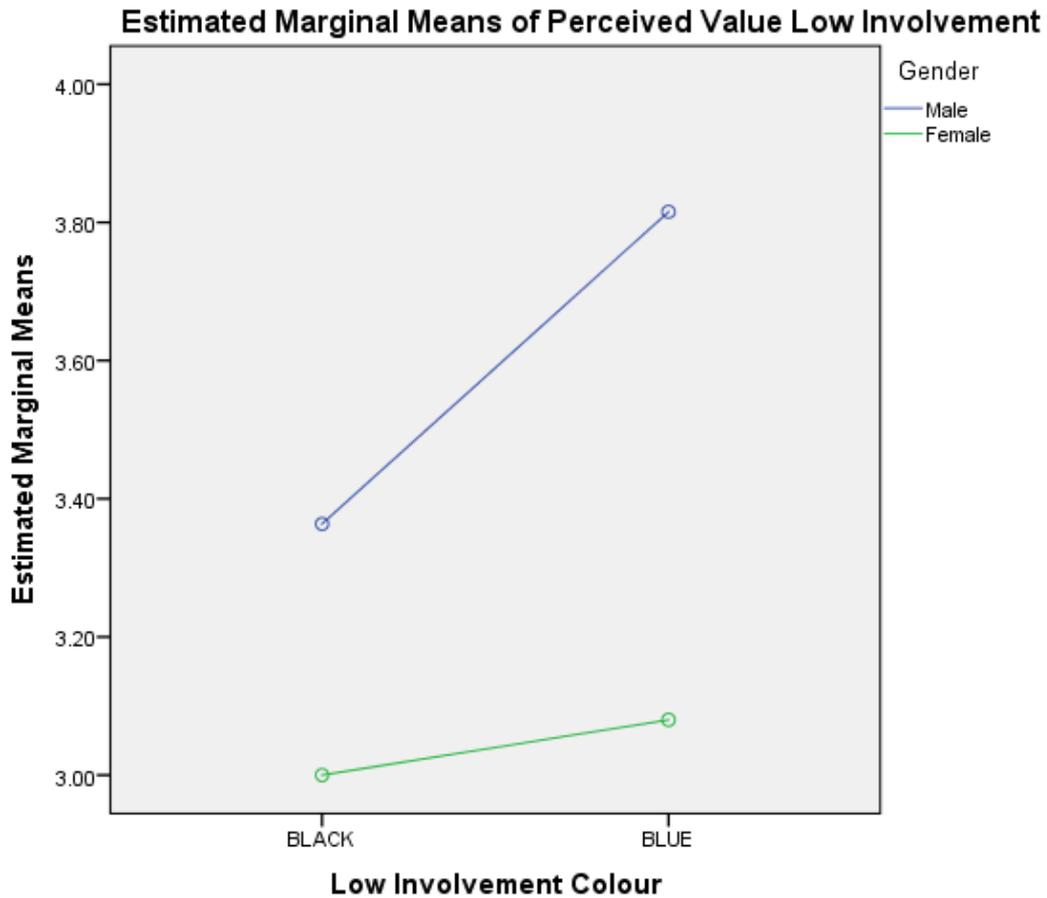


Figure 7: ANOVA Gender, Black, Blue, Low Involvement (Experiment 2)

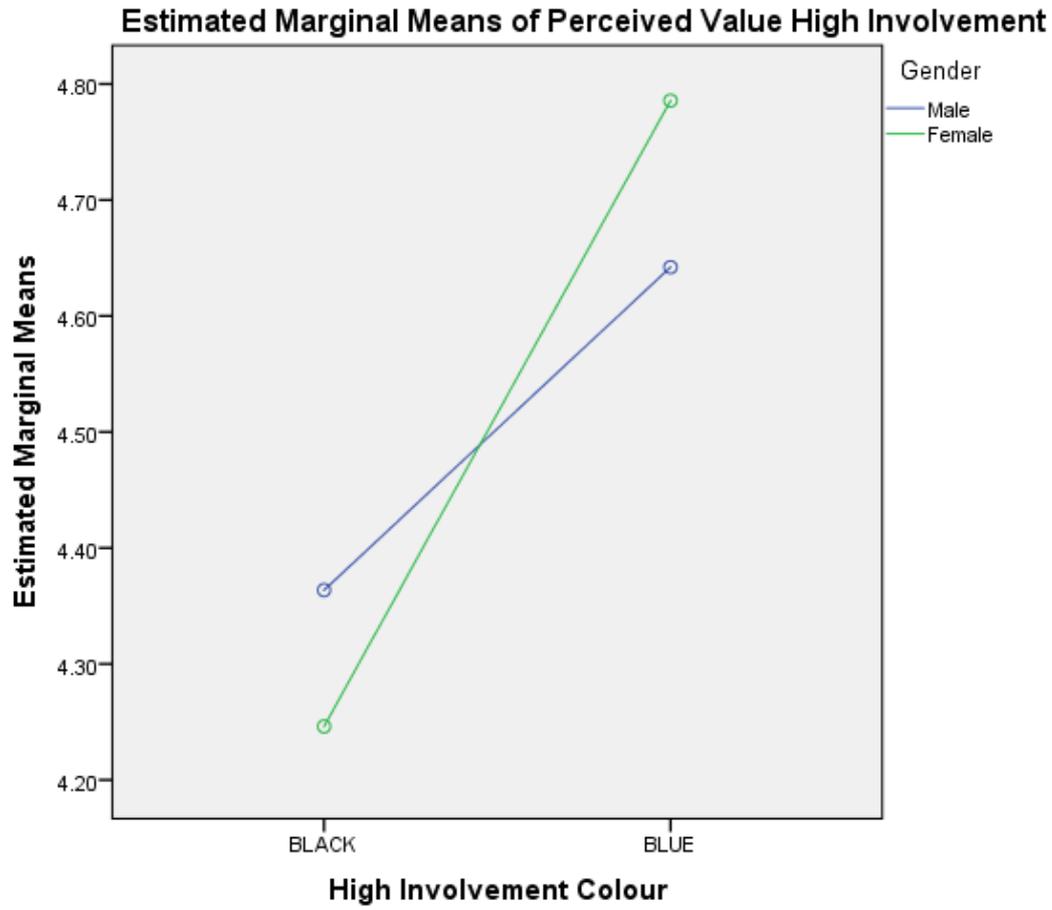


Figure 8: ANOVA Gender, Black, Blue, High Involvement (Experiment 2)

Black and Red Prices, Low and High Involvement

For red prices the interaction effect of gender and price colour was not significant in both the low involvement ($F(1,58) = .424, p = .517$) and high involvement state ($F(1,66) = .014, p = .908$).

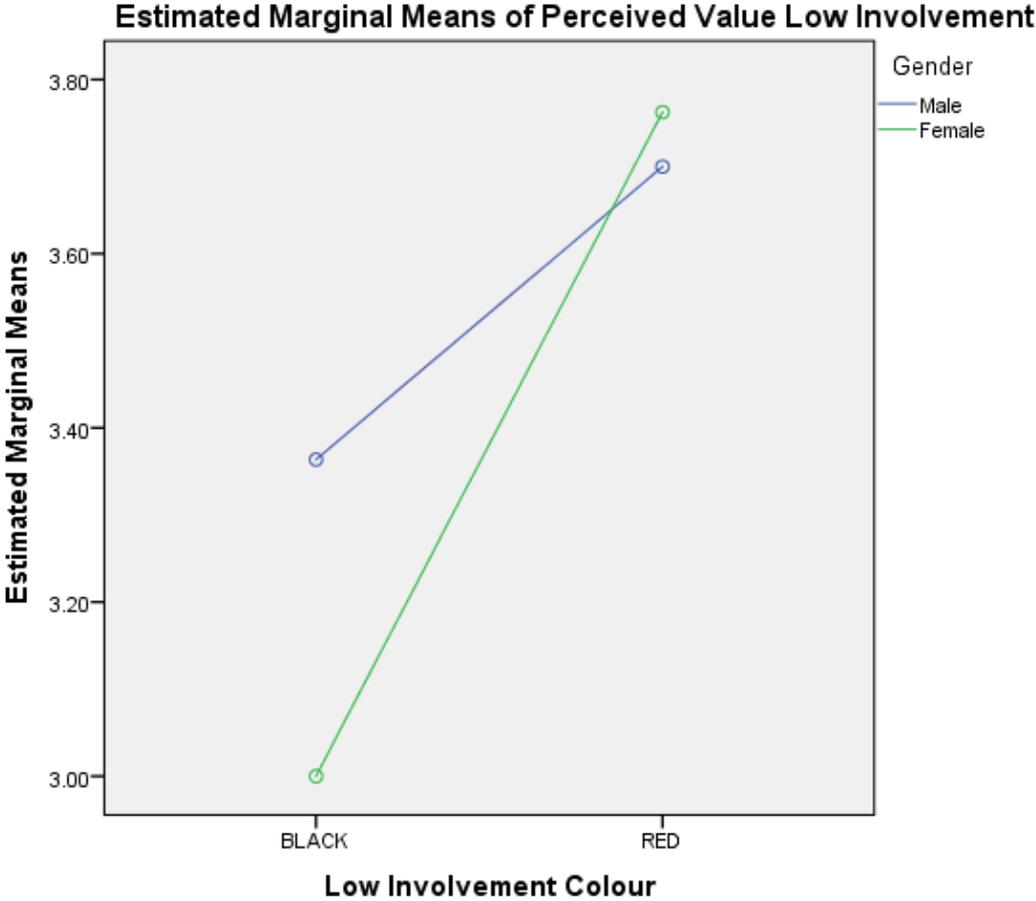


Figure 9: ANOVA Gender, Black, Red, Low Involvement (Experiment 2)

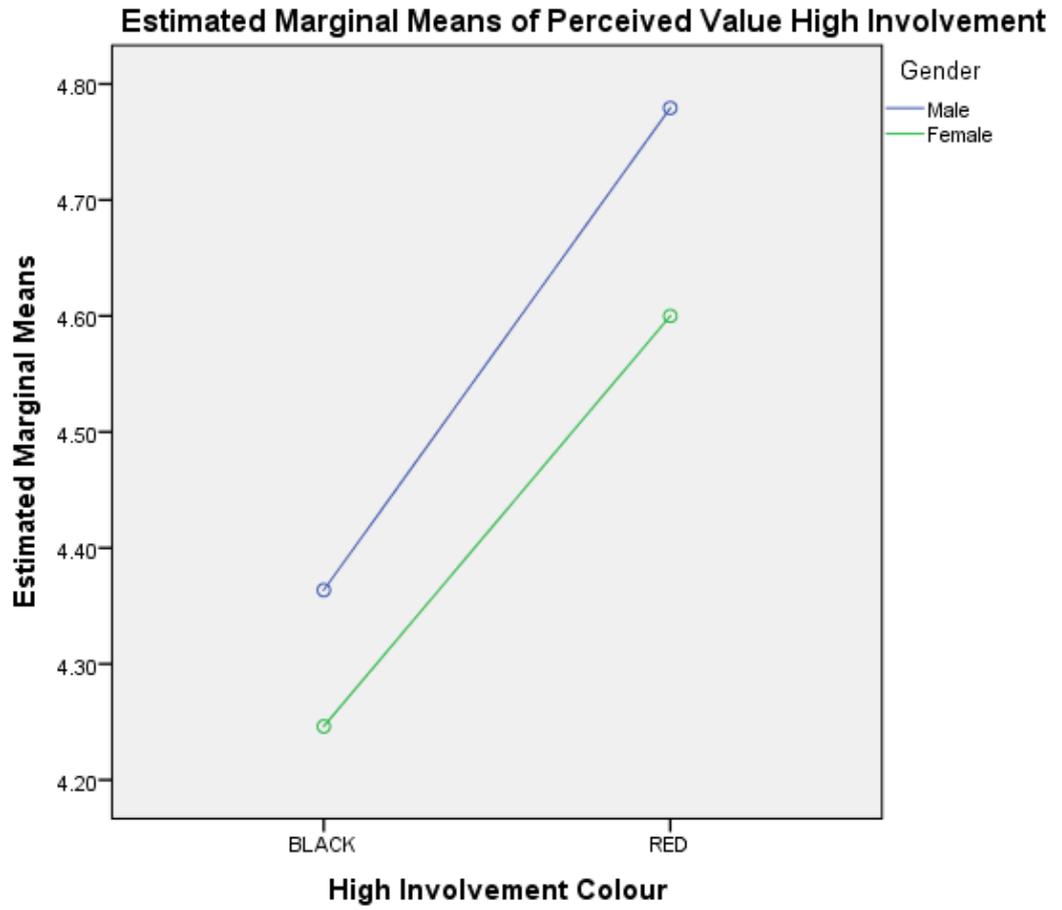


Figure 10: ANOVA Gender, Black, Red, High Involvement (Experiment 2)

Full Sample: Analysis of the Mediating Role of Affect

Similarly to experiment 1, a two-way ANOVA was performed. It showed a significant interaction effect of colour and affect on perceived value only for blue prices compared to black prices in the low involvement. All results from the performed ANOVAs are depicted below.

Low Involvement: Blue and Black

The interaction of blue price colour ($M_{blue} = 3.55$, $SD_{blue} = 1.06$) and affect leads to significantly higher perceived value compared to black prices ($M_{black} = 3.17$, $SD_{black} = 1.15$).

ANOVA Affect, Blue and Black, Perceived Value, Low Involvement (Experiment 2)

<u>Source</u>	<u>Type III Sum of Squares</u>	<u>df</u>	<u>Mean Square</u>	<u>F</u>	<u>Sig.</u>
Corrected Model	43.985	21	2.095	2.673	.003
Intercept	342.473	1	342.473	437.086	.000
Low Involvement	1.418	1	1.418	1.810	.186
Colour LICO					
Affect Low	22.296	14	1.593	2.033	.038
Involvement AFLI					
LICO * AFLI	19.720	6	3.287	4.195	.002
Error	33.692	43	.784		
Total	831.800	65			
Corrected Total	77.678	64			

Table 209: ANOVA Affect, Blue and Black, Perceived Value, Low Involvement (Experiment 2)

*Low Involvement: Red and Black**ANOVA Affect, Red and Black, Perceived Value, Low Involvement (Experiment 2)*

<u>Type III Sum of</u>					
<u>Source</u>	<u>Squares</u>	<u>df</u>	<u>Mean Square</u>	<u>F</u>	<u>Sig.</u>
Corrected Model	48.606	22	2.209	1.841	.047
Intercept	464.925	1	464.925	387.367	.000
Low Involvement	7.021	1	7.021	5.850	.020
Colour LICO					
Affect Low	34.540	13	2.657	2.214	.028
Involvement AFLI					
LICO * AFLI	8.529	8	1.066	.888	.535
Error	46.808	39	1.200		
Total	859.120	62			
Corrected Total	95.414	61			

Table 210: ANOVA Affect, Red and Black, Perceived Value, Low Involvement (Experiment 2)

*High Involvement: Blue and Black**ANOVA Affect, Blue and Black, Perceived Value, High Involvement (Experiment 2)*

<u>Type III Sum of</u>					
<u>Source</u>	<u>Squares</u>	<u>df</u>	<u>Mean Square</u>	<u>F</u>	<u>Sig.</u>
Corrected Model	48.396	25	1.936	2.714	.005
Intercept	778.039	1	778.039	1090.862	.000
High Involvement	1.202	1	1.202	1.686	.204
Colour HICO					
Affect High	32.133	13	2.472	3.466	.002
Involvement AFHI					
HICO * AFHI	11.435	11	1.040	1.458	.198
Error	22.110	31	.713		
Total	1241.920	57			
Corrected Total	70.507	56			

Table 211: ANOVA Affect, Blue and Black, Perceived Value, High Involvement (Experiment 2)

*High Involvement: Red and Black**ANOVA Affect, Red and Black, Perceived Value, High Involvement (Experiment 2)*

<u>Type III Sum of</u>					
<u>Source</u>	<u>Squares</u>	<u>df</u>	<u>Mean Square</u>	<u>F</u>	<u>Sig.</u>
Corrected Model	52.230	25	2.089	4.113	.000
Intercept	856.641	1	856.641	1686.268	.000
High Involvement	.502	1	.502	.989	.326
Colour HICO					
Affect High	39.110	14	2.794	5.499	.000
Involvement AFHI					
HICO * AFHI	9.199	10	.920	1.811	.087
Error	22.352	44	.508		
Total	1537.440	70			
Corrected Total	74.583	69			

Table 212: ANOVA Affect, Red and Black, Perceived Value, High Involvement (Experiment 2)

Full Sample: Analysis of the Personality Test

When analysing how favourite colour and personality relate, subjects who chose red as their favourite colour were, for example, associated with higher levels of Agreeableness than subjects who indicated black ($M_{black} = 4.39$, $SD_{black} = 1.77$, $M_{red} = 5.83$, $SD_{red} = .79$, Levene's test: $F = 3.039$, $p = .105$, Student's t -test: $t(13) = -2.103$, $p = .056$; $Mdn_{black} = 5.13$, $Mdn_{red} = 5.50$, Mann-Whitney test: $U = 11$, $n_{black} = 7$, $n_{red} = 8$, $p = .048$)³⁸.

A simple linear regression was computed to predict the perceived value associated with red prices in the high involvement state based on the level of Intellect/Imagination. A significant

³⁸ *Appendix AE* shows that the Mann-Whitney test was more appropriate than t -tests for Agreeableness.

regression equation was found ($F(1,44) = 9.186, p = .004$) with an R^2 of .173. Similar results were obtained for Conscientiousness ($F(1,44) = 5.096, p = .029, R^2 = .104$).

Similarly to experiment 1, the results therefore indicate that there is a link between personality and the influence of price colour on price perception and suggest further research that analyses this connection in more detail.

Appendix A1: Control Variables (Experiment 2)

Control Variables p-values: Effect of Control Variable on Influence of Price Colour on the Dependent Variable (ANCOVA)

		<u>LI</u>			<u>HI</u>		
		<u>PP</u>	<u>PV</u>	<u>PI</u>	<u>PP</u>	<u>PV</u>	<u>PI</u>
Age	25 and under	.784	.857	.906	.639	.554	.179
	26-35	.594	.831	.464	.636	.568	.158
	46-55	.700	.406	.230	.783	.755	.492
Disposable Household Income	Below €1,000	.062	.055	.086	.447	.469	.973
	€1,000-€1,999	.076	.164	.232	.958	.569	.622
	€2,000-€2,999	.727	.584	.380	.779	.878	.788
	€3,000-€3,999	.446	.177	.051	.243	.185	.320
	€4,000 and above	.171	.090	.377	.081	.075	.539
Country	Austria	.290	.439	.181	.578	.676	.486
	Canada	.446	.406	.373	.783	.474	.511
	Denmark	.779	.776	.225	.810	.574	.922
	Finnland	.779	.776	.475	.939	.574	.460

	France	.446	.239	.713	.783	.769	.132
	Germany	.114	.127	.923	.903	.663	.085
	Morocco	.924	.706	.843	.970	.759	.347
	Norway	.113	.077	.104	.500	.713	.379
	Portugal	.262	.159	.743	.088	.126	.748
	Slovenia	.458	.710	.743	.068	.126	.511
	Spain	.672	.802	.498	.628	.847	.979
	Sweden	.054	.114	.214	.189	.103	.391
	Switzerland	.091	.140	.320	.081	.150	.503
	United Kingdom of Great Briatin and Northern Ireland	.672	.451	.455	.767	.756	.901
	United States of America	.941	.462	.805	.421	.192	.313
Employment	Employed for wages	.680	.586	.997	.852	.442	.255
	Out of work but not currently looking for work	.254	.315	.878	.866	.620	.492
	Self-employed	.067	.057	.063	.461	.524	.415
	Student	.095	.064	.437	.461	.973	.411
	Other	.634	.467	.365	.063	.356	.199
Sale Colour	Red	.879	.810	.252	.084	.150	.093
	Orange	.589	.265	.069	.067	.594	.868

Yellow	.523	.455	.598	.301	.168	.087
Green	.841	.570	.052	.738	.983	.919
Black	.552	.770	.891	.906	.851	.888
White	.109	.101	.401	.178	.657	.349

Note. LI = low involvement, HI = high involvement, PP = perceived price, PV = perceived value, PI = purchase intention

Table 213: Control Variables p-values (Experiment 2)

Appendix AJ: Evaluation of Hypotheses (Experiment 2)

Analysis of Hypotheses. (N/A = not applicable; unless otherwise indicated the results refer to a significance level of $\alpha = .050$)

	<u>Short Explanation</u>	<u>Direction</u>	<u>Support</u>
H1a	Price Colour (Non-Priming) → Perceived Price	-	No
H1b	Price Colour (Non-Priming) → Perceived Value	+	No
H1c	Price Colour (Non-Priming) → Purchase Intention	+	No
H2a	Blue Price Colour (Non-Priming) → Perceived Price	-	No
H2b	Blue Price Colour (Non-Priming) → Perceived Value	+	No
H2c	Blue Price Colour (Non-Priming) → Purchase Intention	+	No
H3a	Red Price Colour (Non-Priming) → Perceived Price	-	No
H3b	Red Price Colour (Non-Priming) → Perceived Value	+	No
H3c	Red Price Colour (Non-Priming) → Purchase Intention	+	No
H4a	Low Involvement: Price Colour → Perceived Price	-	Yes
H4b	Low Involvement: Price Colour → Perceived Value	+	Yes

H4c	Low Involvement: Price Colour → Purchase Intention	+	No
H5a	High Involvement: Price Colour → Perceived Price	N/A	Yes
H5b	High Involvement: Price Colour → Perceived Value	N/A	Yes
H5c	High Involvement: Price Colour → Purchase Intention	N/A	Yes
H6a	Price Colour (Priming) → Perceived Price	-	Yes ^a
H6b	Price Colour (Priming) → Perceived Value	+	Yes ^a
H6c	Price Colour (Priming) → Purchase Intention	+	No
H7a	Price Colour (Priming) → Perceived Price > Price Colour (Non-Priming) → Perceived Price	N/A	No
H7b	Price Colour (Priming) → Perceived Value > Price Colour (Non-Priming) → Perceived Value	N/A	No
H7c	Price Colour (Priming) → Purchase Intention > Price Colour (Non-Priming) → Purchase Intention	N/A	No

^a Significant for red prices ($\alpha < .050$), marginally significant for blue ($\alpha < .100$).

Table 214: Analysis of Hypotheses (Experiment 2)

Appendix AK: Further Colours

The following outlines which attributes are typically associated with the colours orange, yellow, green, and purple, which (next to red and blue) are frequently mentioned for specific wavelengths in the visible spectrum. This could facilitate the decision which colours are attractive for further experiments on price colour and consumer behaviour.

Orange is perceived as distressed, disturbed, and upset (Murray & Deabler, 1957). However, other research suggest that orange is a happy colour. This is in line with findings that orange, like red and yellow, is a warm colour (Clarke & Costall, 2008). Orange also is said to be lively, extroverted, sociable, and energetic (Mahnke, 1996).

Like red, yellow is considered to be warm, playful, joyful, cheerful, and stimulating. Yellow also can be linked to happiness and friendliness as well as to optimism (Clarke & Costall, 2008; Fraser & Banks, 2004; Murray & Deabler, 1957; Odbert, Karwoski, & Eckerson, 2012; Wexner, 1954; Wright, 1988).

Green is thought of as having a calming effect and is also seen leisurely and neutral. Like blue, green is perceived as peaceful and soothing. Green is also connected to low levels of anxiety and to nature (Clarke & Costall, 2008; Murray & Deabler, 1957; Wexner, 1954).

Purple is considered to be solemn, dignified, and stately as well as calming and passive. Purple, unlike red or blue, does not elicit connections to temperature. Additionally, it can be connected to royalty, luxury, quality, and authenticity (Clarke & Costall, 2008; Fraser & Banks, 2004; Labrecque & Milne, 2012; Mahnke, 1996; Murray & Deabler, 1957; Wexner, 1954; Wright, 1988).

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