

*Product Returns in a Digital Era: The Role of
Multidimensional Cognitive Dissonance, Regret, and
Buying Context in the Post-purchase Appraisal
Process*

ZHANG, YAKUN

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YAKUN ZHANG

Product Returns in a Digital Era: The Role of Multidimensional Cognitive Dissonance, Regret, and Buying Context in the Post-purchase Appraisal Process

Abstract

The retailing industry is battling a behemoth – the escalating problem of product returns. The problem is of a graver import for e-tailers. However, the underlying cognitive and affective appraisal process that leads to product returns in case of online purchase still remains unclear. The liberal product returns environment in the context of online purchase has led consumers to proactively consider the option of decision reversal. Nevertheless, the impact of the initial buying context on the post-purchase appraisal process has been neglected in previous studies. To bridge the gaps found after evaluating the current gamut of research work conducted on this topic, a mixed-method approach was employed in the present study. Using in-depth semi-structured interviews (N = 42), the first qualitative study identified three online purchase situations (unplanned, purchase-for-trial and opportunism buying) that frequently provoke product returns. Additionally, the qualitative uncovered the salient post-purchase appraisal factors. To empirically test the underlying appraisal process and the differences caused by the buying situations, a quantitative study was conducted, using scenario-based experiment (N = 620). Findings suggest that contrary to recent studies (e.g., Lee, 2015; Powers & Jack, 2013), cognitive dissonance is not the immediate cause of product returns. It is the affective factor, regret, which leads to decision reversal. Additionally, in opposition to the claim of previous literature that high coping potential reduces stress, this study suggests that the ability to reverse the decision actually increases regret and, in turn, leads to product returns. Results also indicate that buying context (e.g., different buying situations) causes difference in serial mediation pathways from both primary and secondary appraisal to product returns likelihood. E-tailers should utilise consumers' behavioural profile in order to classify different consumer groups and tailor the means to manage product returns accordingly.

Key Words: Product Returns, Cognitive Dissonance, Cognitive Appraisal, Regret, Buying Situations

**Product Returns in a Digital Era: The Role of Multidimensional Cognitive
Dissonance, Regret, and Buying Context in the Post-purchase Appraisal Process**

YAKUN ZHANG

Thesis Submitted in Fulfilment of the Requirements for the degree of
Doctor of Philosophy

Durham University Business School

Durham University

2018

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Acknowledgements

I would like to begin by offering my sincerest gratitude to my main supervisor Dr Sarah Xiao, who is charming, honest and enthusiastic. Sarah has been a wonderful supervisor, mentor, and friend. During the past four years, she taught me how to ask questions and express my ideas, how to approach a problem through systematic thinking and critical reasoning, how to regard an old question with a fresh perspective. Sarah has always been available to clarify my doubts and provided me with prompt, insightful, and straightforward feedback throughout my PhD despite her busy schedule. She has allowed this thesis to be my own work throughout the process but steered me in the right direction whenever she thought I needed the guidance. We've laughed together and she's also been kind to me when I needed to cry.

My gratitude also goes to my second supervisor Professor Carlos M.P. Sousa for his support, encouragement and kindness. At many stages in the course of my research I've benefited from his constructive suggestions and kind advice both academically and professionally.

I would like to express my gratitude to my External and Internal Examiners, Professor Stavros Kalafatis and Professor Mike Nicholson for the intellectually stimulating input.

I am grateful to friends, too many to mention by name, who have helped and supported me in so many ways. Also, thanks to my PhD colleagues for the interesting discussions we had and being fun to be with. A big "Thank you!" also goes out to all participants in my research for their time and for enriching my data.

My heartfelt thanks to my parents for their unconditional love and unflagging support throughout my life. Without them, I would never have enjoyed so many opportunities. Thank you both for always encouraging me to reach for the stars and pursue my dreams. I hope your pride in my accomplishments can somehow make up for the times that I was not there for you when you needed me.

Chapter 1 : Introduction

1.1 The Significance of Product Returns in the Online Retailing Setting

Merchandise returns had previously been accepted as a cost of conducting business. However, research indicates that the product returns issue can cause an enormous depletion in terms of revenue for retailers and manufacturers (Petersen & Kumar, 2009). The distribution and labour costs can be increased due to the need to repack, restock, and resell the returned items (Wachter, Vitell, Shelton, & Park, 2012). Product returns cost manufacturers and retailers more than \$264 billion annually in the US market alone, of which non-defective product returns account for 80 percent (Kerr, 2013; Lawton, 2008; Shulman, Cunha, & Saint Clair, 2015). One percent decrease in the rate of returns could reduce annual reverse logistics cost by an average of \$17 million for large retailers (Douthit, Flach, & Agarwal, 2011). Neil Saunders, a retail analyst at Conlumino, said, “Returns are even more expensive for retailers, as they have to bear the costs of processing a return without the benefit of income from the sale.”

After twenty years since of the first sale of an item online, 95 percent of British population are buying goods via internet retailers (Burrows, 2014). UK online retail sales are expected to reach £62.7 billion in 2020 (Ormrod, 2015). The boom in e-commerce is not without its consequences. Although online shopping has many desirable characteristics for consumers, such as wider product category, availability of information, novelty, and convenience, the nature of remote-purchase environment related to online shopping also has its disadvantages for consumers (lack of physical examination, high shipping and handling costs, and lack of instant gratification, for instance) (Grewal, Iyer, & Levy, 2004; Mukhopadhyay & Setaputra, 2007). These characteristics make e-commerce purchases are returned at a higher rate than those made in brick-and-mortar stores. Analysts estimate that the rate of returns can range from 25 percent to 50 percent for online transaction in the UK (Flood, 2013). Recent statistics suggest that at least 30 percent of all products

ordered online are returned in comparison with to only 8.89 percent of those bought in brick-and-mortar stores (Saleh, 2016). Further, research indicates that the continued growth in product returns rate has exceeded companies' capacity to bear the resultant expenses (Petersen & Kumar, 2009). To be more specific, return-handling costs can be two to four times more than the cost of processing outbound shipments (Petersen & Kumar, 2009; Sahay, Srivastava, & Srivastava, 2006).

The negative impact of merchandise returns is not limited to retailers; it also affects customers. The so-called "serial returners" are reported to be the major reason for retailers raising prices for certain groups (Morley, 2016). It is noted that up to 40 percent of all online fashion purchases are returned and online shoppers are held responsible for inflating prices, as two-thirds admit to sending back their unwanted clothes (Smellie, 2016; White, 2016). Moreover, although consumers often receive some form of compensation from the retailer in exchange for the returned product, they do not receive any compensation for the effort and time they had invested in the product acquisition and product disposition process (Maity & Arnold, 2013). Granted that it is good to have the option to reverse the initial decision, for most consumers, product returns indicate the failure to achieve primary purchase goals. Product returns has been found to be negatively related with satisfaction, trust, and positive word-of-mouth (Walsh & Brylla, 2016). Despite the fact that the phenomenon of consumer product returns has created significant consequences for both e-tailers and consumers, existing studies related to product returns have focused on the traditional brick-and-mortar context rather than online context (e.g., Bechwati & Siegal, 2005; Harris, 2008, 2010; Janakiraman & Ordóñez, 2012; King & Dennis, 2006; King, Dennis, & Wright, 2008; Maity & Arnold, 2013; Petersen & Kumar, 2009; Wachter et al., 2012).

The increased cost of product returns has led to the development of a growing body of studies pertaining to the product returns issue in recent years. Existing research related to

product returns can be classified into two types: general product returns (e.g., Chu, Gerstner, & Hess, 1998; Davis, Hagerty, & Gerstner, 1998; Petersen & Kumar, 2009; Sahay et al., 2006) and deshopping/fraudulent returns (e.g., Harris, 2010; Hjort & Lantz, 2012; Rosenbaum & Kuntze, 2005). Deshopping behaviours emphasise on the “premeditated intention” of the return action. For example, Baron, Harris, Elliott, Reynolds, and Harris (2005, p. 328) refer to fraudulent returner as “customers who conventionally purchase and use goods, and subsequently attempt to return them, fraudulently, for reimbursement at a later date”. However, due to the encouragement of retailers and the nature of the remote-purchase environment, although the intents of the majority of the returners are premeditated, they are not unscrupulous (Lee, 2015; Seo, Yoon, & Vangelova, 2016). Therefore, this thesis will only focus on general product returns.

1.2 Research Objectives and Research Questions

Existing research has begun to examine product returns in the online setting due to the serious ramifications of the issue for e-tailers. Factors include reputation of the online retailer (Walsh, Albrecht, Kunz, & Hofacker, 2016), physical distribution service (Rao, Rabinovich, & Raju, 2014), website technologies (De, Hu, & Rahman, 2013). These studies have only forwarded some overt antecedents such as use of web interactive functions, product availability, and delivery timelessness, without considering the underlying psychological factors from a consumer-centric perspective (De et al., 2013; Rao et al., 2014). Among these factors, researchers directed most of their inquiries to the motivational aspects of consumers who return products for reasons such as “not being satisfied”. Nevertheless, Che (1996) suggested that consumers’ preferences for certain products depend on their sampling the products for gaining more information. This indicates that though the product is not defective or the service encounter is not dissatisfied, consumers may still experience preference change. Lee (2015) called for

product returns research from a “not dissatisfied” perspective. Researchers suggested that it is important to understand the consumer psychological/behavioural processes that underlie the non-defective product returns in online retailing context – that is, why consumers reverse their decisions, and sometimes even before they have tried the product (Bechwati & Siegal, 2005; De et al., 2013; Gbadamosi, 2009; Powers & Jack, 2013; Rao et al., 2014; Seo et al., 2016).

Due to the inability for physical product examinations, online purchases are more likely to lead to discrepancy before and after making the buying decision, making post-purchase cognitive dissonance a more salient factor in the post-purchase appraisal process for online purchase in compared with brick-and-mortar retailing setting (Sweeney, Hausknecht, & Soutar, 2000). Cognitive dissonance indicates a consumer’s lack of confidence due to inconsistent beliefs, ideas, values, or conflicting information during the decision-making process (Festinger, 1957; Sweeney, Hausknecht, Soutar, & Johnson, 1996). Studies also suggested that cognitive dissonance is correlated with negative emotion such as anxiety or regret (Festinger, 1957; Hawkins, 1972; Menasco & Hawkins, 1978). Cognitive dissonance theory posits that because dissonance causes anxiety and uncertainty, individuals are motivated to alleviate the psychological discomfort state by restoring their psychological balance (Brehm, 1956; Festinger, 1957). Therefore, product returns can be used by consumers as a viable coping strategy to deal with negative emotions such as regret. However, researchers mainly examined the cognitive dissonance as the immediate cause for product returns without considering the intermediate impact of emotions (Lee, 2015; Powers & Jack, 2013). Emotion plays a vital role in influencing the post-purchase behavioural responses (e.g., Zeelenberg & Pieters, 2004). A marketplace encounter appraisal involves a range of cognitive, emotional, and motivational appraisals (Lazarus, 1991a) and the cognitively-driven and emotionally-driven processes shouldn’t be separated (Damasio, 1994). However, emotions are only

examined as affective consequences in the fraudulent returns literature. Cognitive appraisal theory is believed to be a promising path to explore emotions in the context of marketing research (Bagozzi, Gopinath, & Nyer, 1999; Johnson & Stewart, 2005). Cognitive appraisal theory posits that when individuals encounter stressful situations, the two-part cognitive appraisal process will be activated, during which individuals first appraise how much their situation threatens their well-being, termed primary appraisal, and determines what, if anything, can be done to redress their stressful situation, termed secondary appraisal (Folkman, Lazarus, Gruen, & DeLongis, 1986; Lazarus & Folkman, 1984). The arrival at product returns decision is not only influenced by the post-purchase appraisal of products/decisions, but also the consideration of return execution potential (e.g., consideration of return policy) (Daugherty, Myers, & Richey, 2002). Existing studies mainly examined the impact of return policies from an operational perspective, relying on the mathematical algorithm rather than the underlying psychological processes (Bandyopadhyay & Paul, 2010; Gurnani, Sharma, & Grewal, 2010; Hess, Chu, & Gerstner, 1996). Using cognitive appraisal theory as a theoretical foundation, this thesis will investigate the joint effect of primary and secondary appraisals on the formation of product returns and the role of elicited emotion in the post-purchase appraisal process.

Researchers argued that coping cannot be separated from the context in which it arises, meaning both the person and environment situation impact the coping process (Folkman et al., 1986; Lazarus, 1991a; Lazarus, 1993). Maity and Arnold (2013) and Seo et al. (2016) recommended that future research could contribute more to the product returns literature by exploring the role of situational/contextual factors involved (e.g., buying situations). Wood (2001) argued that the key behavioural characteristic differentiates distant sales from more traditional brick-and-mortar store sales is that in distant sales, the single purchase is more likely to be framed as two separate decisions: decisions to purchase and decisions to retain or return the time. Initial purchase decisions should

increase sales but will increase profits only if return rates do not rise significantly. Motives for product returns behaviour do not only exist during the post-purchase period or consumption of products but also in the initial purchase phase (Hanson, 1980). Inman and Zeelenberg (2002) suggested that post-purchase appraisal reactions are related with the way in which the decision outcome has been achieved and whether the decision-making processes are justifiable. George and Yaoyuneyong (2010) also claimed that the initial buying situations can affect the post-purchase cognitive responses due to different levels of decision involvement and commitment. Lee (2015) discovered a number of motives for product returns that had not been reported in previous studies such as, “purchase with incomplete product knowledge”, “careless/hurried purchase”, “acquisition of additional information after purchase”, “change of mind after a brief use of the product”, “no longer needed” and “multiple-item purchase”. All these return reasons suggested that product return decisions can be influenced by the initial buying situations. The connection between initial buying situations and the later post-purchase cognitive responses in the context of online shopping makes it is important to examine the product returns issue across the two-stage decision processes as retailers can reduce return rates from the purchase stage (Seo et al., 2016).

In light of the identified research gaps, this thesis aims to answer the following research questions:

1. Why do consumers return non-defective products in the context of online shopping?
2. How does the product returns decision form through the post-purchase appraisal process across the pre- and post-purchase stages?
3. What are the appraisal differences under the decision outcomes of different initial buying situations?

In order to answer these research questions, this thesis has presented three main objectives. First, through a qualitative study, this thesis will identify the salient factors in the post-purchase appraisal process and the online buying situations that are more likely to provoke product returns. Second, using a quantitative study, this thesis will test the relationships between the salient factors identified in the qualitative study in the content of online product returns, focusing on the “non-defective” product returns. Third, this research will examine the post-purchase appraisal process differences for different online buying situations.

1.3 Research Method

As discussed earlier, this thesis seeks to investigate purchase scenarios that have the greatest probability of leading to product returns (Lee, 2015; Morley, 2016; *Omnichannel Retail Survey 2016*, 2016; White, 2016), identify the salient post-purchase appraisal factors that contribute to product returns in the online retailing setting, and also aims to develop and test a theoretical framework of the post-purchase appraisal process, focusing on the non-defective returns (Lee, 2015). In order to achieve the research objectives and answer the research questions, this research adopts a mixed method approach. First, an exploratory qualitative study is conducted in order to identify the buying situations that have the highest chances of causing product returns and the salient appraisal factors in the post-purchase appraisal process. Additionally, the information gathered in the exploratory study serves the purpose of scenario design and conceptual model building for the second quantitative study.

The second study of this thesis is a quantitative study that uses Web scenario-based experiment. The objectives of the second study are to empirically test the post-purchase appraisal process model and test different appraisal processes under the decision outcomes of different initial buying situations. Using the crowdsourcing platform, the sample representativeness of this thesis can be improved across the UK online population

and more insights pertaining to the product returns issue in the online retailing setting can be gained.

1.4 Scope and Context of the Research

This thesis focuses on the UK market due to the proliferation of e-commerce, the liberal product returns environment, and the serious ramifications of product returns in the UK. New research data from OC&C Strategy Consultants, PayPal and Google shows that online sales in the four biggest online shopping markets in the world (the UK, the US, China, and Germany) will grow have by £320 billion between 2015 and 2018, expanding the size of the online market to £645 billion (Ruddick, 2015). With the rapid growth of e-commerce, increasing online returns become an unavoidable consequence. Industry estimation reports that UK retailers incurred £180 million in returned goods that were bought during the 24-hour sales period of Black Friday in 2015 alone, and returns cost UK retailers around £60 billion each year, according to the Telegraph (Davidson, 2015).

Through in-depth interviews, the first qualitative study aims to identify some of the latest observed buying situations that are more likely to induce return intention in the post-purchase appraisal process. In order to identify the appraisal factors that are more salient in the online setting in comparison with the traditional brick-and-mortar one, the first qualitative study assesses both online and offline return incidents. This research mainly focuses on the online purchase context. Moreover, due to the limited sample size ($N = 42$) and the use of convenience sampling in the qualitative study, having both online and offline returns incidents can improve the richness of the data.

For the subsequent quantitative study, consumer electronic devices are selected as the test item in the scenario-based experimental design. One in six consumer electronic items bought online is returned, and 30 percent of women's fashion purchases made on the internet are sent back (Davidson, 2015). According to a report by Accenture (2011), 68

percent of consumer electronics returns are categorised as “no-trouble-found” and 27 percent are associated with buyer’s remorse. This indicates that a staggering 95 per cent of consumer electronics product returns are actually attributed to factors other than defects. The high returns rates and especially the high percentage of “non-defective” returns make consumer electronic device a suitable test item for the quantitative study.

1.5 Contributions

This thesis contributes to cognitive appraisal theory, product returns literature, and practice in the following ways. First, this thesis will contribute to the product returns literature by proposing and empirically testing a theoretical model based on the cognitive appraisal theory in the context of online shopping. Previous researchers directed most of their inquiries to the motivational aspects of consumers who return products for reasons such as “not being satisfied” (Maity & Arnold, 2013; Petersen & Kumar, 2009; Powers & Jack, 2013; Rao et al., 2014; Wood, 2001). Although some consumer product returns can be attributed to dissatisfaction such as product defects or service failure, increasing product returns by consumers who were “not dissatisfied” or did not have enough time to evaluate the product’s performance remain unaccounted for (Lee, 2015). Researchers have suggested that research pertaining to product returns faces the problem of lacking process-oriented theoretical foundation (Bechwati & Siegal, 2005; Gbadamosi, 2009; Powers & Jack, 2013; Seo et al., 2016). Studies pertaining to product returns mainly focus on the traditional brick-and-mortar retailing setting (Bechwati & Siegal, 2005; Harris, 2008, 2010; Janakiraman & Ordóñez, 2012; King & Dennis, 2006; King et al., 2008; Maity & Arnold, 2013; Petersen & Kumar, 2009; Wachter et al., 2012). Due to the significant ramifications of the product returns issues in e-commerce, researchers have called for more research on the issue of product returns of the two-decision process under *online retailing setting* from a consumer psychological perspective (e.g., Bonifield, Cole, & Schultz, 2010; De et al., 2013; Rao et al., 2014; Seo et al., 2016). This thesis, for the

first time, will empirically test a process-oriented framework of the post-purchase appraisal process, which captures the relation between person and context of stressful online transactions pertaining to the issue of non-defective product returns. Cognitive appraisal theory provides alternative explanation to product returns decision formation from a coping perspective beyond traditional expectation theory from a motivational perspective.

Second, this thesis will extend the cognitive appraisal theory by examining the different appraisal processes, causing by the contextual factor - different initial buying situations. By addressing the linkage between initial purchase decision with post-purchase appraisals, this thesis can enhance the explaining power of cognitive appraisal theory on product returns in the content of online retailing setting. Existing studies pertaining to cognitive appraisal theory only investigate the outcome of a stressful encounter as an antecedent of stress (Frijda, 1987; Stephens & Gwinner, 1998; Watson & Spence, 2007). However, the decisional context is expected to influence the later cognitive and affective appraisal reactions and it should not be separated from the appraisal process (George & Yaoyuneyong, 2010; Inman & Zeelenberg, 2002; Lazarus & Folkman, 1984; Seo et al., 2016). By taking the initial purchase situations into consideration, e-tailers can tailor their services or strategies in order to better fulfil the needs of customers under different buying situations and control product returns from the purchase stage.

Third, utilizing cognitive appraisal theory, this thesis will examine the underlying relationships between cognitions, emotion and behavioural intentions of consumers in the product returns decision formation process in the context of online shopping. Cognitive appraisal theory allows affective responses to be examined as an intermediate process in the post-purchase appraisal process (Bagozzi et al., 1999). Although emotions have been identified as the affective consequences in the context of fraudulent returns, the role of emotions in evoking product returns behavioural intention was overlooked.

1.6 Thesis Structure

This thesis consists of six chapters that are divided in order to systematically present the approaches of the manner in which the research questions are proposed and answered. Chapter 1 provides an introduction of the focal issue, addressing the significance and motivations behind the product returns issue. In addition to stating the research questions, this chapter 1 highlighted the scope, context, potential contributions and intended research method.

Following the research objectives and questions developed in Chapter 1, Chapter 2 will provide a literature review with respect to the relevant studies in the domain of product returns. Relevant theories that contribute to product returns phenomenon explanation will be discussed and justifications for selecting cognitive dissonance theory and cognitive appraisal theory will be deliberated.

Chapter 3 will first discuss the research philosophy and overall methodological approach of this thesis. Following the discussion of the research approach, the procedures and findings of the first qualitative study will be discussed.

Chapter 4 discusses theoretical framework of product returns in details and develops hypotheses of the relationships between the variables of the overall sample model and different buying situations models for the quantitative study.

Chapter 5 discusses the quantitative study methodology in terms of enquiry instrument, participants recruitment and characteristics, specification of the scenario-based experiment with detailed description of measurement, remedies to overcome the common method variance, scale purification, method of analysis, and data checking. The hypotheses testing results for the full sample model and different buying situations sample models will be presented. Followed by the findings, the final section of this chapter provides the data interpretation of the quantitative study.

Chapter 6 contains the general discussion, which provides an overall summary and conclusion of this thesis, followed by related theoretical and managerial contributions (implications). Then, the limitations of this thesis and future research directions will be discussed.

1.7 Chapter Summary

This introductory chapter provides an overview of this thesis with respect to the significance, motivations, and rationale behind the research topic. The key findings of previous research works pertaining to product returns have been briefly discussed, which has led to the proposition of the research questions. The scope and context of this research study have been explained. Methodological approach for this thesis has been discussed, based on the research objectives and questions. Potential contributions of this thesis have also been addressed.

Chapter 2 : Literature Review

2.1 Introduction

As seen from the discussion in the introductory chapter, this thesis aims to develop a framework of consumers' product returns appraisal process in order to address the two-stage decision-making nature of online purchase. Moreover, this thesis will investigate different appraisal processes under different buying situations. Although Chapter 1 has discussed the research gaps by providing a brief overview of previous studies pertaining to product returns, detailed review of existing research related to product returns and relevant theories are needed to determine the suitable theories and develop the theoretical framework.

For the purpose of achieving the objectives and answering the research questions in a procedurally and statistically rigorous manner, this chapter discusses the following content. First, a literature review of previous studies pertaining to product returns in relation with cognitive appraisal and cognitive dissonance as well as other relevant studies will be discussed, based on the determined research gaps. Second, justifications for rejecting alternative theories will be provided. Third, cognitive appraisal and cognitive dissonance theories as theoretical foundations in relation to product returns has also been elaborated upon in this chapter.

2.2 Previous Research on Product Returns

As discussed in the literature overview section, existing research on the issue of product returns can be broadly categorised into two major product returns types, namely, general product returns (e.g., Chu et al., 1998; Davis et al., 1998; Petersen & Kumar, 2009; Sahay et al., 2006) and fraudulent returns (e.g., Harris, 2010; Hjort & Lantz, 2012; Rosenbaum & Kuntze, 2005). As explained in the introduction chapter, this thesis will focus on the general product returns.

Researchers are mainly interested in the triggers/causes and consequences of product returns (Maity & Arnold, 2013; Petersen & Kumar, 2009; Powers & Jack, 2013; Rao et al., 2014; Wood, 2001). Previous studies pertaining to general product returns has focused on the triggers/causes, which can be categorised into the following themes depending on the nature of the products and customers characteristics, pre-purchase, exchange process to post-purchase evaluation and returns policy: product characteristics, consumer characteristics (e.g., demographic factors), purchase motivation and pre-purchase information processing, service-related factors, post-purchase evaluations, policy-related factors, and consequences of product returns.

2.2.1 Product Characteristics

Product returns is linked with certain product characteristics. Product categories such as clothes, special occasion dresses and sporting goods are more likely to get returned (Hjort & Lantz, 2012; Maity & Arnold, 2013; Piron & Young, 2000). Low-price products and items sold by a retailer at prices below the competition level are less likely to be returned (De et al., 2013; Maity & Arnold, 2013; Rao et al., 2014). Product popularity (Rao et al., 2014), product time viewed on the website (De et al., 2013), and product availability duration are positively related with product returns likelihood (Rabinovich, Sinha, & Laseter, 2011). Product size has no significant relationship with product returns likelihood (Rabinovich et al., 2011)

2.2.2 Consumer Characteristics

Product returns is not only affected by product characteristics, but also by consumer characteristics. Consumer characteristics are associated with demographic, behavioural and psychological factors. Age and gender are not significantly related with product returns in general (Maity & Arnold, 2013; Powers & Jack, 2015), products purchased in new categories within the same distribution channel are more likely to be returned (Petersen & Kumar, 2009). Past purchase history and customer opportunism are

positively related with product returns frequency (Foscht, Ernstreiter, Maloles III, Sinha, & Swoboda, 2013b; Powers & Jack, 2013; Rao et al., 2014). Although consumers may proactively consider the option of product returns at the time of purchase, recent research suggested that consumers who return products are not unscrupulous (Lee, 2015; Seo et al., 2016).

2.2.3 Purchase Motivation and Pre-purchase Information Processing

In a liberal product returns environment, e-tailers have encouraged less informed buying situations such as e-impulse buying, buying without careful pre-purchase examination, and opportunistic buying in attempt to benefit from return policies (Chang & Tseng, 2014; Lee, 2015; *Omnichannel Retail Survey 2016*, 2016; Powers & Jack, 2013). A small number of studies have examined the impact of purchase motivations on product returns. For example, Seo et al. (2016) found that when hedonics drive purchases, unplanned buying generates higher returns likelihood and when utilitarian motivation drives purchases, the returns likelihood is indifferent, between planned and unplanned buying. However, Maity and Arnold (2013) found that the time consumers spend in planning for purchase is unrelated to returns intention. Researchers also investigated the impact of gift giving and holiday seasonality on product returns (Petersen & Kumar, 2009; Rabinovich et al., 2011; Rao et al., 2014). However, the findings are inconsistent. Petersen and Kumar (2009) found empirical evidence, suggesting that holiday purchases lead to more returns, whereas in Rao et al. (2014) suggested this relationship is insignificant. Although these studies touched upon the impact of purchase motivations on product returns, how do buying situations affect the relationships among different appraisal stages is still unclear. Previous studies have claimed that decision justifiability may affect consumers' post-purchase evaluation (e.g., Inman & Zeelenberg, 2002; Montgomery, 1983; Shafir, Simonson, & Tversky, 1993), indicating that the initial decision context could affect post-purchase appraisal reactions.

Several studies have established the relationship between pre-purchase factors and product returns. For example, Maity and Arnold (2013) found that search as an expense, which is positively related to returns intention. Using online panel data, Minnema, Bijmolt, Gensler, and Wiesel (2016) found that review volume negatively affects returns probability, whereas review valance and variance positively influence return probability. Bechwati and Siegal (2005) discovered that choices that are presented sequentially are less likely to get returned than the chocies that are presneted simultaneously when consumers are exposed to disconfirming information favoring an alternative brand under high-involvment situations. All these studies indicate that the impact of initial buying situations on the post-purchase appraisal process should be taken into consideration when it comes to product returns decision formation. A close examination of post-purchase appraisal processes in different buying situations can provide useful insights into the reason and the way consumers react differently when they face the same decision outcomes, which allows e-tailers take measures to control product returns from the purchase stage accordingly.

2.2.4 Service-related Factors

Another stream of research particularly relies on transactional data obtained from Internet retailing. It focuses on the influence of services on product returns, consisting of factors such as delivery reliability, and perceived scarcity of product availability, which are negatively related with returns likelihood (Rao et al., 2014). Product-focused web technologies, such as zooming, have a negative effect, alternative photos function has a positive effect, and colour swatch has an insignificant impact on product returns (De et al., 2013). Although the data sources of these studies were derived from the context of Internet retailing, these studies only focused on the overt factors, without taking consumers' psychological factors into consideration, and do not reflect the two-decision nature relevant to Internet retailing (Park, Cho, & Rao, 2015; Wood, 2001). This is

important since consumers' appraisal processes towards the products/services and their decisions are not completed until they receive the products/services and make further evaluation (Park et al., 2015).

2.2.5 Post-purchase Evaluation

Existing studies have identified some overt reasons for product returns such as product defects, product performance, inappropriateness (Ferguson, Guide, & Souza, 2006; Foscht et al., 2013b; Hess et al., 1996), failure to meet expectation, finding a better product or price (Powers & Jack, 2015), and retailers' reputation (Walsh et al., 2016). Recently, a limited yet growing body of research has directed attention at investigating the relationship between cognitive dissonance and product returns (Lee, 2015; Maity, 2015; Powers & Jack, 2013, 2015), suggesting that cognitive dissonance is the immediate cause for product returns. However, cognitive dissonance theory suggests that dissonance is more likely to induce psychological repair work rather than behavioural reversal (Brehm, 1956). On the other hand, regret as a frequently experienced negative emotion, eliciting from cognitive dissonance is believed to be effective in inducing behavioural improvement (Zeelenberg & Pieters, 2007). However, the mediating role of emotion in the product returns decision formation was overlooked from previous research.

2.2.6 Policy-related Factors

Prior research has also drawn scholars' attentions to returns policy due to its dual role in consumer consumption. Policy can benefit retailers by signalling the quality of the products or sellers (Bonifield et al., 2010; Wood, 2001), reducing the perceived risk of purchases (Davis, Gerstner, & Hagerty, 1995) and increasing long-term customer value through increased future purchases (Petersen & Kumar, 2009). Conversely, returns policy contributes to opportunistic returns and deshopping (Harris, 2008, 2010; King & Dennis, 2006; Schmidt, Sturrock, Ward, & Lea-Greenwood, 1999). Tight return policy (e.g., high

shipping & handling cost) is negatively related with return (Rao et al., 2014), whereas lenient return policy (e.g., free returns) can increase purchase intention and future spending (Bower & Maxham III, 2012; Pei, Paswan, & Yan, 2014). These results have led scholars from operational domain to design the optimal policies that maximise retailers' profitability (Bandyopadhyay & Paul, 2010; Gurnani et al., 2010; Hess et al., 1996). Nevertheless, these studies did not explain the underlying mechanism of how do product returns policies affect product returns from a consumer-centric behavioural perspective (Bower & Maxham III, 2012; Janakiraman & Ordóñez, 2012; Kim & Wansink, 2012). Powers and Jack (2013) argued that consideration of returns policy can reduce cognitive dissonance, but it is not related with return frequency. Maity and Arnold (2013) and Wang (2009) also found that policy leniency is unrelated with product returns intention. Using construal level theory, Janakiraman and Ordóñez (2012) found that when the trips are pre-planned, shorter deadlines lead to higher returns rates in the case of lower returns effort. The study of Janakiraman and Ordóñez (2012) indicated that the impact of return policies on product returns may differ subject to specific decision context. Additionally, product returns behaviour is widely accepted as a norm under the encouragement of retailing companies (Lee, 2015). The way in which return policy related factors affect product returns intention may have changed overtime.

2.2.7 Consequences of Product Returns

Other than the causes/triggers of product returns in general, a body of research devoted to investigating the consequences of product returns. Return-experienced customers purchase more frequently, place more items, with higher average item value than customers having no returns experience with a retailer (Griffis, Rao, Goldsby, & Niranjana, 2012). Post-returns spending reduces if consumers have to pay for returns regardless of blame attribution (Bower & Maxham III, 2012). Walsh and Brylla (2016) discovered that product returns is negatively related with customer satisfaction, trust, and positive word-

of-mouth. Returns satisfaction further influences loyalty intentions (Mollenkopf, Rabinovich, Laseter, & Boyer, 2007; Ramanathan, 2011). Most of these studies utilised panel data from the operational perspective rather than from the consumer behavioural perspective (except Walsh & Brylla, 2016).

Table 2-1 presents the summary of previous studies and Figure 2-1 illustrates the overall structure of previous literature with respect to product returns.

Table 2-1: Product Returns Literature Review Summary

Product Returns Influencing Factors/ Consequences	Approach to Consumer Product Returns	Findings	Studies
Product categories; price and price leadership; product popularity; size; time viewed; product availability duration	Product characteristics	<ul style="list-style-type: none"> ▪ clothes and special occasion dresses are most likely to be returned ▪ consumers have higher returns intention towards sporting goods ▪ products with high price leadership are less likely to be returned ▪ price has no systematic effect on returns; more expensive items are more likely to be returned ▪ orders that involve more popular products are likely to carry a greater returns likelihood ▪ size of product is not related with returns likelihood ▪ time viewed is positively related with product returns ▪ products that are featured in the catalogue are less likely to be returned ▪ products that have been available on Internet sites will for long are more likely to be returned 	(De et al., 2013; Hjort & Lantz, 2012; Johnson & Rhee, 2008; Petersen & Kumar, 2009; Piron & Young, 2000; Rao et al., 2014; Rosenbaum, Kuntze, & Wooldridge, 2011)
Distribution channel familiarity; product category familiarity; purchase regency; purchase experience;	Consumer characteristics; learning theory	<ul style="list-style-type: none"> ▪ products purchased in new distribution channels within the same product category are less likely to be returned ▪ products purchased in new categories within the same distribution channel are more likely to be returned ▪ products purchased in new channels and new categories are more likely to be returned 	(De et al., 2013; Foscht et al., 2013b; Maity & Arnold, 2013; Petersen & Kumar, 2009; Powers & Jack, 2013, 2015)

customer opportunism; demographic factors		<ul style="list-style-type: none"> ▪ returns history is positively related with product returns ▪ regency of purchase is not related with returns intention ▪ purchase history is (not) related with returns likelihood/frequency ▪ gender and age are not related with returns intention/frequency ▪ customer opportunism is positively related with returns frequency 	
Planned vs. unplanned purchases; shopping motivations; gift giving; holiday seasonality	Purchase motivations	<ul style="list-style-type: none"> ▪ when hedonics drive purchases, unplanned purchases generate higher returns likelihood and when utilitarian motivation drives purchases, the returns likelihood is at about the same level as both planned and unplanned purchases ▪ consumers who returns frequently have different reasons for their shopping motivations in comparison with consumers who never or rarely returns products ▪ time spent in planning for purchase is not related with returns intention ▪ purchases involved in gifts giving are more likely to be returned ▪ holiday seasonality does (not) affect returns likelihood 	(Foscht et al., 2013b; Maity & Arnold, 2013; Petersen & Kumar, 2009; Rabinovich et al., 2011; Rao et al., 2014; Seo et al., 2016)
Product satisfaction; online customer reviews; search as expense and experience; presentation	Expectation confirmation theory; inoculation theory; signalling theory	<ul style="list-style-type: none"> ▪ product satisfaction negatively mediates the effect of search as an expense on product returns intention, while search as an experience positively relates to product satisfaction 	(Bechwati & Siegal, 2005; Maity & Arnold, 2013; Minnema et al., 2016)

<p>of alternatives; disconfirming information;</p>	<p>(prior purchase information processing)</p>	<ul style="list-style-type: none"> ▪ review valance and variance have positive effects on returns probability ▪ review volume has a negative effect on return probability ▪ purchase experience and price weaken the positive effect of review valance on returns ▪ sequential pre-choice presentations are more likely to lead to product returns due to disconfirming information favouring a new brand rather than because of sole positive information about the chosen brand 	
<p>Delivery reliability; customer expectation of order delivery timeliness; perceived scarcity conditions</p>	<p>Operational service; expectation confirmation theory; economic theory; information economics theory</p>	<ul style="list-style-type: none"> ▪ delivery reliability is negatively related to the order's returns likelihood ▪ customer expectations of order delivery timeliness moderate negatively (attenuate) the effect by actual order delivery reliability in the case of product returns. ▪ alternative photos increase returns; zoom technology reduces returns propensity; colour swatch usage is unrelated with product returns ▪ perceived scarcity of product availability has a positive relationship with returns likelihood 	<p>(De et al., 2013; Rao et al., 2014)</p>
<p>Product defects; product performance; inappropriateness; retailer's reputation; found better product or price; expectation not met</p>	<p>Expectation confirmation theory; signalling theory (post-purchase evaluation)</p>	<ul style="list-style-type: none"> ▪ installation difficulties, product performance incompatibility with consumer preferences, and remorse increase false product returns, which can be reduced via supply chain co-ordination methods ▪ consumers who return frequently have different reasons for their mail order returns than consumers who never or rarely return products 	<p>(Ferguson et al., 2006; Foscht et al., 2013b; Hess et al., 1996; Petersen & Kumar, 2009; Powers & Jack, 2015; Rao et al., 2014; Walsh et al., 2016; Walsh & Brylla, 2016)</p>

		<ul style="list-style-type: none"> ▪ finding better products, failure to meet expectation are positively related with returns frequency ▪ retailer's reputation has a negative relationship with returns rates ▪ the negative relationship between retailer's reputation and returns rates only exists if the product matches with consumer's initial choice ▪ number of orders weakens the negative relationship between retailer's reputation and returns rates ▪ the negative relationship between retailer's reputation and returns rates is greater for women and specialist retailers 	
Consideration of return policies; switching barriers; return reasons	Cognitive Dissonance theory	<ul style="list-style-type: none"> ▪ customer opportunism, emotional, and product dissonance are positively related to product returns frequency ▪ emotional dissonance is positively related to return reasons such as finding better product or price/failure to meet expectation ▪ returns reasons of finding better product or price and failure to meet expectation are negatively related with product dissonance ▪ returns reasons of finding better product or price and failure to meet expectation are positively related with emotion dissonance 	(Powers & Jack, 2013, 2015)
Post purchase dissonance (PPD); coping strategies; product returns		<ul style="list-style-type: none"> ▪ consumers' PPD-reduction strategies and reasons for returning products. 	(Lee, 2015)

Cognitive dissonance; leniency of return policies		<ul style="list-style-type: none"> ▪ cognitive dissonance positively influences return intentions in case of lenient return policy, but the relationship fades in case of strict return policy 	(Maity, 2015)
Policy-related	Endowment effect, signalling and learning theory	<ul style="list-style-type: none"> ▪ lenient returns policies appear to decrease the overall amount of purchase decision conflict and product search time and increase positive rating of product quality ▪ lenient returns policies thus increase initial purchasing tendency but not returns rate ▪ consideration of returns policy is unrelated with returns frequency ▪ shipping and handling costs are negatively related with returns 	(Hjort & Lantz, 2012; Powers & Jack, 2013; Rao et al., 2014; Wang, 2009; Wood, 2001)
	Construal level theory	<ul style="list-style-type: none"> ▪ shorter deadlines should lead to higher returns rates in case of lower effort rather than higher effort. ▪ when trips are pre-planned, longer deadlines should lead to lower return rates when in case of higher effort rather than lower effort. 	(Janakiraman & Ordóñez, 2012)
	Meta-Analysis	<ul style="list-style-type: none"> ▪ money, effort leniency has significant impact on purchase proclivity and time; scope and exchange leniency have significant impact on returns proclivity 	(Janakiraman, Syrdal, & Freling, 2015)
Order frequency; number of items/order; and the average item value; post-return spending; loyalty;	Consequence of product returns	<ul style="list-style-type: none"> ▪ refund speed increases purchase frequency, item/order, average items value ▪ free returns policy increases post-return spending and fee returns policy decreases post-returns spending regardless of fairness perception 	(Bower & Maxham III, 2012; Griffis et al., 2012; Mollenkopf et al., 2007; Petersen & Kumar, 2009; Rosenbaum et al., 2011; Walsh et al., 2016)

customer satisfaction,
trust, positive WOM

- site ease, service recovery quality, and previous service experience are positively associated with perceived value of the returns and returns satisfaction
- customer effort is negatively associated with perceived value of the returns and returns satisfaction
- perceived value of returns, return satisfaction and previous service experience positively associated with loyalty intentions
- the amount of product returns is positively related to the subsequent amount of product purchases, up to a threshold
- the amount of product returns is negatively related to the amount of marketing communications a customer receives in the future
- product returns handling affects customers loyalty in the cases of low-risk and high-risk products but not in the case of medium-risk products
- product returns are negatively related with customer satisfaction, trust, and positive word-of-mouth
- monthly spending strengthens the negative relationship between product returns and positive word-of-mouth

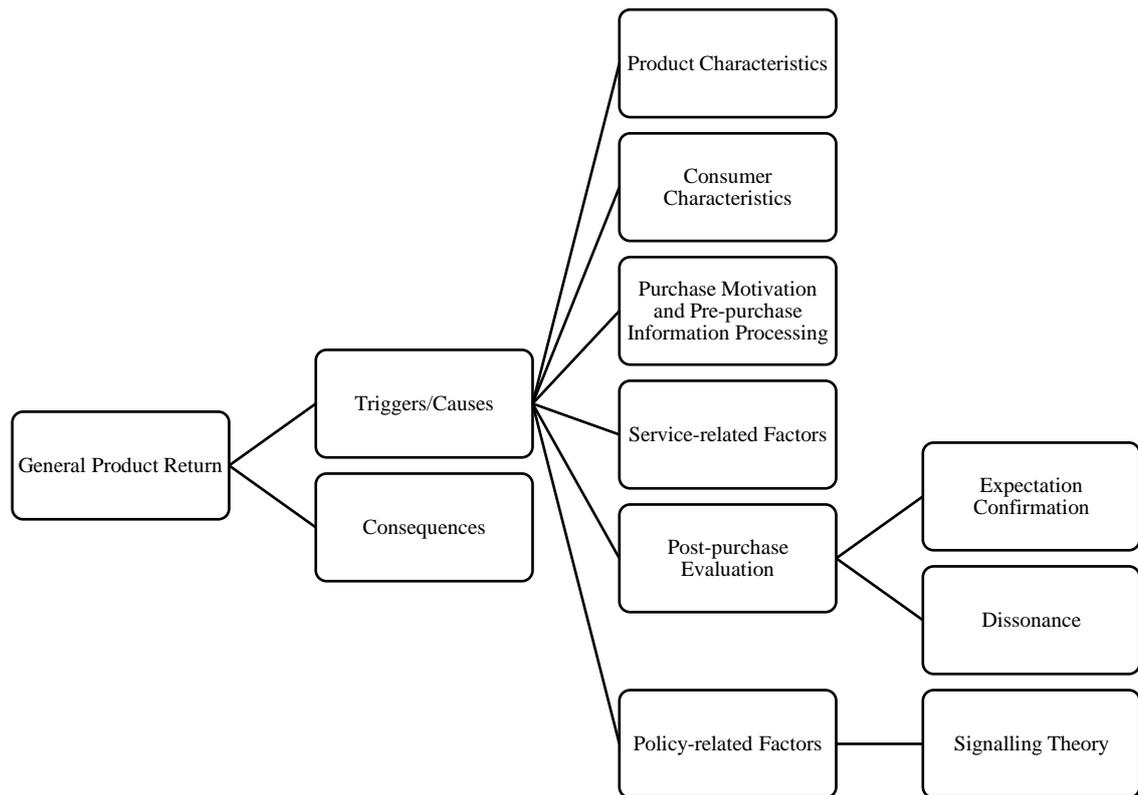


Figure 2-1: Product Returns Literature Structure Overview

2.3 Expectation Confirmation Theory and Product Returns

Drawing upon the expectation confirmation theory, existing research on merchandise returns pointed out (dis)satisfaction is one of the primary reasons causing the increased product returns rates. Researchers identified several causes for product returns, which include product failure, product defects, incorrect delivery, incomplete shipments, dissatisfied quality or performance (e.g., Foscht, Ernstreiter, Maloles, Sinha, & Swoboda, 2013a; Griffis et al., 2012; Petersen & Kumar, 2009). Findings of these studies motivated firms to improve their product quality and after-sales services in order to reduce return rates. Despite the effort has been made in furtherance of product quality, performance and after-sale support (Lawton, 2008), the reality does not seem to be very optimistic. In a more recent study, Lee (2015) argued that dissatisfaction alone is not adequate in explaining why do consumers return non-defective products after

companies have improved their product and service quality. Despite the fact that expectation confirmation theory provides valuable insights into the antecedents and determinants of product returns, it does not explain the reason for which consumers nowadays return non-defective products even before they have had enough time to assess the product performance (Lee, 2015). Therefore, Lee (2015) proposed that product returns behaviour is a viable coping strategy for dealing with consumers' post-purchase dissonance.

2.4 Cognitive Dissonance Theory and Product Returns

Sweeney et al. (1996) argued that cognitive dissonance can be experienced even without product performance evaluation. In addition, Cooper, Fazio, and Rhodewalt (1978) asserted that dissonance involves a more malleable and generally heightened state of arousal, it does not necessarily have to be aversive. Cognitive dissonance, as a construct that measures a sense of lack of confidence, helps to explain returns reasons beyond pure dissatisfaction since it can happen before performance evaluation of the purchase (Sweeney et al., 1996).

Additionally, individuals are more likely to experience cognitive dissonance in the context of online purchase (Sweeney et al., 2000). Cognitive dissonance theory helps address the continuous evaluation from the decision to purchase and decision to retain or return stages. As the mentioned in the introduction chapter, the online and the offline transactions are different in the sense that a large number of online transactions are not complete until the purchased product/service is delivered (except products that involve readily available digital content) (Park et al., 2015). The final purchase decision consists of two stages: 1) assessing products/services before the purchase through the available information in the virtual environment and 2) assessing products/services through the information that becomes available after the purchase (Cao & Gruca, 2004). Due to the lack of experiential information in the virtual environment, individuals are more likely to

re-evaluate their options in the post-purchase stage. Cognitive dissonance, therefore, becomes an important factor that links the pre-purchase and the post-purchase state.

Cognitive dissonance theory alone does not explain the psychological impact of product returns policy related factors and emotions on the formation of product returns decision. Studies conducted in the past have claimed that cognitive dissonance can lead to negative emotional responses (Hawkins, 1972; Menasco & Hawkins, 1978). This indicates that cognitive dissonance may be an intermediate process of the post-purchase appraisal and product returns may be the coping strategy for dealing with elicited emotions. However, emotions have only been examined as post-action responses (King & Dennis, 2006; Piron & Young, 2001; Schmidt et al., 1999). The role of emotion(s) in the formation of product returns decision has been disregarded. Yet, negative emotions can significantly influence consumer post-purchase behavioural responses such as switching, complaining, and negative word-of-mouth (e.g., Zeelenberg & Pieters, 2004). Wang (2009) found that the likelihood of buyers returning purchased goods under a lenient returns policy is the same as the likelihood of regretting their purchase under a no-return policy. Although the research context of this study is different from that of the present thesis (offline China Market) and the sample size is unrepresentative (student sample) and small (Wang, 2009), this study provides preliminary evidence to show that product returns may be a coping strategy for experienced regret. However, previous research works have not investigated the impact of the chain effect of the post-purchase cognitive and emotional appraisal across pre- and post-purchase stages in the context of online shopping.

2.5 Signalling Theory and Product Returns

Previous studies have used signalling theory to explain the impact of policy related factors on the product returns decision formation. Research has suggested that lenient return policy has a signalling effect on the perceived quality of products (Bonifield et al., 2010; Wood, 2001). For example, complying with signalling theory, Wood (2001) argued that

lenient return policy can reduce the overall decision conflict. Based on signalling theory, lenient return policy should reduce product returns. However, the negative relationship between lenient policy and return intention or behaviour was found insignificant from previous studies (Maity & Arnold, 2013; Powers & Jack, 2013; Wang, 2009). With the encouragement of retailing companies, product returns are accepted as a norm for consumers nowadays (Lee, 2015), therefore, the positive effect of perceived return policy leniency may have diminished. Also, signalling theory does not explain why do consumers return non-defective products in the first place. Alternative psychological theories may provide better explanation in terms of the impact of consideration of policy leniency on product returns. For example, previous studies have suggested that decision changeability reduces the positive evaluation of chosen items (Gilbert & Ebert, 2002).

2.6 Theory of Planned Behaviour (TPB) and Product Returns

Applying TPB, King et al. (2008) suggested that shoppers' perceptions of the ease of carrying out product returns significantly predict return behaviour. The theory states that attitude toward behaviour, subjective norms, and perceived behavioural control, together shape an individual's behavioural intention and behaviours (Ajzen, 2002). However, in the context of online product returns, TPB does not consider one's needs prior to engaging in product returns behaviour, needs that would affect return action regardless of expressed attitudes. For example, one might have a negative attitude towards product returns and perceive a low behavioural control and yet engage in product returning as he's experiencing a huge discrepancy between pre- and post-purchase evaluation. Additionally, the role of emotions in product returns decision formation is overlooked by TPB despite emotions can influence the post-purchase evaluation and subsequent behavioural responses.

2.7 Cognitive Appraisal Theory and Emotions

As discussed in the section highlighting an overview of previous research, research pertaining to product returns in the context of online retailing lacks a consumer-centric theoretical foundation for explaining the underlying appraisal process across the decision to purchase and decision to retain or return stages (e.g., Bechwati & Siegal, 2005; Gbadamosi, 2009; Powers & Jack, 2013). As discussed in the above sections, expectation confirmation theory, signalling theory, and theory of planned behaviour model are inadequate in explaining product returns phenomenon in the online retailing context under current market trends. Although cognitive dissonance as an important construct in the context of online transactions, providing explanation on why do consumers return non-defective products beyond pure dissatisfaction, cognitive dissonance theory alone does not take product returns execution related factors and emotions into consideration.

As seen from the discussion in the introduction chapter, the role of emotion in the product returns decision formation should be taken into consideration. There are two streams of views about emotions and cognitions. Zajonc (1980) believed that it is possible to feel without thinking and preferences (feelings) need no inferences. Zajonc (1980) argued that emotion does not necessarily require cognitive processing and encoding to occur. By conducting a number of experiment, Zajonc posited that affective reactions to stimuli are often the very first responses and they can take place automatically. Slovic, Finucane, Peters, and MacGregor (2002) also suggested that emotion precedes cognitive evaluation and it can be made sooner and with greater confidence than cognitive judgement. The demonstration of mere exposure effect provided evidence for Zajonc's argument. Mere exposure effect is the psychological phenomenon by which people tend to develop a preference for things merely because they are familiar with them (Zajonc, 1968).

Lazarus (1982), on the other hand, argued that emotion or feeling is never totally independent of cognition, even when the emotional response is instantaneous and

nonreflective. He held the view that thought is a necessary condition of emotion. But he concluded that thinking does not have to be conscious and it can be quick, automatic. Lazarus and his colleagues popularized the cognitive appraisal theory to explain coping responses to stressful situations (e.g., Folkman & Lazarus, 1980; Folkman, Schaefer, & Lazarus, 1979; Lazarus & Folkman, 1984). They argued that cognitive appraisal is a necessary as well as sufficient condition of emotion.

Cognitive appraisal is “a process through which the individual evaluates whether a particular encounter with the environment is relevant to his or her well-being, and if so, in what ways” (Folkman et al., 1986, p. 992). Cognitive appraisal theory posits that individuals evaluate encounters through both primary and secondary appraisals. The primary appraisal is the initial evaluation of the situation, which is comprised of an assessment to determine whether the situation is stressful or not. Primary appraisal focuses on the retrospective aspect of the encounter and explains the reasons for which an event or situation is being perceived as stressful or their motives for considering product returns. The secondary appraisal is an assessment of whether a problem can be solved in the near future and directs attention at the prospective aspect of the encounter (Lazarus, 1966).

Cognitive appraisal theory is valuable owing to the fact that it clarifies the underlying characteristics of events/encounters that are assessed or appraised within the context. It explores what, if any, emotions are experienced as a result of the appraisal process and identifies the subsequent behavioural responses (Lazarus, 1991b). Cognitive appraisal theory is considered to be the most suitable theoretical foundation for investigating the product returns issue in the context of online shopping for the following reasons.

First, cognitive appraisal theory provides an explanation of the underlying process of the way product returns decisions are formed. It is a process oriented approach (Folkman et

al., 1986). It is concerned with the individual's dynamic cognitive, affective, and behavioural efforts for appraising and managing a specific stressful encounter (Lazarus & Folkman, 1984). Building a framework with cognitive appraisal theory as the theoretical foundation answers the call of previous research works for investigating the two-decision process in the case of online purchase – the factors that make consumers reverse their decision and return products (Bechwati & Siegal, 2005; Harris, 2010; Mollenkopf, Frankel, & Russo, 2011; Rosenbaum & Kuntze, 2005).

Second, cognitive appraisal theory allows product returns in the context of online shopping to be examined on the basis of a specific context. It is a contextual approach (Folkman et al., 1986). Drawing upon the cognitive appraisal framework, for the first time, this thesis examines the relations between the specific context (three buying situations: unplanned, purchase-for-trial and customer opportunism) and the environment (online retailing setting) of the stressful situations (evaluation discrepancy before and after the purchase decision) in case of product returns (Coyne, Aldwin, & Lazarus, 1981; Folkman & Lazarus, 1980; McCrae & Costa, 1986; Stone & Neale, 1984). Previous studies have suggested that there is a need to investigate the influence of pre-purchase situational factors on product returns and their underlying mechanism (Bechwati & Siegal, 2005; Maity & Arnold, 2013; Powers & Jack, 2013; Seo et al., 2016). To this effect, cognitive appraisal theory can provide useful insights on the way in which initial buying situations affect the post-purchase appraisal process and product returns intention.

Third, cognitive appraisal theory allows the collective impact of both retrospective/primary (factors in the past decisions that induce stressful feelings) and prospective/secondary (factors that facilitate the execution of product returns in the near future) appraisal to be examined simultaneously in the context of online purchase. With product returns behaviour is accepted as a norm in consumers' minds (Dodge, Edwards, & Fullerton, 1996; Wilkes, 1978), the role of consideration of returns policy as well as other

relevant factors that affect consumers' ability to execute the product returns action require re-examination.

Fourth, cognitive appraisal theory allows for the exploration of the previously neglected effect of emotion through the examination of the antecedents and consequences of emotional response in a specific circumstance (Johnson & Stewart, 2005). Emotions are only briefly mentioned in the literature pertaining to fraudulent returns as the affective consequence of fraudulent returns (King & Dennis, 2006; Piron & Young, 2001; Schmidt et al., 1999). However, emotion plays a vital role in influencing the post-purchase behavioural responses (e.g., Zeelenberg & Pieters, 2004).

2.8 Chapter Summary

This chapter presents an extensive literature review of previous literature on product returns and relevant theoretical approaches. To conclude, three main research gaps are identified from the previous studies. First, from a theoretical perspective, previous studies have adopted fragmented theories such as expectation confirmation theory, cognitive dissonance construct, signalling theory, and theory of planned behaviour to provide partial explanation on product returns decision formation. The underlying relationships between the cognitive, emotional, and motivational appraisals of a marketplace encounter were not clearly examined by these fragmented theories. Researchers have called for a process-oriented theoretical framework to explain the underlying psychological process of product returns decision formation (Bechwati & Siegal, 2005; Gbadamosi, 2009; Powers & Jack, 2013; Seo et al., 2016).

Second, although an increasing number of studies have started investigating product returns in the context of online retailing, research pertaining to the two-decision nature in the context of online shopping is unclear (Maity & Arnold, 2013; Park et al., 2015; Rao et al., 2014; Wood, 2001). Online transactions differ from traditional brick-and-mortar

transactions in the sense that online transactions contain two decisions: the decision to purchase and the decision to return or retain (Wood, 2001). Due to limited information access and inability of physical product examination in online shopping context, it is very likely for online consumers to experience cognitive dissonance in the post-purchase appraisal process. Previous research has suggested that the post-purchase evaluations are related with the way in which the decision outcome has been achieved (Inman & Zeelenberg, 2002), indicating the impact of the initial buying situations on the post-purchase appraisals should be taken into consideration (Seo et al., 2016). This thesis, therefore, also seeks to investigate the different appraisal processes caused by the contextual factor - initial buying situations.

Third, as addressed in the above discussions, the role of emotion in the product returns decision formation is overlooked from existing studies. Although existing studies argued that cognitive dissonance is the immediate cause for product returns (Lee, 2015; Powers & Jack, 2013), both cognitive dissonance theory and empirically research have provided evidence to suggest that intense emotions such as regret is more likely to lead to decision reversal (Festinger, 1957; Wang, 2009). Therefore, the role of experienced regret will be examined in this thesis.

The following chapter will provide a discussion of the overall research methodological approach adopted in this study and the research philosophy behind the methodological approach. In addition, the qualitative study will be discussed and key findings will also be highlighted.

Chapter 3 : Methodological Approaches and Exploratory Study

3.1 Introduction

Chapter 2 proposed the integration of cognitive appraisal theory and cognitive dissonance theory as theoretical foundations of this thesis. Despite the fact that merchandise return leads to significant consequences for both retailers and consumers, it is an under-researched domain, especially in the context of online shopping-related research (Bonifield et al., 2010; De et al., 2013; Rao et al., 2014; Seo et al., 2016). Both industry observers and scholars have reported new reasons or behavioural patterns for product returns (Lee, 2015; Morley, 2016; White, 2016). Yet, the underlying salient psychological parameters are still unclear, especially in the context of online retailing. As discussed in Chapter 1, this research investigates the two-decision appraisal process pertaining to the product returns decision formation. Therefore, the initial buying situations that are more likely to lead to product returns decisions should be identified first. Then, the salient appraisal factors in the product returns decision formation process and their relationships will be examined. Furthermore, the different post-purchase appraisal processes under different buying situations will be examined. In order to achieve the research objectives and answer the research questions, two empirical studies appear to be necessary. First, a qualitative study will be conducted in order to gain more insights on the details pertaining to buying situations that have higher chances of inducing product returns. The qualitative study also explores consumers' post-purchase appraisal processes in the online retailing setting and the traditional brick-and-mortar retail setting. However, the focus of this study is under the online context. The offline context is explored in this study only to identify the salient factors in the online context. Following the findings of the qualitative study, a theoretical framework explains the product returns decision formation in the online context will be proposed. This framework will be tested in the second quantitative study.

Bearing the research objectives and approaches in mind, the first part of this chapter will provide an introduction to the research philosophy and the most suitable research paradigm for this thesis. Subsequently, the research instrument, procedures, sampling method, data analysis method, and verification strategies to ensure the rigor of the qualitative study will be elaborated upon in the order of mention. Then, the findings from the qualitative study will be presented, which will be followed by a discussion of the qualitative study in order to impart some insights into the cognitive appraisal process. The findings of the qualitative study will facilitate the theoretical framework development and serve as the basis for experimental scenario design in the quantitative study.

3.2 Research Philosophy

Guba and Lincoln (1994) claimed that “questions of method are secondary to question of paradigm” (Guba & Lincoln, 1994, p. 105). Therefore, this chapter will begin with a discussion regarding the philosophy of research and identify the best suited research paradigm for the study and further lead to the selection of appropriate methods. A paradigm is a set of basic beliefs, values, assumptions, or worldviews that are shared between scientists about with respect to the manner in which problems should be understood (Guba & Lincoln, 1994; Kuhn, 2011; Shapere, 1964). Guba and Lincoln (1994) argued that research paradigm could be characterised by the following three fundamental questions.

- 1) the ontological question – what is reality?
- 2) the epistemological question – what is the nature of the relationship between the knower and that which can be known?
- 3) the methodological question – how can the inquirer go about finding out the things that he/she believes can be known?

3.2.1 Two Approaches of Research Paradigm in Social Science

The abovementioned fundamental questions have led social scientists to split into two main streams of research paradigm: positivism and interpretivism (e.g., Burrell & Morgan, 1979; Giddens, 1984; Guba & Lincoln, 1994). The debate between the use of positivism and that of interpretivism in social science has been enthusiastically participated in by advocates of quantitative and qualitative research paradigms many times over a century (Johnson & Onwuegbuzie, 2004). Quantitative purists (also known as positivists) believe that social science should mirror the procedures of the natural sciences and research should be conducted objectively and independent of the objects of research (Nagel, 1989). Conversely, qualitative purists (also referred to as constructivists and interpretivists) argue that in the domain of human science, researchers should be concerned with understanding (*Verstehen*) as opposed to explaining (*Erklaren*) processes rather than “facts” (Hunt, 1991b).

The two perspectives differ in terms of the nature of the research paradigms. Ontologically, positivists tend to adopt a realist perspective and opine that a single, objective reality exists independent of what people perceive. On the contrary, interpretivists deny the existence of single reality and acknowledge the existence of multiple realities, as they believe reality is mental and perceived (Hunt, 1991b).

Epistemologically, positivists emphasise the identification of causal linkages (Hudson & Ozanne, 1988). The positivist research approach focuses on time-and context-free generalisation and abstraction (Nagel, 1989). On the other hand, the objective of interpretivist research is to understand and interpret the meanings pertaining to human behaviour in a specific context rather than to achieve statistical generalisability and to predict causes and effects (Hudson & Ozanne, 1988).

Methodologically, the positivist approach is normally characterised as exhibiting a preoccupation with operational definitions, objectivity, replicability, and causality (Bryman, 1984). Therefore, the positivist approach usually leads to instruments such as surveys and experiments. For example, in a survey, the concepts can be operationalised with scale items, the distance between the researcher and the respondents ensures the objectivity, replication is possible by employing the same research instrument under different circumstances, the problem of causality has been alleviated by the development of path analysis and related statistical techniques (Bryman, 1984). In contrast, the interpretivist approach is considered to be much more flexible and it focuses on discovering novel or unanticipated findings. Consequently, the interpretivist approach involves different data collection instruments, including observation, focus group, and interviews (Matthews & Ross, 2010).

There are different advantages of adopting either of the approaches. The positivist approach is very useful when it comes to testing and validating existing theories regarding with respect to the manner in which phenomenon occurs, and the data collection process is relatively cost-efficient. Positivist data collection methods are normally standardised and it is easy for researchers to replicate the study on different populations and in varied contexts. Interpretivist approach can normally generate rich and in-depth knowledge pertaining to social phenomenon. It is useful for understanding and explaining complex and contextual factors (Johnson & Onwuegbuzie, 2004).

Both positivist and interpretivist approaches have their own disadvantages. For example, the positivist approach is regarded as being quite inflexible, and the direction cannot be altered once the data collection process has started. It also provides a poor understanding of the social processes and is often unable to explain the meanings people attach to social phenomenon since it focuses on the testing of theory or hypothesis rather than on the development of theory or hypothesis (Johnson & Onwuegbuzie, 2004). In following the

interpretivist approach, the data collection and analysis are often time consuming and complex. The knowledge produced by interpretivist approach may not generalisable for different individuals or other contexts due to the limited sample sizes. Consequently, clear patterns may not emerge from adopting the interpretivist approach (Johnson & Onwuegbuzie, 2004).

3.2.2 A Pragmatic and Compromising Approach – The Realism Paradigm

Table 3-1: Basic Belief Systems of Alternative Enquiry Paradigms

Item	Positivism	Critical Theory	Constructivism	Realism
Ontology	naïve realism - "real" reality but apprehendable	historical realism - virtual reality shaped by social, political, cultural, economic, ethnic, and gender values; crystalized over time	critical relativism - multiple local and specific 'constructed' realities	critical realism - "real" reality but only imperfectly and probabilistically apprehendable and so triangulation from many sources is required to try to know it
Epistemology	dualist/objectivist; findings true	subjectivist; value-mediated findings	transactional/subjectivist; created findings	modified objectivist; findings probably true
Methodology	experimental/manipulative; verification of hypotheses; chiefly quantitative methods	dialogic/dialectical: researcher is a 'transformative intellectual' who changes the social world within which participants live	hermeneutical/dialectical: researcher is a 'passionate participant' within the world being investigated	case studies/convergent interviewing; triangulation, interpretation of research issues by qualitative and quantitative methods such as structural equation modelling

Adapted from Perry, Riege, and Brown (1999, p. 547) based on Guba and Lincoln (1994)

As mentioned in the beginning of this section, research method adoption should be consistent with the research paradigm. The following section provides a discussion pertaining to the research paradigm of adopted in this thesis in order to deduct the most suitable research methodological approach. It is argued that research related to business and marketing should reflect the real-world complexity (e.g., Pettigrew, 1987). In an attempt to address such issues in the domain of marketing research, Borsch and Arthur (1995) have suggested that a combination of objectivist and subjectivist methodologies would be helpful. Perry et al. (1999) proposed that the two approaches can be merged into one approach: a realism paradigm. Table 3-1 summarises four different paradigms on the basis of the fundamental philosophical issues in related to ontology, epistemology, and methodology.

Positivism. As discussed in the earlier section, positivists believe that there is a single apprehensible reality, that can be quantitatively measured and known (Guba & Lincoln, 1994; Tsoukas, 1989). However, this approach is not appropriate in the context of marketing research, which involves humans and real-life experiences, as the positivist approach “ignores respondents’ ability to reflect on problem situations, and act on these” (Robson, 1993, p. 60).

Critical Theory. The second paradigm, critical theory, differs from positivism in assuming apprehensive social realities and incorporating historically situated structures. This paradigm emphasises the reflective assessments and critique of society and culture and, therefore, research inquiries often involve long-term ethnographic and historical studies (Healy & Perry, 2000). Critical theory focuses on assessing and changing society, instead of seeking comprehension and explanation. Nevertheless, in a consumer behaviour or decision-making context, the investigation of “why” and “how” are often quite critical for both scholars and practitioners (Perry et al., 1999). Consequently, this paradigm is also inappropriate for the consumer behaviour context.

Constructivism. Like critical theory, the constructivist paradigm also does not assume this world to be a single reality. Constructivism posits the view that reality actually consists of “multiple realities” that people have “mentally constructed” (Guba & Lincoln, 1994). This approach may be suitable for some research works pertaining to social science and consumer behaviour that are more subjective in nature, such as religion or beauty. Constructivism has been criticised in the context of more general management and marketing research, as this approach disregards the concerns of the important and visibly “real” (e.g., the economic and technological dimensions of business), which is too extreme from a business and marketing perspective (Hunt, 1991a).

Realism. The realism paradigm is believed to be the most appropriate research paradigm in the context of the current research project. According to realism, there is a “real” world to explore although it is only imperfectly apprehensible (Godfrey & Hill, 1995; Guba & Lincoln, 1994; Tsoukas, 1989). It consists of abstract things that stem from people’s mental constructions but exist independent of any one person (Healy & Perry, 2000). Applied to the marketing context, methodologies pertaining to the realism paradigm are considered to be more pragmatic and capable of truly representing “some reality” that lies somewhere between objectivism and subjectivism. Although the second quantitative study adopts the Web experiment, the aim is to replicate the “real” world scenarios. Data analysis of the quantitative study employs structural equation modelling in order to explore the post-purchase psychological process that provokes product returns.

Healy and Perry (2000) summarised a representative range of methodologies on the basis of two main dimensions, namely, theory-building and theory-testing, indicating that there are some methodological approaches that could be undertaken by marketing researchers (see Figure 3-1). Grounded theory is classified under the constructivism paradigm. This research methodology usually begins without relevant reports or consideration of previous literature, and the research is not to be affected by the “outside” reality. In-depth

interviews and focus groups with a certain interview protocol, instrumental case studies, and structural equation modelling (SEM) all fit into the realism paradigm. The fundamental difference between the two qualitative research methods in the case of realism and that of constructivism is well explained in Stake’s (1995) distinction between intrinsic and instrumental case research. The participants’ perceptions in the context of intrinsic case studies are being independently under the constructivism paradigm. On the other hand, these perceptions are explored and aggregated for providing a wider perspective to a reality beyond those perceptions in the instrumental case research under the realism paradigm. The in-depth interviews and focus groups with an interview protocol indicate that the researcher does not start from scratch, and the research seeks to explore the “predetermined outside reality”, which philosophically differ from the constructivist paradigm. In addition, although SEM involves statistical techniques, research works that incorporate SEM usually have a strong theoretical background or are sufficiently understood and ready to be generalised for a large population (Kline, 2015). Therefore, SEM remains relevant to researchers adopting realism.

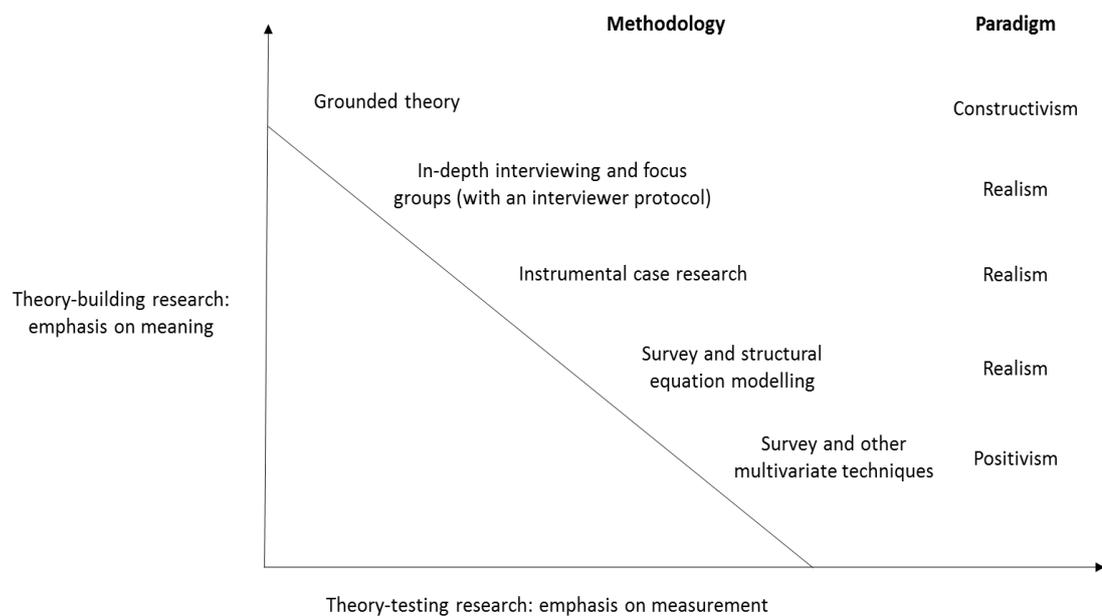


Figure 3-1: Representative range of methodologies and their related paradigms: adopted from Healy and Perry (2000)

3.3 Research Approach – A Mixed Method Approach

As explained and elaborated upon in the above section, this thesis will assume a realism research paradigm. Accordingly, the methodological approach will follow this research paradigm. It is clear that both qualitative and quantitative methodological approaches have their own strengths and weaknesses. In order to counterbalance the weaknesses of both the approaches, the mixed method approach emerged (e.g., Kelle, 2005; Miller & Gatta, 2006; Onwuegbuzie & Leech, 2005). This approach refers to the combination of different qualitative and quantitative methods of data collection and data analysis in a single empirical research project (Kelle, 2005). The fundamental principle of mixed method research is to merge or combine strategies and approaches in a way that results in harmonising strengths and non-overlapping weaknesses (Brewer & Hunter, 1989). Mixed method research is considered to be inclusive, pluralistic, and complementary (Johnson & Onwuegbuzie, 2004). Philosophically, the mixed method research adopts a pragmatic research paradigm, by offering a logical and practical alternative (Johnson & Onwuegbuzie, 2004). Mixed method research combines the deductive (testing and validating of theories and hypotheses), inductive (discovering patterns), and abductive (producing the best explanation) reasoning approaches in a single research project.

The design of the research method should follow the research question in such a way that the researcher can offer the best chance to obtain useful answers (Johnson & Onwuegbuzie, 2004). The previous chapter has provided a detailed literature review of past studies pertaining to product returns, identified relevant research gaps, and proposed the research questions. As mentioned in the last chapter, this thesis aims to develop a theoretical framework pertaining to the product returns appraisal process that examines the post-purchase appraisal factors, cognitive, affective, and behavioural responses. In addition, this thesis also attempts to examine the extent to which the post-purchase

appraisal pathways differ among different buying situations. Moreover, the relationships between the salient post-purchase appraisal factors will be empirically tested.

The literature review indicates that there are several major changing trends with respect to the product returns phenomenon. First, contemporary consumers hold a more tolerant attitude towards product returns (Dodge et al., 1996; Harris, 2010). Liberal returns policies are not a premium service for attracting consumers but rather a force-complied industry standard for staying in the business (Lee, 2015). Second, with the proliferation of online shopping, the function of liberal product returns policies has changed for consumers as well. Consumers treat the lenient returns policies as a post-purchase guarantee nowadays; free returns have converted consumers' bedrooms into the extensions of fitting rooms. In addition, the popularity of online shopping also has given rise to new patterns or reasons of product purchase and returns behaviours, such as e-impulse buying, bulk purchases, opportunistic returns (Lee, 2015; Park, Kim, Funches, & Foxx, 2012; Powers & Jack, 2013). Although these newly observed purchase and return behaviours have been largely reported by the industry observers ("Why returns is the new retail battleground," 2015; Davidson, 2015; *E-commerce and internet use, 5 facts about online retail sales in the UK*, 2015; Morley, 2016), empirical research pertaining to the appraisal patterns of these newly observed purchase and returns behaviours is rather limited (Lee, 2015). Moreover, the underlying psychological mechanism that leads consumers to reverse their purchase decision still remains unclear, especially in the context of online purchase (Bonifield et al., 2010; Wood, 2001). Due to the abovementioned changing trends, it is necessary to conduct a qualitative study first in order to examine the purchase situations that are more likely to induce product returns, returns reasons, post-purchase cognitive and affective evaluations, and subsequent behavioural patterns and to determine the salient factors relevant to the context of online

purchase. Following the findings of the first qualitative study, the theoretical model will be proposed and tested in the second quantitative study.

3.3.1 Mixed Method Procedures

The most prevalent pattern of the mixed method approach is to integrate fieldwork and survey methods. This combination has been advocated by several social scientists (McCall & Simmons, 1969; Reiss, 1968; Sieber, 1973; Spindler, 1986; Vidich & Shapiro, 1955). They have posited that quantitative approaches can make significant contributions to fieldwork, and vice versa. Researchers who adopt qualitative approaches are encouraged to utilise sampling methods and develop systematic and quantifiable structures for coding (Jick, 1979). Survey method is believed to have the advantage of affording greater confidence in the generalizability of results (Vidich & Shapiro, 1955). Conversely, researchers who adopt quantitative methods are encouraged to exploit “the potentialities of social observation” (Reiss, 1968, p. 360). Fieldwork can contribute to survey analysis in terms of results validation, relationship interpretations, and clarification of findings (Sieber, 1973). However, researchers cannot claim valid casual inference with survey method and this method lacks internal validity (Vidich & Shapiro, 1955). Therefore, this thesis adopts the semi-structured in-depth interview and Web scenario-based experiment research techniques as primary research instruments.

Before proceeding to the qualitative study instrument description and discussion, an explanation of the design of procedures pertaining to the mixed methods approach will be provided. There are several factors that needs to be considered in the designing of procedures, namely, timing, weighting, mixing, and theorising (Creswell, 2013). As seen from the discussion in the previous section, the qualitative and quantitative data collection will be conducted in sequence, separated into two phases. The qualitative data will be analysed first in order to explore the topic, as there are some emerging merchandise returns trends and the product returns issue in the context of online purchase is under-

researched. Following the findings of the qualitative study and relevant literature, a theoretical model and relationships between relevant variables will be proposed. The different appraisal processes for different buying situations will also be proposed with evidence from previous studies. A quantitative approach will be employed in order to provide empirical evidence. The data will be collected from a large number of participants through an online crowdsourcing platform. With respect to the weighting, the qualitative study explores the salient factors in the post-purchase appraisal process and identifies the buying situations that have higher chances of causing product returns in the context of online shopping in comparison with the offline setting, serving as a basis for the scenario design in the later quantitative study. The qualitative study will incorporate an abductive (producing best explanation) approach and the quantitative study will implement a deductive approach (testing the theoretical framework). Moreover, the two data sets will be kept separate but connected during the phase of research. The research study begins with a qualitative data collection, and the results of the data analysis will be used to identify some key factors and develop hypotheses for the second quantitative study. The final consideration is concerned with the theoretical perspective. As mentioned in the literature review section, cognitive appraisal theory has already been identified as a key theoretical foundation for this research. It provides a guiding direction for this research project. Nevertheless, as some product returns trends continue to emerge, it would be helpful to conduct a qualitative study first and then refine the theory in order to provide the best explanation for the latest post-purchase appraisal process in the context of online purchase.

Following Tashakkori and Teddlie's (2010) guidance related to the mixed method research, this thesis will use the sequential transformative strategy. It is a two-phase research approach with the same theoretical perspective being applied to the sequential research phases. With respect to this research context, the initial phase would be a

qualitative study, followed by a second phase, a quantitative study that builds upon the earlier qualitative study. The theoretical perspective serves as a guidance throughout both phases of the research study.

3.4 The Appraisal Process Behind Product Returns – A Qualitative Approach

3.4.1 Instrument

The qualitative study adopts the in-depth interview research technique for capturing the underlying post-purchase process with a detailed focus on participants' own narratives (Marshall & Rossman, 2011). In-depth interviews can either be structured or semi-structured (Fylan, 2005). For this study, the semi-structured interview is selected over the structured one. Product returns, especially in context of online retailing, is an under-researched area. The conversation in the semi-structured interviews is free to vary and can change between the participants. The flexibility of semi-structured interviews makes them more suitable for finding out “why” rather than merely “what” and “how” (Fylan, 2005). The semi-structured interview is considered to be the most appropriate research instrument for the first exploratory study for the following reasons.

First, the interview is generative in the sense that new insights, knowledge, or thoughts are likely to be created (Ritchie, Lewis, Nicholls, & Ormston, 2013). As addressed in the first chapter, product returns issue is an under-researched area and new reasons and behavioural patterns have surfaced in terms of the product returns issue (Bonifield et al., 2010; Wood, 2001). The one-to-one in-depth interview allows the researcher to determine the unknown returns motives or the underlying mechanism that have not been investigated in previous research from the perspective of making the purchase decision.

Second, the in-depth interview is especially useful for both exploring and explaining phenomena (Matthews & Ross, 2010). The nature of the first qualitative study is both explanatory and exploratory. Explanatory research seeks to explain why people

experience or understand a social phenomenon in a particular way, and exploratory research aims to find out what people think is important about a certain topic (Matthews & Ross, 2010). The qualitative approach allows the researcher to discover what the participant thinks is important about the research topic and facilitate the emergence and exploration of unanticipated explanations (Matthews & Ross, 2010). One of the objectives of this study is to investigate the factors that consumers believe to be salient and important during the post-purchase evaluation process, especially in the context of online retailing. Moreover, this study also seeks to explore the underlying mechanism in product returns decision formation: why do consumers make the product returns decision? Even though the psychological process behind returns behaviour, especially in the online context, is under-researched, the purpose of this study is not merely to test hypotheses. This study attempts to derive an in-depth understanding of the appraisal process across the pre-purchase and post-purchase decision stages and the meaning they make of the whole process.

Third, in-depth interviews are considered to be a useful technique to understand decision-making at the individual level where personal feeling is involved (Wansink, 2000). It has the primary advantage of providing information about individual's personal experiences, opinions, and feelings in greater detail and gaining an in-depth understanding or arriving at an explanation for behaviour or attitudes (Matthews & Ross, 2010). The topic of product returns is individual-centred rather than group-oriented. The study concentrates on personal decision-making processes, post-purchase evaluations, personal feelings and attitudes. Moreover, as mentioned in the last chapter, the role of emotion has been neglected in previous research studies and the in-depth interview allows participants to recall and share the feelings and emotions that they have experienced. Although product returns behaviour is a relatively simple task, consumers may have different motives for product returns. This research is not designed to explore deshopping behaviour, however,

returns behaviours such as “multiple-item purchase”, or “no longer needed” can also be opportunistic in nature. The in-depth interview provides a comfortable conversation environment and allows participants to share their personal experience when the topics are private, sensitive, or controversial (Ritchie et al., 2013). Consequently, the in-depth interview is chosen over the focus group.

3.4.2 Procedures

Interviews were conducted at the locations most convenient for the interviewees, ensuring an informal and flexible environment in order to allow interviewees to express their experiences in their own way. In order to achieve the best result from each interview, the environment of each interview was kept relatively private, quiet, and physically comfortable. Audio recording of all interviews was done for the purpose of data analysis with the consent of the interviewees, and the duration of the interviews varied from 30 to 90 minutes.

In order to assist the in-depth interviews and effectively attain the research goals, sequential incident technique (SIT) was adopted. SIT is a variation from critical incident technique (CIT), which is equipped with the advantages of CIT but avoids its weaknesses (Stauss & Weinlich, 1997). CIT basically involves gathering certain information or facts from a number of respondents in order to identify events or experiences that are “critical”, either the particularly satisfactory or the especially unsatisfactory experiences of customers in transaction situations (Flanagan, 1954; Roos, 2002). The purpose of SIT is to assemble all the incidents customers perceive in the case of a specific service transaction sequentially in the course of the consumption process (Stauss & Weinlich, 1997).

SIT is adopted in order to give enable the following considerations. First, product returns issue, especially from a consumer-centric perspective with the emphasis on the process

in the context of online purchase, is an under-researched subject (Bechwati & Siegal, 2005; De et al., 2013; Maity & Arnold, 2013; Rao et al., 2014; Wang, 2009). SIT is useful for identifying issues that were not considered in previous literature (Bitner, Booms, & Tetreault, 1990). SIT helps the researcher discover the previously overlooked factors. Second, like CIT, SIT produces unambiguous and concrete information and respondents share a detailed account of their own experiences. Therefore, the information obtained from SIT can easily be translated into specific operational measures (Bitner et al., 1990). One purpose of this qualitative study is to help in building the experimental scenarios for the second quantitative study. Consequently, the detailed incidents provide the best opportunity of finding the most appropriate measures in relation to the later quantitative study. Third, similar to CIT, SIT allows for the exploration of different aspects over the duration of the enactment of an encounter with a product and company (Grove & Fisk, 1997), and this is specifically relevant to company-directed behaviours such as product returns (Edvardsson, 1988). Fourth, unlike CIT, SIT collects not only the extreme (satisfied and dissatisfied) incidents but also the usual, uncritical incidents (Roos, 2002). As discussed earlier, this thesis focuses on the “not dissatisfaction” motives of product returns. SIT, therefore, serves this purpose better than CIT. Last but not least, unlike CIT, SIT adapts to the process character of the transaction experiences and asks participants to share their transaction incidents in accordance with the phases of the process or contact points (Stauss & Weinlich, 1997). As this thesis aims to present the complete picture of the product returns decision formation, SIT improves the understanding of the process character in normal or routine situations.

An incident is defined as an observable human activity that is complete enough to allow inferences and predictions to be made about the person performing the act (Bitner et al., 1990). The sequential incident technique helps in identifying “when”, “why” and “how” product returns occur. The reported incidents in SIT is very similar to that in CIT. For

each incident, participants are asked whether they evaluate it positively or negatively. However, in contrast to CIT, it is not necessary that the incidents are perceived as extreme. As the aim of this study is to explore the underlying cognitive and affective process that lead to product returns decisions, focuses on the stressful incidents (e.g., specific purchase experience that leads to returning products or non-returns in which consumer experiences psychological discomfort). As discussed in the first chapter, stressful incidents need not to be significant or life-changing events. Daily events, such as filling forms, misplacing or losing things, are considered to be stressful for consumers (Lazarus & DeLongis, 1983). The criteria of incidents are (Stauss & Weinlich, 1997) listed as follows:

- Experiencing uncomfortable feelings after purchase from the participant's point of view
- Being a discrete episode
- Having sufficient detail to be visualised by the interviewer

An incident is considered to be critical if the customer was able to recall the incident on being asked about memorable situations of interaction with the retailers (Flanagan, 1954; Roos, 2002). 138 incidents pertaining to post purchase dissonance and product returns were identified from the 42 participants in total.

In order to capture all the aspects of product returns situations, the interviewees were asked to describe:

- Situations where they had doubts/uncomfortable feelings/anxiety about the product or decision
- Situations where they had returned the product
- The reasons for product returns and uncomfortable feelings
- The happenings in situations leading to returns in details
- Their pre-returns and post-returns feelings

This common set of questions were utilised to gain an understanding of consumers' product returns processes. Each interview consisted of two components. The first component aimed to obtain the details of the participants' post-purchase and returns experience. The interviewer asked them to reconstruct the details to the extent that the interviewer could visualise the events. The second component focused on the participants' understanding of their own experience. They were asked to identify the salient factors that contributed to their uncomfortable feelings, returns actions, and future buying behaviour or intentions. Probing questions such as "Can you elaborate on that?", "Can you tell me how you feel about that?", "How did you feel when that happened?", or "Back to your earlier experience regarding with... Can you tell me more about that?" All the interview audiotapes were transcribed verbatim. The initial transcripts were checked against the audiotapes for accuracy, and all discrepancies were rectified.

3.4.3 Sampling

As discussed in the previous section, semi-structured interviews were used to gain understanding of participants' experiences, perceptions, and values with respect to product returns. Therefore, purposive sampling is employed and informants are chosen on the basis of their experience or opinion regarding the research topic (Matthews & Ross, 2010). Purposive sampling focuses on the exploration and interpretation of experiences and perceptions (Matthews & Ross, 2010). In this study, consumers having previous product returns experiences in the UK or consumers having experienced uncomfortable feelings, doubts, or anxiety after purchase decisions were recruited in order to conduct in-depth research on the topic of product returns. The actual number needed from the study is subject to the depth of the analysis and theoretical saturation (Strauss & Corbin, 1998). "Theoretical saturation" implies that there are no additional insights that, can be generated from the data ($n = 42$). The number of interviews often ranges from 20 to 100 (e.g., Myers

& Newman, 2007). Given the fact that the qualitative approach is utilised and that product returning is a relatively simple task, the sample size was deemed adequate.

Among the 42 participants, 60 percent of our sample was female and 40 percent was male, with an average of 30 years in terms of age (ranging from 19 to 59). Since the aim of this study is to explore the cognitive process related to returns behaviour for the general population, the respondents' occupations were varied and included student, financial analyst, lecturer, homemaker, editor, product manager, compensation analyst, HR consultant, and so on. 69 percent of our participants were single, and 31 percent were married. Table 3-2 presents participants' demographic information.

Table 3-2: Participants' Demographic Information

Demographic Information	Number of Interviewees
Age Group	
16-24	12
25-34	22
35-44	4
45-54	2
55+	1
Gender	
Female	25
Male	17
Marital Status	
Married	13
Single	29

3.4.4 Method of Analysis

Reasoning is the process of making sense of things, applying logic in order to draw conclusions, make predictions, or construct explanations (Kompridis, 2000). Three methods of reasoning include the deductive, inductive and abductive approaches. Deductive reasoning moves from a general law to a specific case, and a valid deduction guarantees the rigor of the conclusion (Andreewsky & Bourcier, 2000; Taylor, Fisher, & Dufresne, 2002). Conversely, inductive reasoning begins with observations and proceeds to general law (Andreewsky & Bourcier, 2000; Taylor et al., 2002). Abductive reasoning

(also referred to as abduction, abductive inference, or retroduction) is a form of logical inference that starts from a real-life observation and arrives at a hypothesis that contributes to the observation (Dubois & Gadde, 2002; Kovács & Spens, 2005; Miles & Huberman, 1994).

A deductive research approach is more suitable for testing existing theories than discovering something “new” (Arlbjørn & Halldorsson, 2002). The inductive reasoning approach focuses on generalisations and/or specific manifestations of observations (Kovács & Spens, 2005). As mentioned above, the qualitative study of this thesis is exploratory and explanatory in nature. Thus, the data analysis process followed an abductive reasoning approach (Dubois & Gadde, 2002; Kovács & Spens, 2005; Miles & Huberman, 1994). The abductive reasoning research approach is expected to produce the “best possible explanation” for the set of observations based on the best available evidence (Lundberg, 2000). Abduction helps in determining which aspects of a situation are generalisable and which only remain valid under certain conditions (situational environmental factors, for example) (Lundberg, 2000). The combination of the abductive reasoning approach and CIT aids the researcher in investigating better the causes, feelings, perceptions, actions taken, and changes in consumers’ future behaviours for post-purchase scenarios (Serenko, 2006).

Although the abductive approach generally starts with a real-life observation, it is not unusual for researchers to have a pre-determined theory (Dubois & Gadde, 2002). As addressed in the last chapter, cognitive appraisal is deemed to be the most appropriate framework in explaining the product returns decision formation process. However, as this thesis aims to analyse the two-decision process in the context of online retailing for “not dissatisfied” returns motives, the specific factors within cognitive appraisal theory may require adaptation to a specific context. Therefore, the addition of new factors or theories into the framework may be required in order to attain the best explanation. Cognitive

appraisal theory alone may not be sufficient for explaining the post-purchase cognitive evaluation and psychological process and their behavioural consequences. This leads to an iterative process of “theory matching” or “systematic combining” in order to find a new matching framework or to extend the theory used previously for explaining the underlying psychological paths for returns behaviour and future buying in different decision situations (Dubois & Gadde, 2002; Taylor et al., 2002). Simultaneous data collection and theory development allow the research to formulate a more integrated framework in order to better explain the post-purchase process and the relevant behavioural consequences (Dubois & Gadde, 2002). This process helps the researcher find an integrated framework, that combines cognitive dissonance theory and cognitive appraisal theory.

In accordance with Roos (2002), qualitative content analysis is applied for analysing the data that were gathered from the in-depth interviews. There were three major coding steps in this study. The first step was open coding in which meanings were derived through inductive categorisation which resulted in the creation of 47 sub-dimensions, such as return effort, unplanned buying, purchase-for-trial buying, consumer opportunism buying, regret, cognitive dissonance, and so on. All critical incidents were compared for similarities and differences. All the similar themes were categorically labelled. After the codes were named and the categories were grouped, the data were revisited in order to ensure they were all classified into the best suited category. The coding procedure was repeated until no discrepancies could be found.

The second step is called axial coding. At this step, concepts that described the concrete aspects of the product returns process and situations were merged and aggregated into the next level of conceptualisation. The transcripts were reanalysed in order to further develop thematic categories by abstracting the subcategories into high-order conceptual ones. Similar subcategories were grouped in order to form dimensions, and a

classification scheme was thus developed. As the researcher consolidated the categories, they became more theoretical and more abstract. Sorting the incidence resulted in the creation of six major categories pertaining to product returns process that were labelled purchase situations, post-purchase contextual situations, primary/retrospective appraisal, cognitive dissonance, elicited emotion(s), and secondary/prospective appraisal.

The final step was selective coding. Once the theoretical categories were formed, the way in which different categories are related to the central topic has been explored. Several conceptual frameworks were constructed in order to explain the way in which different categories are related to each other and to the existing psychological theories. Then, the data that were fit were re-examined in order to identify the most suited framework. During this process, it became clear that the previous research related to product returns did not capture the causal association between liberal product returns policies, cognitive dissonance and repeat purchasing observed in the empirical data. Therefore, a new appraisal structure, divided into decision situations, post-purchase contextual situations, primary/retrospective appraisal, cognitive dissonance and elicited emotion, secondary/prospective appraisal, was created.

3.4.5 Verification in Qualitative Research

Morse, Barrett, Mayan, Olson, and Spiers (2002) have proposed that verification strategies should be used by researcher throughout the qualitative research process in order to proactively attain the rigor of a study. They defined verification as “a process of checking, confirming, making sure, and being certain in order to ensure the rigor of a study” (Morse et al., 2002, p. 17). While conducting the inquiry, activities should be carried out in order to achieve the goals of methodological coherence, sampling sufficiency, concurrent data collection and analysis, theoretical thinking and theory development (Morse et al., 2002).

First, methodological coherence implies that the research question should match the research method. As highlighted in the first chapter, the first research question aims to determine the underlying psychological factors for product returns with latest product returns behaviour, especially in the context of online retailing. Another purpose is to find out a more specific research context and pave the way for the next quantitative study for statistical generalisability. The in-depth interview is chosen as the research technique for the qualitative study. The research question matches the intended method and therefore, methodological coherence is ensured.

Second, the sample should consist of participants who best represent or have knowledge of the research topic. Although the participants of the qualitative study belong to one city (Durham), the sample consists of participants with different ages and occupations. The gender is also balanced in order to represent the general UK market. In addition, as this thesis adopts a triangulation approach and the results are generalised in the second phase of this research – the quantitative study. Furthermore, the sampling adequacy is warranted by theoretical saturation and replication from the results of the data analysis (Strauss & Corbin, 1998).

Third, the data collection and analysis should be concurrent in order to determine the dynamic nature of what is known and what needs to be known. As explained in the section related to method of analysis, this study implements abductive reasoning approach. The data from the interview were collected and analysed simultaneously in order to obtain the best explanation for the emerging returns phenomenon.

The fourth aspect is concerned with theoretical thinking. Thinking theoretically requires macro-micro perspectives. As described in the method of analysis section, the coding procedure was repeated multiple times until no discrepancies could be found and the data were reanalysed every time new themes emerged. To ensure the level of intercoder

agreement, a secondary independent coder was also involved before all the themes and categories were finalised and a concordance rate of 100 percent was achieved in the end.

The last aspect is theory development. Moving between a micro perspective of the data and a macro perspective of the theoretical foundations, the preliminary framework was developed from the exploratory study rather than being a simple adoption from previous. The preliminary framework in this research also serves as a template for further development of the theory in the subsequent quantitative research stage.

Other than the verification strategies adopted in this qualitative study, the use of the triangulation approach improves the rigor of this research. Patton (2002) has argued that the use of the triangulation approach can strengthen a study as the combination of different methodological approaches can counterbalance the weaknesses of each other. The first in-depth interview (with an interview protocol) contributes to a “deeper understanding rather than examining surface features” (Johnson, 1995, p. 4). Utilising online crowdsourcing platform, the quantitative study is conducted with a more representative population in terms of sample size and geographically reach. As mentioned in the research paradigm, this thesis adopts the realism paradigm as the actors in the social world do not make their decisions in mechanical ways as in a laboratory setting. Under this research paradigm, the researcher investigates multiple perceptions about a single reality, discovers knowledge of the real world by naming and describing broad, generative mechanisms that operate in the world, makes causal inferences that are not fixed but are contingent upon the specific context. The use of triangulation can create synergy effect by engaging multiple methods (e.g., in-depth interviews and scenario-based experiment) and lead to a more valid, reliable and diverse construction of a “real” world.

3.5 Findings

Following the abductive reasoning approach, the findings from the interviews are summarised in Figure 3-2. The key factors identified from the in-depth interviews includes buying situations, post-purchase contextual situations, primary appraisal, cognitive dissonance and elicited emotions(s), secondary appraisal, and product returns action.

The discussion proceeds with different types of purchase situations, that are frequently mentioned in the interviews in the context product returns. Then, the salient psychological factors pertaining to the post-purchase appraisal process, which lead to product returns are explained.

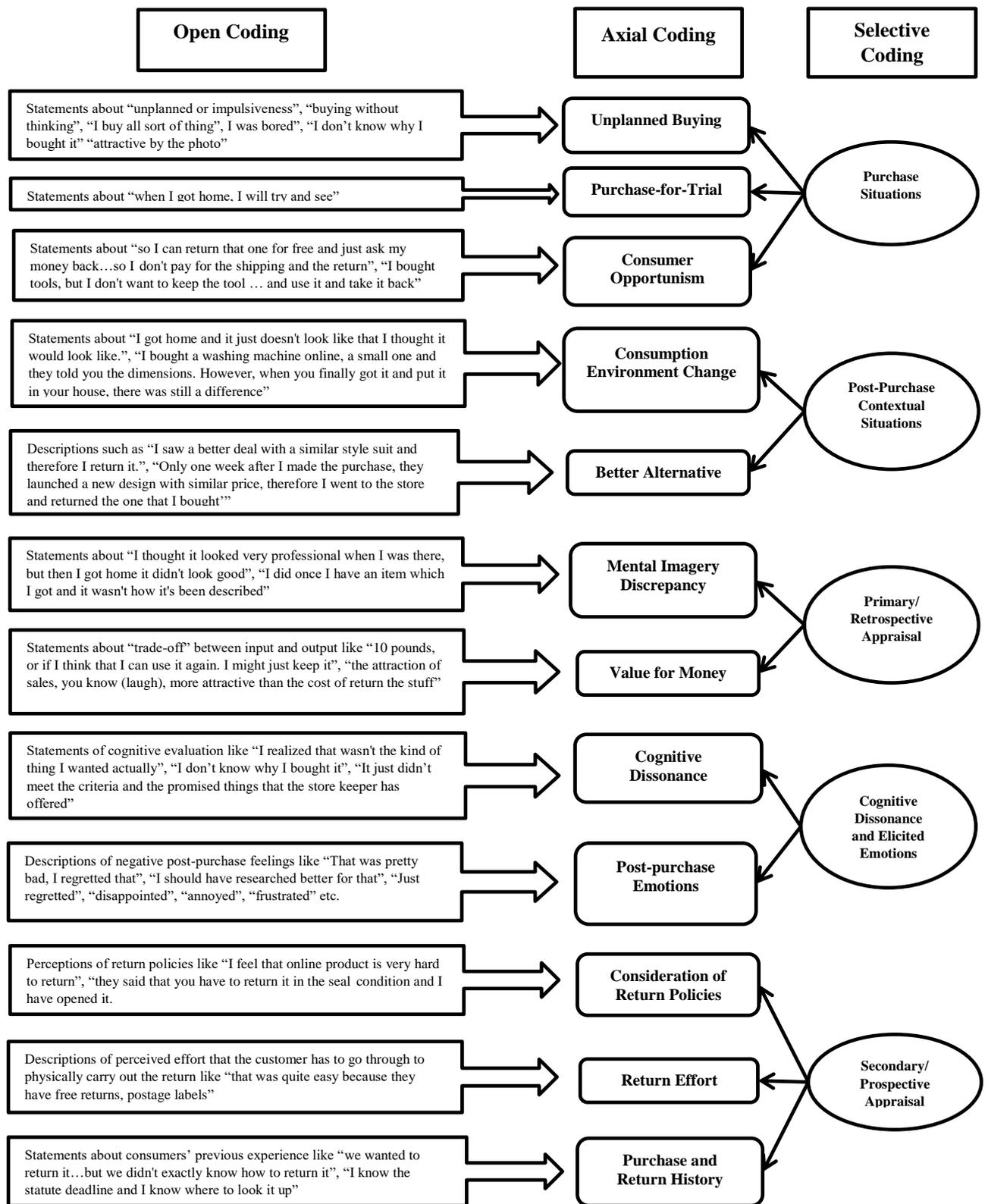


Figure 3-2: Data Analysis Coding

3.5.1 Buying Situations

When the participants were asked to recall their product returns experiences, one of the most frequently mentioned factors was their purchase situations in the initial decision-making stage. Three buying situations are identified in this study – unplanned buying, purchase-for-trial, and consumer opportunism. Although all three buying situations are very likely to induce product returns behaviour, it appears that the post-purchase appraisal processes are somewhat different. In this study, unplanned buying was the most cited cause of product returns. Consumers sometimes plan to make a purchase before they enter a store or browse a retailing website, and sometimes they decide to buy a product during their shopping trips (Bucklin & Lattin, 1991). Unplanned purchase is defined as “a buying action undertaken without a problem been previously recognised or a buying intention formed prior to entering the store” (Engel, 1978, p. 483) as the following informant stated.

“About 70 or 80 percent of items that I bought online was just unplanned buys, mostly because they were on sale and I happened to need them.” (Age 25, female)

From the interviews, unplanned purchases are found to be spontaneous and impulsive and are more likely than planned purchases to cause post-purchase re-evaluation.

“I really wanted that in the store, they only had the displayed one, but I just really wanted it at that moment. But after I got home, I felt very uncomfortable (it wasn't a new one) and when that feeling reached to a certain threshold, I just returned it.” (Age 23, female)

The findings from the interviews suggest that consumers indulge in unplanned buying and they consider unplanned purchase behaviour as a social norm, i.e., it is what people do. Buyers take less buying responsibility, as lenient returns policies reduce their perceived risk and allow them to withdraw their decisions easily.

“...when you think you can return them back later anyway, you will just buy a lot without much consideration and you feel extremely happy about this buying process. Of course, it will be another story if it comes to return them back.” (Age 25, female)

For example, throughout the course of the interviews, participants expressed that unplanned buys often induce certain level of post-purchase regret. People are averse to regret and are motivated to minimise regret (Zeelenberg & Beattie, 1997; Zeelenberg, Beattie, van der Pligt, & de Vries, 1996). This may lead to either a risk-seeking decision (making an unplanned purchase in order to avoid regret due to loss of opportunity) or a risk-avoiding decision (coming up with a solution for reducing the regret from an unplanned purchase). Product returns, therefore, serve as a strategy to revoke unplanned or impulsive decisions and eliminate the post-purchase negative emotions. Previous research has suggested that it is extremely probable for unplanned buying to produce post-purchase regret (Wood, 1998). However, the results from the interviews suggest that consumers also inclined to use external excuses in order to justify their returns behaviours provoked by unplanned purchases, and therefore, regret is often accompanied by disappointment. In the unplanned buying situation, consumers evaluate the chosen alternative more thoroughly in the post-purchase appraisal process.

“I was in a hurry and the store was about to close. It wasn't too expensive, about 50 or 60 pounds. I regretted it right after I came out of the store. It wasn't something that I would use and I bought it in an impulse...He (staff in the customer service) asked the reason for returning. Then I carefully checked the bag and told him, the logo on the bag was crooked.” (Age 24, female)

“That pair of headphones was quite expensive. It was about 300 pounds. It couldn't fold completely. I felt it was faulty. But when I returned it to the store, the employee there told me all of their headphones were designed like that.” (Age 25, female)

The second type of purchase situation that contributes to product returns is purchase-for-trial buying. Competition between retailers is growing fiercer. Many retailers frequently use “no-hassle-return” tactics as a source of competitive advantage (Lee, 2015). In this study, 40 percent of the participants mentioned that they bought products just for physical examination, testing or trying out, due to the liberal returns atmosphere in the UK. Liberal returns policy is a double-edged sword for retailers. The results indicate that purchase-for-trial buying under lenient returns policies can stimulate future buying behaviour. However, with the generalisation of lenient returns policy, the returns rate, especially the online returns rate, is still dramatically increasing. Purchase-for-trial buying helps explain this dilemma. Lenient returns policies give consumers the impression that they can use their bedrooms as their personal fitting rooms with all their favourite accessories or matching clothes at hand, as the following examples revealed.

“And I see this return for free is the same thing. So they send you for free to your place. You try it home, if you do not like, you just return. It is free again, so...things like going to a shop and try it, seems like the same. No, I think it is even better. Because sometimes, you go to a shop and you just do not like it. At home, you try, it might fit, and you have all of your other clothes. You can match it with your other clothes. If you go to a shop, you just have the cloth you wore.” (Age 33, male)

“I found retailers such as ASOS has very accommodating return policy. I buy and return a lot from them. Of course, I did not return fraudulently. It is just they have free return and the return procedure is quite convenient. I simply want to try out.” (Age 28, female)

The last type of buying situation that is more likely to lead to product returns behaviour is consumer opportunism buying. Opportunistic behaviour in the context of product returns is purposeful behaviour where the consumer acts in his/her own self-interest and expects a high probability of success from such behaviour (Joshi & Arnold, 1997).

Consumer opportunism may cause a return to be premeditated from the very point of purchase or may become intentional at the point of return (Hjort & Lantz, 2012; King et al., 2008). Interestingly, this qualitative study found that consumers strategically exploit companies' liberal returns policies when there is a threshold for free benefits, a minimal spending amount for free delivery, for example. Participants reported that they would shop for the minimal purchase limit and then return the unwanted products in order to avoid the delivery charges. As one of our participants specified.

“Another situation that I will return products back is that when you buy online, they have the minimum amount to get free delivery. Sometimes, if I didn't reach the targeted amount, I would purchase more so that I can avoid the delivery fee.” (Age 25, female)

The lenient returns policies seem to be perceived as the rights of the customers and does not really improve the impression of the retailers. Customer opportunism buying/returns behaviour is a grey area of product returns, as it is very difficult to categorise this kind of behaviour as fraudulent returns behaviour. Although consumers may have premeditated intentions of returning the products, they are likely to keep the products that they fancy or feel delighted during the later post-purchase evaluation process. This result is concordant with Lee's study (2005), arguing that the majority of returners are not unscrupulous.

“As I buy online, normally, I go like over the minimum amount, so I can get the shipping for free. Sometimes, I get like three shirts, over the three shirts, I like two, other one, I didn't like very much. So I am going to return that one for free ... So I can return that one for free and just ask my money back. So I don't pay for the shipping or the return.” (Age 33, male)

From the interview results, it is evident that these situations often occur in the Internet retailing setting due to consumers' inability to physically examine the products and obtain experiential information (Wood, 2001). E-tailers also utilise lenient online shipping and returns policies as competitive strategies (Lee, 2015).

3.5.2 Post-purchase Contextual Situations

Previous research has suggested that disconfirming information can affect the subsequent affective and behavioural responses (e.g., Holbrook & Batra, 1987; Luce, Payne, & Bettman, 1999; Zeelenberg & Pieters, 2004). The interviews indicated that environment change, especially from the virtual to the physical, can easily induce post-purchase dissonance/conflicts.

Environment change. Products such as home electronic appliances, clothes, and jewellery are context-dependent. Change in environment may affect the attitude/preference towards the chosen alternative (Robert & John, 1982). For example, consumers may be concerned about whether a mini fridge will fit in their rooms or whether a set of jewellery suit their skin tones. A change in environment may make the purchase less appropriate. For instance,

“I bought a washing machine online, a small one and they told you the dimensions. The best you could do is measuring it with a ruler and imagining the approximate size of it. However, when you finally got it and put it in your house, there was still a difference.” (Age 27, male)

Exposure to better alternative. Participants also shared their returns experiences that were caused by a conflict between the chosen alternatives and the foregone alternatives. Consumers may not necessarily opt for the best alternative, but the discovery of better alternatives triggers in them feelings of discomfort towards the chosen alternative, which

leads to returns behaviour. The alternatives in these examples serve as an internal justification for the returns. For example,

“They asked whether I would like an exchange. I said no. Because right after I bought it I realised that I actually would like to have an advanced one, one with bladder.” (Age 24, female)

“I saw a better deal with a similar style suit and therefore I return it. But I didn’t buy the better one later actually.” (Age 23, male)

3.5.3 Primary Appraisal Factors

Item value and value for money. Product price and monetary value are critical factors that consumers consider when they make purchase decisions. Previous researchers have suggested that high-priced products have a higher likelihood of being returned in comparison with low-priced products, as consumers are more motivated to expend extra efforts to return products if they carry higher monetary values (Anderson, Hansen, & Simester, 2009; Rabinovich et al., 2011; Rao et al., 2014). The findings provided empirical support to this conclusion. For example,

“If it is a major purchase, like a television and it breaks in the first three months, I probably want to return or exchange it straight away. But with something, say, I don’t know, like a quite cheap watch and it breaks within three months, I probably think that it was a cheap watch anyway, I didn’t expect it to last very long.” (Age 26, male)

Consumers often try to minimise the amount of money they invest in obtaining products and try to obtain maximum utility from the product (Levy, 1999). The interviews suggested that most of the interviewees (90 percent) are “value for money” sensitive, and “value for money” can be one of the most critical evaluation criteria that affect their retain-or-return decisions. Participants sought to acquire products at the lowest price and

to spend their money wisely. Highly discounted products (e.g., price leadership) are less likely to be returned (Petersen & Kumar, 2009; Rao et al., 2014) because the relatively high perceived value for money, and consumers will be more tolerable in the case of products that have been bought under huge promotions, and it is less probable for them to experience negative feelings. For example,

“Another reason that will affect my return decision is huge discount. Even if I am not very fond of it, I would feel it is worth keeping.” (Age 28, female)

The item does not have to be expensive in order to get returned. It is all about value for money as the following participant stated,

“I bought a very small cake-baking pan. The picture online was very pretty, but the edge was not even and the material was different from what I thought it would be. It was quite cheap, about seven pounds...they required posting charge for return, but I felt it was the seller’s problem and they gave me a collect plus label...”
(Age 24, female)

This participant did not feel that the product serves the purpose and delivers the value that she expected. Although the item was quite cheap from the participant’s own perspective, she still went through the trouble of contacting the seller and eventually managed to return the item for free.

Mental imagery discrepancy. One interesting factor that becomes visible from the interviews is the mental imagery discrepancy between the time of purchase and time of usage. Biocca (1997, section 5.3) argues people automatically generate a mental model of an external space with the help of the patterns of energy on the sensory of organs to both the physical and virtual worlds. This implies that consumers may automatically visualise the usage situation on the basis of the information that they receive at the time of purchase. Mental simulations can influence people’s thoughts, feelings, and behaviour

(Gilbert & Wilson, 2007; Gilovich, Medvec, & Chen, 1995). Previous studies have suggested that mental imagery can stimulate consumers' purchase intentions, especially in the context of online shopping (e.g., Fiore & Yu, 2001; Laurie & Burns, 1997). However, no prior research study has investigated the impact of mental imagery on the post-purchase evaluation process. In the in-depth interview, participants pointed out that a gap could exist between their imagined perception of the product or usage situation and the actual product. Images of the products can be presented on the web page, but the context of those images has to be imagined by the customers. The familiarity associated with a visual representation can facilitate the mental imagery and processing of information for consumers and make it easier for consumers to visualise the two-dimensional items on the website (MacInnis & Price, 1987). However, this kind of information is always lacking in the remote purchase environment. Mental imagery discrepancy in the remote-purchase environment happens due to consumers' mental expectations, which are formed by their prior experience of, or communications about, the product. For example,

"I bought a washing machine online, a small one and they told you the dimensions. The best you could do is measuring it with a ruler and imagining the approximate size of it. However, when you finally got it and put it in your house, there was still a difference." (Age 27, male)

"As the suit I bought, when I was reading the suit, it was really nice on the screen, but when it arrived, I did not like it. So I returned." (Age 33, male)

Even when consumers shop in traditional brick-and-mortar stores, different retail settings may lead to perceived discrepancy. For example, research has shown that the comfort level of the light that shoppers encounter while buying fruits can affect their assessment of fruit quality, leading to better evaluations if the light is comfortable and lower ratings if it is uncomfortable (Wang, Chen, & Wang, 2009). A latest investigation conducted by

the Daily Mail has found that the mirrors in changing rooms have the power to make customers look as good as possible. This is done, for instance, by adjusting the angles, and the results were striking (Platell, 2015). The discrepancy between the item at the point of purchase and when at home, due to the supporting store atmospherics, may lead to product returns.

“When I got home, I looked at it and I was like “God, I looked like my grandmother...I got home and it just doesn't look like that I thought it would look like.” (Age 31, female)

Mental imagery discrepancy seems to trigger intense emotional responses in consumers, especially in the context of online purchase. In case of distance selling, products are initially tried in customers’ imagination. The intriguing online advertising pictures and attractive “catwalk” videos create the fantasy for consumers seated in front of their computers. However, by offering consumers the chance to indulge in wishful thinking, retailers potentially enlarge the gap between the fantasy and reality for consumers as the following participant stated.

“I find that's disappointing, especially if you are waiting for something and you have ordered in any way for it to come and find it really disappointing if it is not right. Because I will build up in my head in what kind of situation, I am going to wear it. So if it is not right, it's very disappointing.” (Age 19, female)

3.5.4 Post-purchase Cognitive Dissonance and Elicited Emotion(s)

Due to the liberal product returns environment, consumers nowadays return products for reasons beyond pure dissatisfaction and they are more likely to re-evaluate the product after receiving or taking it home (Lee, 2015), especially in the context of online retailing. Online shopping provides consumers a large set of potential alternatives, which easily induces post-purchase psychological discomfort and further motivates consumers to

make returns decisions (Inbar, Botti, & Hanks, 2011). Moreover, when consumers make purchase decisions, they may have multiple objectives (Iyengar & Lepper, 2000; Kramer & Yoon, 2006). For instance, they may want the best quality at the lowest price or they desire both product convenience and performance. The conflicting multiple objectives may lead to post-purchase discomfort (Solomon, Bamossy, Askegaard, & Hogg, 2013).

Change of significance. When consumer re-evaluate their purchase decision, they may have doubts about the necessity of their purchases. Purchase decisions are often goal-directed (Zeithaml, 1988). This means that consumers make purchase decisions in order to fulfil their goals. Prior to the purchase decision, one may have certain expectations of the desired product. However, if the situation changes and the need of use disappears or the product does not fit the purpose, then, the individual may feel that purchase is not suitable. It is not necessary that the chosen alternative is of low quality or defective; the decision evaluation is also subject to the environment or the usage situation. The perceived value may have changed from the time of purchase to the time after the purchase. For example,

“Because it's thin material and we are in the UK and it's about to be winter. And it's long, so it will drag and the summer was almost over, so it will drag. So it will be thin and wet.” (Age 31, female)

“I needed a suit, because I want a new suit. But I don't usually use suits; it's just for parties and stuff. But I didn't like it. Kind of like it was expensive. So let's return it. I got my money and that's fine.” (Age 33, male)

Unplanned purchase can easily trigger a change of significance in consumers' daily purchase decisions. The immediate pleasure and excitement derived from unplanned buying or the items are hard to resist. However, the instant elation at the time of purchase can quickly vanish after the re-evaluation of the perceived value. To illustrate,

“For clothes and shoes, maybe you just made a decision to buy and you regretted it. All I did was that I was wondering why I never had the chance to wear it.” (Age 40, female)

Wisdom of purchase. Participants also shared their returns experiences arising from conflicts between the chosen alternatives and the foregone alternatives. The difference between the change of significance and the case of the foregone alternative is that the former situation is caused by the reduced perception of product utility at different time points, whereas the later situation involves comparison between the chosen and foregone/rejected alternatives. Consumers do not definitely opt for the alternatives that are the best, but if they discover a better alternative, it triggers in them feelings of discomfort towards the chosen alternatives, which leads to returns behaviour. The alternatives cited in these examples serve as an internal justification for the returns. This provides empirical support, suggesting that changeable decisions or openness to the possibility of alternatives can elicit regret. For example,

“They asked whether I would like an exchange. I said no. Because right after I bought it I realised that I actually would like to have an advanced one, one with bladder.” (Age 24, female)

“I saw a better deal with a similar style suit and therefore I return it. But I didn’t buy the better one later actually.” (Age 23, male)

Concern over deal. During the post-purchase evaluation process, consumers sometimes feel that the undesired purchase decisions were made under external influences. The following examples demonstrate that the decision could be affected by the store settings, peers, or website information at the time of purchase.

“The lighting was really good and of course you got the “Beyoncé” of it and you got music and you are having fun of buying tons of stuff. You got one bad apple (Laugh).” (Age 31, female)

“I did not have this kind of clothing before, my friends were there with me, and they said it looked good on me and then I bought it. After I bought it, I suddenly felt that it was not that good.” (Age 23, male)

“I really think something is gotta be good because whatever it says on the website and then when it comes it is actually not good...It looked very good from everything I have seen on the website and when it came, it is just a little bit useless.” (Age 25, male)

Emotion dissonance. The abovementioned examples demonstrate that the post-purchase decisional conflicts are not necessarily into the same as (dis)satisfaction. Oliver (2014) labelled dissonance as the apprehension that precedes (dis)satisfaction. (Dis)satisfaction is reached when the performance of the purchase is compared with expectations of it and it usually concerned with the known performance, whereas dissonance involves unknown outcomes and doubts. Additionally, dissatisfaction usually arises from post-use evaluation, whereas dissonance can be experienced before using the product (Sweeney et al., 1996). In marketing literature, cognitive dissonance has been defined as psychological discomfort (Carlsmith & Aronson, 1963; Elliot & Devine, 1994), a psychologically uncomfortable state (Festinger, 1957), and closely related with stress and anxiety (Menasco & Hawkins, 1978). It is fair to claim that cognitive dissonance has both cognitive and affective components (Sweeney et al., 2000). However, emotion dissonance may not be as strong as the negative emotions such as regret. The psychological discomfort may escalate into intensive emotions such as regret, causing later product returns action.

“I really wanted that in the store, they only had the displayed one, but I just really wanted it at that moment. However, after I got home, I felt uncomfortable (by the fact that it was not a brand new one) and when that feeling reached to a certain threshold, I just returned it.” (Age 23, female)

On the other hand, psychological discomfort could dissipate, evoking the psychological immune system. Consumers may try to focus on the positive aspects of the decision outcomes or attempt to reduce the significance of the purchase, even by modifying the original way of using the products, subject to the magnitude or salience of dissonance. To exemplify,

“There are some clothes that I bought that I never really wear it. I thought that I might wear it someday...I think clothes and shoes, they are just come and go.” (Age 40, female)

“It was 190 pounds. But it's ok; I got it in the sale. The original price was 320 pounds. So I kind of got a good price, but it doesn't really perform well in the Wi-Fi. So that's OK.” (Age 28, male)

“It was something that I bought... it could be useful but not what I need. And now I am still using it and it's just not how it meant to be.” (Age 26, male)

As soon as the purchase decision is made, the negative aspects of the selected alternatives and the positive aspects of the foregone alternatives start becoming apparent for the decision-maker. In other words, the decision-maker directs his/her attention at the dissonance caused by the purchase decision and attempts to reduce the dissonance, no matter how briefly. There is a deliberation or conflict-resolving process for consumers after making the purchase decision. When the psychological immune system fails, the negative emotions become more prominent and lead to further behavioural responses.

Cognitive dissonance is often experienced more frequently in the online purchase setting due to the uncertain nature of the remote-purchase environment (Sweeney et al., 2000).

Negative emotions. From the statements of the interviews, it is observed that the most frequently mentioned negative emotions are disappointment and regret. Regret and disappointment share some common features. For example, both regret and disappointment are generated from the comparison between “what is” and “what might have been”, and they both emerge from counterfactual thoughts (Zeelenberg, Van Dijk, SR Manstead, & der Pligt, 1998a). However, they have a major difference. Regret originates from comparisons between the obtained outcome and an outcome that might have occurred, while disappointment stems from comparison between the obtained outcome and an outcome that was expected (Bell, 1982; Sugden, 1985). Additionally, regret arises from self-responsibility and self-blame (Inman, Dyer, & Jia, 1997). Consumers are able to differentiate regret and disappointment on the basis of their cognitive appraisal processes. External influences, such as misleading advertisement or incomplete product descriptions, are more likely to cause disappointment, and internal influences, such as change of significance or realisation of superior alternatives, are more probable to lead to regret. Nevertheless, one should be cautious that these two prominent post-purchase negative emotions are usually experienced simultaneously. When consumers experience disappointment, the negative cognitive and affective thoughts might elicit the feeling of regret. To illustrate,

“They have picture online which is quite deceiving and when the product came, I was quite disappointed with the bottle-feeding system that I bought.” (Age 35, female)

“I think that's just regret for that one. They probably shouldn't have accepted it. (laugh) They probably should have said no, you bought it. It's your own fault.” (Age 24, male)

“If it doesn't fit, then I will be very disappointing. If I make an impulse purchase, I will feel regret about it. I feel that it is my own fault, but if it isn't, I will just feel unhappy.” (Age 23, male)

3.5.5 Secondary Appraisal Elements

Perceived returns effort. Perceived returns effort refers to the level of perceived effort that the customer has to undergo in order to physically carry out the return, which includes time, fees and, other forms of effort (Janakiraman & Ordóñez, 2012). The majority of the participants (88 percent) revealed that their product returns decisions are largely affected by the perceived returns effort. Convenience, non-monetary costs, and low effort are the three primary factors that cause a consumer to return products more often. For example,

“It was pretty convenient. All I have to do is give it to them. There weren't too many questions asked.” (Age 23, female)

“So, I shop in city centre, I will come back latter anyway. I will come and go every time. So, if you don't like, just throw there.” (Age 31, female)

The findings derived from the interviews show that perceived returns effort is a very substantial factor that affects product returns and sometimes even the turning point of return-or-keep decisions. A participant originally decided to send the item back. However, after taking the returns effort into consideration, she changed her mind.

“So I called and I said could I return it and they said yes. But in the end, it was too troublesome for me to return it.” (Age 40, female)

Results of the interviews suggest that consumers prefer to return to high-street stores (if applicable) for online purchases, as they can obtain immediate responses from the

frontline employees. This implies that consumers may demand a more seamless integration of purchase and returns processes from the retailers. Postage fees also represent a key evaluation criterion while considering whether to return a product. For example,

“In store is convenient because you can just hand over. Online you have to pack the stuff and take it to the post office.” (Age 23, male)

“I look at the cost of returning and the cost of actual product. If there is no much of the difference, I won't bother return it.” (Age 35, female)

The interview results depict that lenient returns policies are considered to be a default setting for consumers. After a long exposure to these policies, consumers generally perceive liberal return policies as their basic customer right. In 70 percent of the cases, participants take lenient returns policies for granted, which encourages purchase decisions without much consideration and deliberation. For example,

“I think that the (liberal) return policy is meant to be exploited. Things such as duvet, if you don't try it, there is no way that you could know whether it is suitable or not.” (Age 26, male)

“If you talk about the UK market, I am not afraid to buy anything because of this return policy. Because I know 90 percent of the shop will do this (no-question-ask return).” (Age 31, female)

The responses from the participants also suggest that the existence of a lenient returns policy makes them more critical at the time of post-purchase evaluation. This is consistent with decision changeability theory (Gilbert & Ebert, 2002), suggesting that changeable decisions actually makes people less happy, as the following participants stated.

“My iPhone got a scratch on it and I was not very happy about it. So, I went to the Apple Store and asked for a new one. I told them that it was really slow and not

very sensitive. I was just trying to pick up some issues with the phone. In fact, I was just unhappy about the scratch. But since their policy allowed, why not?" (Age 23, male)

"I've returned a necklace. I wore it once or twice and then I didn't feel it goes well with me, so I went back to return it. I just feel that they have very accommodating return policy and they would not judge you or anything." (Age 23, female)

Past returns experience and knowledge. Past returns experience refers to the extent to which consumers' have previously engaged in product returns behaviour. Previous research suggested that past behaviour adds independent productiveness over attitude and social norm in the determination of behavioural intention (Bagozzi, 1981; Bentler & Speckart, 1979; Manstead, Proffitt, & Smart, 1983). The interview data suggest that the appraisal processes may differ depending upon the past returns experience. If a consumer has considerable amount of previous returns experience and familiarity with the returns procedures in general, he/she has a higher behavioural confidence level and is more likely to engage in decision reversal rather than other coping strategies when it comes to resolving post-purchase dissonance.

"I think that one time we bought a gift for a friend and we got the wrong size and we wanted to return it. But we didn't exactly know how to return it. So instead of returning it back, we just decided to give it to another friend instead." (Age 33, female)

"So I know the store quite well. So I just go straight in and it was never too busy. So it's usually quite easily to get straight to the till and say this is what's wrong and sort it all out." (Age 24, male)

3.6 Discussion

This exploratory and explanatory study aims at examining the phenomenon of product returns. Three types of buying situations that are more likely to induce product returns have been identified in the interviews and are in accordance with recent academic studies and commercial reports (Chang & Tseng, 2014; Lee, 2015; Powers & Jack, 2013; White, 2016). Salient factors such as additional post-purchase information in terms of change in the environment or better alternatives, value for money, mental imagery discrepancy, different dimensions of cognitive dissonance, post-purchase negative emotions such as regret, perceived returns effort (policy leniency), past returns experience and knowledge have been identified from the participants' responses. Although the in-depth interviews include incidents from both the online and the offline retail retailing context, these factors are more salient in the context of online retailing.

The interview results identified the key factors of the post-purchase appraisal process that follows the structure of cognitive appraisal theory (Coyne et al., 1981; Folkman & Lazarus, 1980; McCrae & Costa, 1986; Stone & Neale, 1984). The formation of product returns decision constitutes both primary/retrospective and secondary/prospective appraisals. The primary/retrospective appraisal involves the reasons for feeling stressful, and the secondary/prospective appraisal refers to the potential of resolving stressful situations (Lazarus, 1966).

Consumers may proactively consider the option of product returns (Seo et al., 2016). Therefore, the initial buying situations may affect the post-purchase appraisal process and the behavioural responses. The interview data suggest that product returns is very likely to be encouraged by three initial buying situations – unplanned, purchase-for-trial, and customer opportunism buying. As previous research related to this area has shown, the elation accompanying an unplanned buy has a high chance of being partially deflated as the functional/economic model kicks in once the consumer is back home (Bayley &

Nancarrow, 1998; Xiao & Nicholson, 2013). Although it is difficult to claim statistical significance in the case of a qualitative approach, the findings suggest that unplanned buys may strengthen the relationship between dissonance and experienced regret, which, in turn, encourage returns behaviour.

In the case of purchase-for-trial buying, consumers exploit lenient returns policies as a way of trying a product. This behaviour is more prevalent in the context of online retailing due to the encouragement of e-tailers and lack of experiential information. Consumers take less-informed decisions and postpone the appraisal process after receiving the item. Most of the time, consumers return the product immediately after receiving it without a careful evaluation. Due to the two-decision nature of online shopping, factors such as value for money and mental imagery discrepancy are very important in the case of online retailing, as these factors are difficult to evaluate prior to physical examination and easy to appraise after physical examination or receiving additional information.

Given the competition in the retail marketplace, it is more probable for consumers to use companies' returns policies in a strategic way for their own benefits. From the interviews data, it is noted that although the opportunism behaviour is premeditated, some consumers still go through the post-purchase evaluation process and make their final returns decision accordingly. In addition, consumers who engage in customer opportunism buying have a more profound understanding of the product returns policies and they perceive the liberal return policies as the norm of the contemporary retailing industry. The perceived leniency does not seem to affect their post-purchase cognitive process too much. The opportunism behaviour is also more likely to occur in the context of online retailing, as consumers can leverage the online purchase returns policy such as free shipping and returns.

As seen from the discussion in the first chapter, the motivation for product returns nowadays is not limited to dissatisfaction (Lee, 2015). Participants of the interviews

support this finding. Despite the existence of quality issues or unintended mistakes, many participants return products because they experience cognitive dissonance and regret. Consumers who experience dissonance and regret are not necessarily dissatisfied with their purchase (Gardial, Clemons, Woodruff, Schumann, & Burns, 1994; Sweeney et al., 1996; Tsiros & Mittal, 2000). Additional information available after the purchase decisions can lead to the experience of lack of confidence or intense feeling of regret (Chang & Tseng, 2014; Tsiros & Mittal, 2000). Therefore, cognitive dissonance and its elicited emotion(s) such as regret are important constructs in explaining the reason for which consumers return products even when they are not entirely dissatisfied with the chosen alternative.

As discussed in the first chapter, the interview results indicate that consumers do make a secondary appraisal when it comes to product returns decisions (Lazarus, 1966). The appraisal consists of consumers' assessments of their ability to deal with problems related to product returns. This study reveals that consumers do not consider the product returns policies in great detail *until* they experience dissonance with the chosen alternative. This is because awareness of product returns policies is seen as a "consumer right" and taken as a norm in the marketplace. Moreover, participants reported that their past returns experiences come into play during their post-purchase evaluation process and influence their final returns decisions. The data from the interviews suggest that consumers with limited product returns experience are less inclined to return products when they experience dissonance or even regret.

3.7 Chapter Summary

The qualitative study provides useful insights into the product returns decision-making framework development. As seen from the discussion in the method of analysis section, the qualitative study adopts an abduction approach, aiming to determine and provide the best set of explanations for understanding the latest observed product returns

phenomenon (Andreewsky & Bourcier, 2000; Taylor et al., 2002). As predicted by cognitive appraisal theory, the product returns decision-making process consists of primary and secondary appraisals (Lazarus, 1966). The qualitative study indicates that cognitive dissonance is an important construct in the post-purchase evaluation, especially in the context of online purchase. The qualitative data suggest that consumers begin considering about the option of product returns after they experience dissonance. The joint effect of cognitive dissonance (appraisal outcome) and the secondary appraisal (ability to cope with the current situation) will elicit post-purchase regret. Regret will trigger the product returns intention. Moreover, the results show that the initial buying situations may influence the later post-purchase appraisal process. Although all these results provide useful insights into the product returns literature, the precise relationships among all the factor within the product returns decision-making process are still unclear. Additionally, it appears that the likelihood of product returns is higher in the context of online retailing. Therefore, the next chapter will propose a theoretical framework of product returns decision formation based on the integration of cognitive appraisal theory and cognitive dissonance theory in the context the context of online retailing.

Chapter 4 : Online Product Returns: A Quantitative Approach

4.1 Introduction

As seen from the discussion in the research gaps section, research pertaining to product returns faces the problem of lacking theoretical foundation for exploring the process of product returns decision formation (Bechwati & Siegal, 2005; Gbadamosi, 2009; Powers & Jack, 2013; Seo et al., 2016). Product returns can be seen as one of the viable solutions for coping with stressful purchases (Lee, 2015). Cognitive appraisal theory is very valuable in terms of clarifying the underlying characteristics of events/encounters that are assessed or appraised within the present context. It explores what, if any, emotions are experienced as a result of the appraisal process and identifies the subsequent behavioural responses (Lazarus, 1991b). Previous studies in the field of marketing have applied cognitive appraisal theory to explain stressful encounters such as service failure (Gyung Kim, Wang, & Mattila, 2010; Stephens & Gwinner, 1998). This research integrates cognitive appraisal theory and cognitive dissonance theory in order to explain the two-stage appraisal process pertaining to product returns in the context of online purchase.

This research study, for the first time, draws upon the cognitive appraisal theory in order to examine the relations between the specific context (initial purchase situations) and environment (online retailing setting) in the case of stressful situations (receiving inconsistent or additional information after purchase). The way in which the stressful situation is perceived and appraised by the individual concerned, the affective response(s) associated with the situation, and the coping strategy adopted (product returns) are explored in this study (Coyne et al., 1981; Folkman & Lazarus, 1980; McCrae & Costa, 1986; Stone & Neale, 1984). Cognitive appraisal theory presents a process-oriented theoretical framework that explains not only how online buying decisions can be stressful for consumers and how they perceive and respond to their online purchase decisions (Coyne et al., 1981; Folkman & Lazarus, 1980; Stone & Neale, 1984), but also why

consumers return products (e.g., to cope with the negative emotion elicited from the post-purchase appraisals), sometimes even before they have had the time to evaluate the performance of the purchased items (Parkes, 1986), and the factors individuals take into consideration in order to adopt measures for dealing with stressful decisional outcome(s) (secondary appraisal).

Coping methods are employed for managing situations considered stressful (Lazarus, 1991a). Cognitive appraisal theory posits that stressful event will be evaluated through the cognitive appraisal process (Lazarus, 1991b). It is important to understand that stressful encounters are not necessarily significant, life-changing events such as death or divorce. Lazarus and DeLongis (1983) claim that the stress created by the daily hassles of life (e.g., misplacing or losing things and filling forms) is a better predictor of psychological stress than the stress caused by major life events. In the case of online purchase situations, consumers may proactively consider the product returns option for dealing with potentially unwanted or regrettable decision outcomes due to the heightened perceived risk and uncertainty associated with online purchase (Grewal et al., 2004; Kang & Johnson, 2009; Seo et al., 2016). In this thesis, the situational factors, specifically, the buying situations, will be examined throughout the appraisal process rather than being treated as an antecedent as the way in which decision outcomes that are derived can affect the later cognitive, affective, and behavioural reactions (Inman & Zeelenberg, 2002).

Consumers experience delay before taking physical possession and examination of the product. The additional information that consumers may receive during the time gap between placing the order and receiving the product may influence consumers' post-purchase evaluation (Chang & Tseng, 2014; Tsiros & Mittal, 2000; Wood, 2001). For example, the item may not fit into the physical consumption environment, better deals/alternatives may surface, the lack of experiential information may cause discrepancy and preferences change (Sweeney et al., 2000; Yoon & Vargas, 2011; Yoon & Vargas, 2010).

When consumers experience these issues during the purchase experience, they may worry about wasted time, effort, and potential transportation costs, parking, shipping costs, restocking fees associated with product returns (Seo et al., 2016). Therefore, contrary to the traditional brick-and-mortar shopping environment, online consumers can easily experience dissonance (Sweeney et al., 2000).

The two-decision process of online shopping makes cognitive dissonance a relevant concept when it comes to post-purchase appraisal, as consumers are more likely to experience inconsistent or conflicting information before and after the purchase in the context of online purchase (Sweeney et al., 2000). Cognitive dissonance is defined as a kind of psychological discomfort experienced by an individual who holds two or more contradictory beliefs, ideas, or values; or is challenged by new information that conflicts with their existing beliefs, ideas, or values (Festinger, 1957). Cognitive dissonance theory, therefore, can explain the inconsistency in the two-decision process in the context of online purchase. As cognitive dissonance can be experienced precedes satisfaction, it helps scholars to explain the reason for which consumers return products even before they have had time to gauge the chosen alternative (Sweeney et al., 1996). Additionally, multidimensional cognitive dissonance consists of internally (wisdom of purchase), externally (concern over deal) attributed dissonance and emotional dissonance. Appraisal theory suggests that blame attribution can affect the appraisal process (Lazarus, 1966). Therefore, the roles of different dimensions of cognitive dissonance in the post-purchase appraisal process are worth examination.

As highlighted in the literature review discussion, the role of emotion has been neglected in the research pertaining to product returns. Bagozzi et al. (1999) and Johnson and Stewart (2005) posit that cognitive appraisal theory as a promising path to explore emotions in the context of marketing research. Coping theory (Lazarus, 1991a; Smith & Ellsworth, 1985) suggests that stressful situations trigger appraisals of events, which, in

turn, affect both affective reactions and the form of coping chosen to manage it. The openness and uncertainty of the online purchase environment (e.g., plentiful product choices and abundant product information for consumers to make comparison or construct “what if” scenarios) provides the right ingredients for breeding the most commonly experienced negative emotion – regret (Grewal et al., 2004; Roese & Summerville, 2005). Although regret and cognitive dissonance were used interchangeably in a few marketing studies (e.g., Chang & Tseng, 2014; Lee, 2015; Saleh, 2012), these two constructs represent opposite effects in psychology literature. The original cognitive dissonance theory states that the experience of dissonance tend to cause increased attractiveness towards the chosen alternative (Festinger, 1957). Such post-decisional “spreading” in the attractiveness of chosen alternatives result in consumers justifying their decisions. As opposed to cognitive dissonance, regret that is elicited from cognitive dissonance leads to preference reversal, which means that individuals will focus on the dissonant elements when they experience regret (Brehm & Wicklund, 1970; Festinger, 1957). Recent studies argue that cognitive dissonance is the immediate cause of product returns and product returns can be considered as the coping strategy for consumers in dealing with cognitive dissonance. However, regret as a negative emotion that motivates future behavioural changes has higher chance of causing product returns (Markman, Gavanski, Sherman, & McMullen, 1993). Utilising cognitive appraisal theory, the impact of cognitive dissonance and regret can be analysed simultaneously in the post-purchase appraisal process in order to better explain the appraisal process that lead to product returns.

Incorporating cognitive appraisal theory and cognitive dissonance theory, the following section will propose a post-purchase appraisal framework of product returns decision formation and identify different appraisal mechanism of different buying situations.

4.2 Primary/Retrospective Appraisal and It's Appraisal Outcome (Cognitive Dissonance)

Cognitive appraisal theory postulates that primary appraisal is a determination of whether the marketplace problem is stressful (Lazarus, 1966). Previous research has explored primary appraisal from the motivational, goal-oriented approach (Watson & Spence, 2007). Motivation can be perceived as the desire for behaviour and the result of unfulfilled needs (Fiske & Taylor, 2013; Pincus, 2004). Research underpinned by motivation theory suggested that the direct causes of product returns are those factors that do not satisfy the consumer's goal-oriented benefits (Petersen & Kumar, 2009; Rao et al., 2014). Existing studies have used dissatisfaction to measure goal incongruence (e.g., Nyer, 1997). However, consumers nowadays return products even before they have had the time to gauge the performance of the products. This makes cognitive dissonance a relevant concept in the post-purchase appraisal process as it can be experienced proceeds (dis)satisfaction (D'Innocenzio, 2011; Lee, 2015). Purchase decisions made in the online purchase environment usually involve higher perceived risks due to the lack of diagnostic information for judgement and consumers are more likely to experience cognitive dissonance (Grewal et al., 2004). Cognitive dissonance can be perceived as a psychological stress or discomfort that results from consumers' lack of purchase confidence (Bell, 1967; Cohen & Goldberg, 1970; Festinger, 1957; Sweeney et al., 2000; Sweeney et al., 1996; Westbrook, 1980). This purchase confidence evaluation process would ideally take place after the purchase decision but before the use of the product (Sweeney et al., 1996). Lee (2015) suggested that consumers return products in order to cope with their post-purchase dissonance. The findings from these studies suggest that cognitive dissonance can explain product returns reasons beyond pure dissatisfaction. However, there are other antecedents of cognitive dissonance need further exploration, especially in the context of online purchase (Powers & Jack, 2013; Sweeney et al., 2000).

In this research, low value for money and mental imagery discrepancy have been identified as the salient factors that induce cognitive dissonance in the context of online shopping.

Bagozzi et al. (1999) argue that goal relevance and goal congruence are two important primary appraisal factors. However, in the context of online purchase, consumers can be goal-directed or exploratory (Moe, 2003). Previous studies have suggested that the top ranked reasons for online shopping include “convenience” and “cost and time savings”. In other words, consumers’ purchase behaviours imply a goal-directed search (Darke & Dahl, 2003; Pechtl, 2003; Sorce, Perotti, & Widrick, 2005; Wu, 2003). Conversely, with less search time and cost, it is more probable for consumers to browse and explore the Internet, without having a specific goal in their minds (Moe, 2003). Even during the product search process, the consumer is often exposed to products other than those they were originally seeking. For example, a good bargain may serve as an external stimulus that trigger unplanned purchase (Xiao & Nicholson, 2013). Retail consumers are “value-driven” (Levy, 1999). Previous research suggested that obtaining a good bargain is one of the primary motives for online shopping (Arnold & Reynolds, 2003), as consumers can experience the joy of feeling like smart shoppers (Chandon, Wansink, & Laurent, 2000). This indicates that *value for money* is a salient evaluative factor for consumers particularly in the context of online purchase. Although most consumers know the value of a product when they buy it, some face greater uncertainty and risk because they could not determine its value at the time of purchase. This thesis differentiates the salient primary appraisal factors with respect to cognitive dissonance. Purchase decisions often involve multiple attributes of a product/service (Iyengar & Lepper, 2000; Kramer & Yoon, 2006), and consumers have a higher probability of integrating the various experienced attributes while evaluating a choice. This is labelled as abstraction strategy (Johnson, 1984, 1988). Abstraction strategy states that concrete attributes that across products/

services are connected to abstract decision criteria in order to facilitate meaningful comparison of the alternatives. Therefore, this thesis posits that the salient primary appraisal factors are those specific cognitions that lead to cognitive dissonance. Park et al. (2015) argued that dissonance results from the comparison between any two relevant aspects regarding with respect to a referent (e.g., the purchase decision); it does not necessarily have to emerge from a comparison of the same specific attributes. In the context of online shopping, a low perceived value for money therefore implies deviation from the online shopping objective (i.e., whether it would be a good match for their needs). Perceived value is defined as consumers' overall assessment of what is received relative to what is given (Zeithaml, 1988). A more widely used definition of value is the ratio or trade-off between quality and price (Cravens, Holland, Lamb, & Moncrief, 1988; Monroe, 1979). The key conflict here is the comparison between "receive" and "pay" rather than price alone. Value for money can be assessed at different stages of the purchase process and even at the pre-purchase stage. Therefore, consumers' value perceptions can be triggered even without the acquisition or consumption of the products (Woodruff, 1997).

4.2.1 Value for Money and Cognitive Dissonance

Getting a good bargain (e.g., price promotion) can enhance consumers' perception of transaction value and act as an external stimulus that provokes purchase decisions (Audrain-Pontevia, N'Goala, & Poncin, 2013). Previous studies have suggested that difficulty in relating physical product qualities and performance differences, and confidence with the performance of the product may lead to dissonance (Cohen & Goldberg, 1970; Kaish, 1967; Westbrook, 1980). Additionally, the cost of purchase, or rather the relative cost of purchase (e.g., constrained by budgets) can also affect cognitive dissonance (Cummings & Venkatesan, 1976; Engel, 1965; Kaish, 1967; Oshikawa, 1969, 1970, 1972). The low perceived value for money results from information asymmetry in the context of online purchase and will therefore lead to the recognition of selecting a

suboptimal alternative under external influence (concern over deal) (Mavlanova, Benbunan-Fich, & Koufaris, 2012).

Utilitarian buying motives such as convenience-seeking, search for quality of merchandise, reasonable price and so on are primary reasons for consumers' engagement in online shopping (Sarkar, 2011). One would expect that when the decision outcome inhibits the shopping goal actualisation (e.g., low perceived value for money from the purchase), consumers will be more likely prone to feeling that they have made an unnecessary or undesirable purchase (wisdom of purchase) (e.g., Folkes, 1984; Griffis et al., 2012).

Consumers obtain hedonic value from feeling good about being savvy shoppers (Arnold & Reynolds, 2003; Chandon et al., 2000). Consequently, low value for money may generate a gap between the pre-purchase emotional state and the post-purchase emotional state and consumers have higher chances of experiencing feelings of stress or discomfort (Zeithaml, 1988). Therefore, this research proposes the following hypotheses.

H1: Low perceived value for money will significantly increase consumers' feelings of a) concern over deal; b) wisdom of purchase; and c) emotion dissonance

4.2.2 Mental Imagery Discrepancy and Cognitive Dissonance

The expansion of e-commerce and development in technology have led marketers and scholars to direct attention at enhancing consumers' online shopping perceptions and experiences (Kim & Lennon, 2010; Li, Daugherty, & Biocca, 2001; Song, Fiore, & Park, 2007). Stimulating mental imagery has been discovered to create a positive impact on consumers' attitudes towards ads, attitudes towards brands and even purchase intention (e.g., Fiore & Yu, 2001; Laurie & Burns, 1997). E-tailers have been employing different tactics for enhancing consumers' mental imagery processing in order to increase purchase rates (Kim & Lennon, 2008). Holbrook and Hirschman (1982) argued that the product is

responsible for stimulating mental events such as pleasurable imagery involving the use of the product for consumers. Therefore, it is reasonable to infer that merely exposing to online product information can evoke mental imagery for consumers. Due to the unavailability of the option of physical examination, consumers in the remote-purchase environment have to make judgments based on the information that they receive from retailers and their mental imagery. Biocca (1997, section 5.3) argued people automatically generate a mental model of an external space with the help of the patterns of energy on the sensory of organs to both of the physical and virtual worlds. This implies that consumers can utilise the information available from the virtual environment in order to mentally construct the unavailable information (e.g., imagining the situations in which they use the item) (Belk, 1996).

The increased sales from the positive effect of the evocation of consumers' mental imagery will boost profits only if product returns rates do not rise significantly. Menasco and Hawkins (1978) claimed that imagery processing can influence both the probability and the valence of the decision outcomes, which, in turn, may lead to inflated expectations and further enlarge the gap between the actual and the imagined outcomes (Anderson, 1983; Oliver, Robertson, & Mitchell, 1993). Mental imagery evoked in the the purchase stage may actually induce imagination disparity in the case of online buyers and eventually lead to product returns. Therefore, this research will investigate the role of mental imagery discrepancy in the post-purchase appraisal process.

Mental imagery discrepancy in the context of online shopping concerns both perceived veracity and mental imagery discrepancy. Perceived veracity refers to the extent to which consumers believe that the product information does not reflect the veracity (Chaouachi & Rached, 2012). When consumers receive the items, even if the product information was not purposefully modified, they may still perceive a relatively low level of product information veracity owing to the change in environment, availability of experiential or

additional information at the decision to keep or return stage. Consequently, it is important to take mental imagery discrepancy into consideration. Mental imagery discrepancy indicates the discrepancy presented in “the activation of stored information during the production of mental images beyond what is provided by the stimulus with reality” (Babin & Burns, 1998, p. 266). Mental imagery is an important factor that affects consumer satisfaction, purchase intentions and consumption experiences (MacInnis & Price, 1987). Therefore, mental imagery discrepancy can affect the appraisal process of decision reversal.

Remote-purchase environment can result in information asymmetry because of consumers’ inability of physical product examinations and sellers’ tactical or opportunistic manipulation of product information on websites in order to attract more customers (Mavlanova et al., 2012). For example, using Photoshop-like software programmes are applied to the online models or professional lighting is used to enhance the colours of products, thereby making the products more attractive. When consumers receive the items, even if the product information was not purposefully modified, they may perceive a relatively low level of product information veracity due to the limited product information or a discrepancy between the mental imagery stimulated at the time of purchase and the reality presented on receiving the item (Anderson, 1983; Oliver et al., 1993). For example, artificial light may cause potential problems, as natural light can make the clothes see-through in the case of thin fabrics and it is very difficult for consumers to detect this from the two-dimensional images on the Internet. Consequently, consumers may feel that they have taken suboptimal decisions under external influences (concern over deal), such as deceptive or incomplete product information.

For context-sensitive products such as personal accessories, furniture, and clothes, the fitness or appropriateness of the item largely depends on complementary products or the consumption environment (Ajanki et al., 2011). In the context of online shopping, the

lack of interactive and experiential product information can increase the likelihood of taking suboptimal decisions (Lurie & Mason, 2007). For example, if a consumer buys a new sofa set online and when the set is delivered, there is a mismatch between the colour of the set with respect to the wallpaper in contrast to what the customer imagined at the time of purchase, the purchase would be deemed unwise. Therefore, mental imagery discrepancy may lead to feelings of having made an unnecessary purchase or an unwise decision (wisdom of purchase).

Moreover, the mental imagery discrepancy may also cause *emotion dissonance*. Mental imagery is believed to effectively trigger emotional responses (Holmes, Mathews, Mackintosh, & Dalglish, 2008). Escalas (2004) suggested that positive affect has a mediating role between mental imagery and consumers' attitudinal response. Zhao, Hoeffler, and Zauberan (2011) claim that the cognitive and emotional processing of mental imagery can influence consumers' product evaluation. For example, if a consumer finds out that a necklace does not suit his/her skin tone in contrast to what he/she has imagined by using the information on the website, he/she may experience a range of emotions, such as anxiety, depression or disappointment. Hence, the following hypothesis is proposed.

H2: Mental imagery discrepancy increases a) concern over deal; b) wisdom of purchase; c) emotion dissonance

4.3 Emotion Elicitation

Emotions have been seen to influence post-purchase behaviours significantly (Bui, Krishen, & Bates, 2011; Lazarus, 1993; Stephens & Gwinner, 1998; Watson & Spence, 2007). Regret plays a vital role in consumer decision-making process as it motivates individuals to make changes in order to prevent themselves from experiencing regret (e.g., Kahneman & Tversky, 1982; Patrick, Lancellotti, & De Mello, 2009). Regret has been

linked with post-purchase behaviours such as switching, repurchase, complaints, negative word-of-mouth (Dutta, Biswas, & Grewal, 2011; Keaveney, Huber, & Herrmann, 2007; Zeelenberg & Pieters, 2004). Regret is a critical emotion when it comes to product returns decision because it reflects the disparity between the initial purchase decision outcome and the best possible outcome (Zeelenberg, Van Dijk, Manstead, & vanr de Pligt, 2000). Wang (2009) showed that the likelihood of buyers returning the purchased goods when the decision is reversible is similar as the likelihood of buyers to experiencing regret when the decision is irreversible. This shows that product returns behaviour is a viable coping strategy for consumers in order to overcome regret when they have the opportunity. Therefore, this research will investigate the role of regret in the post-purchase appraisal process, which forms the product returns decision.

4.3.1 Cognitive Dissonance and Regret as Two Constructs

Although previous studies pertaining to marketing research have used the terms post-purchase dissonance and post-purchase regret interchangeably (Chang & Tseng, 2014; Lee, 2015; Saleh, 2012), social psychologists differentiate these two concepts on the basis of the following aspects.

First, cognitive dissonance is largely related with *cognitions*, although later studies include the emotional component in the measurement (Festinger, 1957; Sweeney et al., 2000), whereas regret is generally defined as an *emotion* related to cognitive judgement and assessment (Kahneman & Tversky, 1981; Zeelenberg & Pieters, 2007). Cooper (2007, p. 9) summarises that the magnitude of dissonance (D_1) can be indicated by the following formula:

$$D_1 = D/(D + C)$$

where D represent the sum of cognitions dissonance with respect to a particular cognition and C stands for the sum of cognitions consonant with respect to the same particular

cognition, with each cognition weighted for importance. A cognition is any “piece of knowledge” a person may have (Cooper, 2007, p. 6). It can be knowledge regarding a behaviour, attitude, or state of the world. Basically, anything that can be thought about is open to the experience of dissonance. Therefore, cognitive dissonance is a concept that focuses on cognitions.

Previous studies on related to cognitive dissonance have also found correlations between cognitive dissonance and anxiety, which suggests that cognitive dissonance is often related with emotion (Hawkins, 1972; Menasco & Hawkins, 1978). Sweeney et al. (2000) included the emotion component in their three-dimensional cognitive dissonance measurement scale.

Regret, on the other hand, has been defined by many researchers as an *emotion* having cognitive involvement. For example, Zeelenberg and Pieters (2007, p. 4) have defined regret as a “comparison-based emotion of self-blame, experienced when people realize or imagine that their present situation would have been better had they decided differently in the past”. Landman (1987a) has defined regret as the sense of sorrow, disappointment, or distress over something done or not done – all emotions. Kahneman and Tversky (1981) have described regret as a counterfactual emotion. Russell and Mehrabian (1977) have also found that regret contains a reliable pleasure/displeasure dimension, which is considered a necessary component of emotion. Moreover, regret is often related with self-reflection and self-appraisal (Roseman, 1996), which indicates regret is a personal experience. From a psychological perspective, the sense of selfhood is related with a “warm” type of self-concept rather than a “cold intellectual self-estimation” (James, 1890, p. 323). Past psychology and psychiatry-related research suggested that the self is an intrapsychic construction that consists of multiple self-representations and their related *affective* characters (Kernberg, 1975).

Kernberg (1975) argued that the concept of self is always constituted of a mix of affective and cognitive components. Therefore, regret is an emotion, but it contains a cognitive process of memory, judgement, and assessment of one's decisions.

Second, cognitive dissonance measures a consumer's lack of confidence and implies a *sense of doubt* in the matter of the purchase (Hunt, 1970; Sweeney et al., 2000; Sweeney et al., 1996), whereas regret is a more intense emotion that implies the *acknowledgement* of undesirable decisional outcomes (Brehm & Wicklund, 1970). For instance, in Hunt (1970)'s study, he used items such as "There is considerable doubt in my mind as to whether I should have made my purchase in this store" or "I should have spent more time in shopping around for this appliance" to measure regret. These declarations represent consumers' post-purchase doubts. Similarly, in Sweeney et al.'s (2000) measure, they used items such as "I wonder if I really need this product" or "After I bought this product I wondered whether there was something wrong with the deal I got". These statements capture the sense of doubt that is results from the post-purchase decisional conflicts. Other researchers have even argued that cognitive dissonance involves a more malleable and general heightened state of arousal. It does not necessarily have to be aversive (Cooper et al., 1978; Rhodewalt & Comer, 1979).

On the other hand, regret is the most intense negative emotion and the second most frequently experienced emotion (Saffrey, Summerville, & Roese, 2008). It is a very prevalent and painful cognitive emotion (Saffrey et al., 2008; Sugden, 1985). Festinger (1964) revisited his earlier arguments regarding the post-decisional process, which de-emphasised the defensive attitude changing mechanism, and argued that an increase in the prominence of dissonant thoughts would lead to the experience of regret. This indicates that regret is stronger than cognitive dissonance. It is a relatively intense and aversive emotion associated with the higher-order cognitive process that expedites

decision reversal and it represents a failure to rationalise or justify one's prior behaviours or decisions (Landman, 1987b).

Third, when cognitive dissonance is experienced, the individual is *motivated to engage in cognitive manoeuvres* in order to justify the decision (Cooper et al., 1978; Festinger, 1957), whereas regret is shaped by behavioural-focused counterfactual thinking that *motivates decisional reversal* (Pligt, Zeelenberg, & Manstead, 1998; Zeelenberg et al., 1998b).

Kahneman and Tversky (1982, p. 170) argue that regret is a “special form of frustration in which the event one would change is an action one has either taken or failed to take”, which implies one's desire to change the current situation. Counterfactual thinking is the imagination of alternatives to reality (Kahneman & Miller, 1986; Kahneman & Tversky, 1982). Regret is often related with upward counterfactual thinking such as “what could have been” (Ritov, 1996; Roese, 1997). Although the upward counterfactual thoughts may lead to feelings such as sense of failure and inadequacy (Festinger, 1954), devalue the factual outcomes, and make people feel worse about themselves (Taylor & Schneider, 1989; Wells, Taylor, & Turtle, 1987), these thoughts can stimulate a desire for something better and consequently, create motivation for further betterment of the current circumstances in the future (Markman et al., 1993). Consequently, consumers are more likely to adopt an active problem-solving coping strategy (e.g., product returns) when they experience regret in order to resolve stressful situations (Patrick et al., 2009). Regret serves as a motivational kick that provokes individuals to improve their current circumstances through revision of past decisions or adoption of corrective action that would lead to further improvement (Zeelenberg & Pieters, 2007).

Cooper and Fazio (1984) argued that dissonance can be divided into two components: “dissonance arousal” and “dissonance motivation”. They suggested that dissonance

reduction (attitude change) will occur if the decision outcome is perceived to be aversive and the decision-maker needs to accept responsibility for the decision as predicted by the dissonance theory (Festinger, 1957). Other studies also suggested that the decision must be irreversible in order to trigger dissonance reduction (Festinger, 1954; Korgaonkar & Moschis, 1982; Oliver, 2014). However, due to fierce competition, retailers usually offer lenient returns policies in order to lure in consumers (Lee, 2015), leaving the opportunity for consumers to revoke their initial decisions. In addition, consumers nowadays are faced with an overwhelming number of alternatives before and after they made the purchase decision, especially in the remote-purchase context (Iyengar & Lepper, 2000; Kramer & Yoon, 2006). The decision outcomes may not necessarily be aversive. It could merely be the conflicts among the product attributes or foregone alternatives (Lee, 2015). A major premise of cognitive dissonance theory is that individuals prefer to be in harmonious or consistent states. The liberal returns environment provides choices for consumers to achieve harmony – they can either adopt cognitive manoeuvre or problem-solving coping strategies, such as product returns. Consequently, when consumers encounter conflicts regarding their decisions in the context of online purchase, they are likely to experience cognitive dissonance, but not necessarily trigger cognitive reduction through attitude change.

4.3.2 Cognitive Dissonance and Regret

Festinger (1954) suggested that intensified cognitive dissonance can elicit regret and motivate individuals to change their decisions. Previous studies pertaining to cognitive dissonance have discovered correlations between cognitive dissonance and anxiety, which suggests that cognitive dissonance may elicit emotional responses (Hawkins, 1972; Menasco & Hawkins, 1978). In this study, all three dimensions of cognitive dissonance are expected to induce the feeling of regret, although regret is often associated with responsibility (Frijda, Kuipers, & Ter Schure, 1989). Connolly, Ordóñez, and Coughlan

(1997) provided empirical evidence that shows that regret and responsibility are not related. Taylor (1985) argued that regret can be felt without being self-responsible. Solomon (1976, p. 349) proposes that “In regret, one does not take responsibility, blaming whatever disappointment is involved on “circumstances beyond one’s control.”” Additionally, though concern over deal results from externally attributed dissonance, consumers are still the ones who make the final purchase decision. Therefore, concern over deal is expected to lead to the experience of regret.

With respect to the wisdom of purchase, the gap between what the consumer gets and what the consumer could have got may result in self-doubt and low purchase confidence and further develop into regret (Nygren & White, 2005). Accepting responsibility for the poor decision outcome leads to the experience of regret (Simonson, 1992). Online purchase usually involves higher perceived risk and suboptimal decision outcomes are predicted (Häubl & Trifts, 2000; Schlosser, White, & Lloyd, 2006; Van der Heijden, Verhagen, & Creemers, 2003).

This research distinguishes emotion dissonance from regret. Emotion dissonance is a set of mixed uncomfortable feelings without extensive cognitive evaluations, stemming from the gap between the pre-purchase and post-purchase stages. The purchase decision usually evokes positive feelings (Sweeney & Soutar, 2001). When the consumer is exposed to disconfirmation information, it is normal to experience a discrepancy between the feeling at the time of purchase and that after the decision outcome is appraised. Mere exposure to the basic or initial characteristics of decision outcomes such as value for money and imagery discrepancy, can stimulate instant emotion dissonance. On the other hand, strong negative emotions such as regret require more deliberate cognitive processing, critical judgement and induction (Landman, 1987b). When the emotional gap intensifies to a certain threshold, the aversive feeling of regret will be elicited (Festinger & Walster, 1964).

As discussed at the beginning, this research focuses on post-purchase evaluation other than (dis)satisfaction. It should be noted that regret is a different concept than satisfaction. The reference points for regret and satisfaction are different, that is, satisfaction is internally referenced (the expectation of the chosen alternative) and regret is externally referenced (the performance of the forgone alternative) (Tsiros & Mittal, 2000). Additionally, regret is related to choice, whereas satisfaction is related to outcomes (Gardial et al., 1994).

H3: a) Concern over deal; b) wisdom of purchase; c) emotion dissonance is increases experienced regret

4.4 Primary Appraisal and Returns Likelihood: Cognitive Dissonance and Regret as Serial Mediators

Building upon the cognitive appraisal theory, a process-oriented model reflecting the way in which a marketplace problem will be perceived and appraised by the individual concerned, the affective responses associated with the marketplace problem in the context of online shopping will be developed (Lazarus, 1966; Lazarus & Folkman, 1984). The post-purchase appraisal requires the processing of relevant stimuli (Lazarus, 1991a), and the evaluation of relevant stimuli will lead to appraisal outcomes and further elicit negative emotion(s) (Yi & Baumgartner, 2004) and finally form behavioural responses (e.g., returns decision) (Smith & Ellsworth, 1985).

Individuals spontaneously think about the way in which an outcome could have turned out differently, and they mentally mutate one or more aspects of a past event that led to the decision outcome (Byrne & McEleney, 2000). Regret is elicited from upward counterfactual thinking, that is, focuses on the way in which the situation could have been better (Roese, 1997). Additional information that becomes available after the purchase decision creates a difference between imagined decision outcome and reality or a possible

better alternative and can, therefore, lead to regret (Tsiros & Mittal, 2000). Existing research has suggested that the intensity of regret depends on the magnitude of cognitive dissonance (David Clarke & Mortimer, 2013; Festinger, 1954). With an overwhelming number of available choices, it is easier for consumers to experience post-purchase regret than dissatisfaction (Schwartz, 2004). Cognitive appraisal theory suggests that internally attributed emotions are less likely to evoke direct problem-solving coping strategy (Stephens & Gwinner, 1998). Although regret is often associated with self-responsibility (Zeelenberg & Pieters, 2007), it is shaped by behavioural-focused counterfactual thinking (Pligt et al., 1998; Zeelenberg et al., 1998b). Consequently, consumers are more motivated to reverse their regrettable decisions when they have the chance. Therefore, experienced regret motivates future betterment and boosts product returns likelihood (Markman et al., 1993).

Hence, this research argues that undesired primary appraisal will trigger cognitive dissonance. Intense cognitive dissonance will elicit regret and finally motivate consumers to take product returns decisions. Indeed, the adoption of cognitive appraisal theory and cognitive dissonance theory as the theoretical foundations for this study suggests the potential for these multiple serial mediation relationships (Lazarus, 1966; Lazarus & Folkman, 1984). The relationships between primary appraisal (value for money and metal imagery discrepancy) and cognitive dissonance and the relationship of cognitive dissonance with regret have been established in the primary appraisal and emotion elicitation sections. Hence, this study argues that the impact of primary appraisal on returns likelihood can be explained by the serial mediating effect of cognitive dissonance and regret. Accordingly, the following hypotheses are proposed.

H4a: Value for money will indirectly influence returns likelihood through causally linked multiple mediators of concern over deal and regret.

H4b: Value for money will indirectly influence returns likelihood through causally linked multiple mediators of wisdom of purchase and regret.

H4c: Value for money will indirectly influence returns likelihood through causally linked multiple mediators of emotion dissonance and regret.

H4d: Mental imagery discrepancy will indirectly influence returns likelihood through causally linked multiple mediators of concern over deal and regret.

H4e: Mental imagery discrepancy will indirectly influence returns likelihood through causally linked multiple mediators of wisdom of purchase and regret.

H4f: Mental imagery discrepancy will indirectly influence returns likelihood through causally linked multiple mediators of emotion dissonance and regret.

4.5 Secondary/Prospective Appraisal

Secondary appraisal focuses on the prospective aspect of the appraisal, which is an assessment of whether a problem can be solved in the future (Lazarus, 1991a). It is concerned with the calculation of one's ability to cope or deal with the marketplace problem or change the situation (Lazarus, 1966). Previous studies have discovered that agent or attribution of blame could affect the adaptation of coping strategies in the secondary appraisal stage (Nyer, 1997; Stephens & Gwinner, 1998; Yi & Baumgartner, 2004). For example, attributing blame to the firm can lead to complaint behaviour, negative word-of-mouth, and brand switching if service failure is interpreted as situational (Folkes, Koletsky, & Graham, 1987; Richins, 1983). However, as discussed in the first chapter, due to the liberal returns environment, consumers perceive product returns as a market norm and product returns reasons are not limited to defective products or dissatisfaction anymore. This implies that the role of blame attribution in the post-purchase appraisal process is diminishing. For example, Ruth, Brunel, and Otnes (2002) found that the appraisal combination of agency, controllability and fairness only explains

5.4 percent variance in consumption emotions, which is not a very significant impact. The importance of fairness or attribution of blame in the post-purchase appraisal process is declining, even in the case of post-returns spending. Bower and Maxham III (2012) observed that neither the positive consequences of free returns nor the negative consequences of fee returns were reversed when consumer perceptions of fairness were taken into account. In addition, as mentioned previously, this research project investigates the impact of the multidimensional cognitive dissonance, which already takes blame attribution into consideration (Sweeney et al., 2000).

Existing research pertaining to the secondary appraisal also highlights factors such as power and modifiability (Frijda, 1987; Roseman, 1991). Power is concerned with consumers' beliefs of being in a position of strength or weakness (Roseman, 1991). Modifiability indicates whether the marketplace event is modifiable or not (Frijda, 1987). From 13th June 2014, the Consumer Contract Regulations, which implement the Consumer Rights Directive in UK law, has come into effect. It gives online purchase customers the right to cancel orders for goods within 14 days from the day that they receive the goods (Consumer contracts [information, cancellation, and additional charges] regulations, 2013), which used to be seven days (The Distance Selling Directive 97/7/EC). Some companies even encourage product returns as a part of their competitive marketing strategy (Lee, 2015). Additionally, there are no consequences for attempting to return products for literally any reasons other than shoplifting (King et al., 2008). For example, Mail Online recently reported some of the most ridiculous reasons for product returns nowadays and one of customers returned a cat toy that clearly states "30-minute auto shut-off" on the package on the grounds that it "stopped working after 30 minutes" (Elliott, 2016). The industry data showed that when it comes to product returns, it does not matter the situation can be modified or not. It is only about the extent to which the decision can be changed in accordance with consumers' own perceptions. Therefore, this study focuses

on consumers' own consideration of policy leniency, knowledge of return policy and past returns experience and the way in which these factors affect product returns in the post-purchase appraisal process as deliberated in the literature review.

4.5.1 Secondary/Prospective Appraisal and Regret: A Decision Changeability

Perspective

Cognitive appraisal theory posits that a situation/ event/stimulus will be further appraised if it is perceived as stressful and requiring some form of coping strategy (Watson & Spence, 2007). Previous studies have not reached a consensus regarding with the position of secondary appraisal in the cognitive appraisal process. For example, Smith and Ellsworth (1985) have investigated the effort after emotion elicitation, indicating that coping should happen after an initial cognitive appraisal and its associated emotional response. However, Stephens and Gwinner (1998) suggested that the stress level depends upon the coping potential in the context of a dissatisfying marketplace problem. Lazarus (1991a) argued that the primary and secondary appraisal could happen simultaneously and be interactive. One explanation for the inconsistent findings could be that the cognitive appraisal process is situational and environment-dependent (Johnson & Stewart, 2005; Parkes, 1986). By adopting a mathematical analytical model, Davis et al. (1998) have suggested that consumers are likely to return the product if the residual consumption value after trial is less than or equal to value obtained by the consumers from claiming the refund. This implies that consumers will first appraise the salient factors of the decision outcome and then consider their ability to execute the product returns action. Therefore, this thesis argues in the context of online purchase returns action, individuals start the secondary appraisal process once cognitive dissonance is aroused. The cognitive dissonance and secondary appraisal process together contribute to the experienced regret and further lead to product returns. This study adopts a different perspective for viewing secondary appraisal in the context of online product returns. Past studies have

investigated the role of reversibility in decision-making (Seo et al., 2016; Tsiros & Mittal, 2000; Wang, 2009; Wood, 2001), splitting decisions into either reversible or irreversible categories. However, under the encouragement of retailers, consumers nowadays can easily return unwanted products (Johnson, 2003; Lee, 2015; Stock, Speh, & Shear, 2006), and it is rarely the case that consumers are unable to return products in the context of online purchase due to customer legal protection (Consumer contracts [information, cancellation, and additional charges] regulations, 2013). Rosenbaum et al.'s (2011) findings suggested that inconvenience and time spent on returns can prevent consumers from returning products. Therefore, instead of focusing merely on whether the decision can be changed or not, this research project focuses on factors that contribute to the feasibility of reversing the decision (product returns) in the secondary/prospective appraisal, such as consideration of returns policy and knowledge of returns policy.

Individuals generally prefer to take decisions that are changeable (Gilbert & Ebert, 2002). For instance, many people are inclined to live with their partner for years before getting married; companies offer temporary contract graduate schemes for graduates; consumers are willing to pay premium rates for post-purchase guarantees or pay extra for hotel reservation cancellations. This is because individuals perceive the unchangeability or irreversibility as a threat to their decision of freedom (Brehm, 1966) and as a result, they are willing to pay more to sidestep from this type of decisions. However, most people do not realise that changeable decisions actually make them less satisfied (Gilbert & Ebert, 2002).

Myers (2001) has suggested that increased availability and acceptability of divorce should have increased the average satisfaction with marriage, after taking the least happy couples out of the data set. Nevertheless, Myers (2001) has noticed that satisfaction with marriage in The US has actually decreased. He proposed that this may be attributed to the changeability of marriage. Several studies have provided empirical evidence to support

the notion that the ability to change the decision actually breeds regret from different perspectives (Gilbert & Ebert, 2002; Gilovich et al., 1995; Iyengar & Lepper, 2000; Roesch & Summerville, 2005; Wrosch & Heckhausen, 2002).

One of the reasons for which changeable decisions increase regret is that they hinder the activation of individuals' psychological immune system. Frey, Kumpf, Irle, and Gniech (1984) conducted an experiment to test whether there is a change in the attractiveness of decision alternatives with relation to decision reversibility and time. Thirty minutes after the decision, the subjects from the irreversible group scored higher on the decision satisfaction scale than the subjects who knew that they could still reverse their decisions. The results showed that decision reversibility restrains individuals' ability to subjectively optimise the chosen outcome over time. People who keep their options open may find it is more difficult to initiate their mental reconstructions for justifying their current decisions. Similar results were also found in Gilbert and Ebert's (2002) experiments.

Changeability does not merely imply that the decision can be remade but rather an opportunity for changing one's mind and the accessibility to infinite outcomes (Roesch & Summerville, 2005). Iyengar and Lepper (2000) examined the impact of the number of choices on consumers' satisfaction, frustration and regret. The results showed that the likelihood of purchase and satisfaction were attenuated when participants were given a larger set of product options to evaluate and select from (e.g., 24 different flavours of jam). They also found that participants who were offered a large number of choices felt more frustration than the ones who were offered fewer choices (e.g., six different flavours). In addition, Iyengar and Lepper's (2000) study also included the measurement of regret in the later part of their study. Participants belonging to the extensive choice group reported that they were feeling more dissatisfied and having more regret about the choices they had made than the participants belonging to the limited choice group. Extensive choices increase the perceived opportunity, which, in turn, leads to increased

level of regret. The liberal product returns environment does the same thing to consumers. Being able to return unwanted products freely implies accessibility to several possibilities, which generates upward counterfactual thinking that leads consumers to feel worse about their current choices. The following discussion explains the cognitive mechanism responsible for the idea that perceived opportunity or susceptibility to change leads to regret.

From a motivational perspective, decisions can be perceived as goals that need to be fulfilled or attained (Liberman & Förster, 2006). Previous research pertaining to both cognitive and social psychology posited that threat motivational states, such as needs, goals, intentions, and concerns, enhance the accessibility of motivation-related constructs (Förster, Liberman, & Higgins, 2005; Wyer, 2014). The enhanced accessibility of goal-related concepts contribute to effective pursuit of goal (Goschke & Kuhl, 1993; Kuhl, 1987). The accessibility of goal-related constructs is claimed to persist as long as the pursuit of the goal is active (e.g., Goschke & Kuhl, 1993). This implies that consumers will actively look for relevant information until they fulfil their objectives. The enhanced accessibility of goal-related constructs is conducive and easily leads to the detection of those stimuli in the environment that are necessary for goal attainment (e.g., Gollwitzer, 1999). For example, when the individual has a goal of listening to music, the related concepts, such as where to find the music (e.g., BBC Radio or Apple Store) or the devices that can be used to play the music (e.g., smartphones), will be automatically activated in order to achieve the intended goal. The accessibility of goal-related constructs will be reduced or inhibited until the goal is attained (Liberman & Förster, 2000; Marsh, Hicks, & Bink, 1998). When a decision is still changeable, the goal to take a decision is presumably not yet entirely fulfilled (Bullens, Van Harreveld, & Förster, 2011). As a result, decision-related constructs will remain accessible and relatively active until the decision becomes irreversible (Bullens et al., 2011). The accessibility means that the

decision-maker has hypothetically constructed possibilities and remains more occupied with thoughts of improving the current decision and reaching the ultimate satisfactory goal. This should motivate decision-makers to remain sensitive about the appealing characteristics or features of the foregone but available alternatives, further inducing feelings such as regret, and further motivating them decision-makers to engage in decision reversal behaviour.

From a counterfactual thinking perspective, existing research has found that negative emotions may result from counterfactual thinking (Roese, 1997; Roese & Olson, 1995). Counterfactual thinking, literally, involves thoughts related to non-factual or counterfactual alternatives to reality (Markman et al., 1993). Markman et al. (1993) conducted an experiment using a computer-based blackjack game. The outcomes of the game were manipulated, and findings suggested that negative outcomes evoked more upward counterfactual thinking than positive outcomes. More interestingly, they found that participants who expected to play the game again had more upward counterfactual thoughts and were less satisfied with the outcomes than participants who were not offered the opportunity to play again, meaning they experienced more regret. The future opportunity of an event induces individuals' desire to improve the outcome in the future and, therefore, leads people to focus on the way in which things might have been better. Yet, this upward counterfactual thinking leads people to devote more attention to the inadequacy of the existing outcome, and therefore, they may experience a higher level of regret than the individuals who were not offered the second chance.

Previous studies pertaining to regret due to action and inaction also provide some explanations for the notion of "opportunity breeds regret" (Gilovich & Medvec, 1994; Gilovich et al., 1995; Hattiangadi, Medvec, & Gilovich, 1995; Savitsky, Medvec, & Gilovich, 1997). In their study, Gilovich et al. (1995) explained that the consequences of actions are known for both the short and the long term, while the consequences of

inactions become clearer only in the long term. This means that the outcomes of inactions can be mentally infinite, whereas the outcomes of actions are finite. The accessibility to several possibilities inhibits the activation of the psychological defence system.

Liberal returns environment certainly allows the outcomes to be modified or reversed. Roese and Summerville (2005) argued that regret intensifies when individuals identify the possibility or opportunity for change, growth, and renewal, and they defined this as the “opportunity principle”. They argued that regret is deepened as a consequence of the that are perceived to afford change but is minimised in the act of unchangeable circumstances through dissonance reduction and emotion regulation efforts. This implies that consumers nowadays may easily experience post-purchase dissonance but may not necessarily have the desire to return the unwanted items. However, once the dissonance becomes salient and transforms into a more intensified negative emotion, such as regret, the elicited regret will motivate subsequent behavioural changes – product returns, especially for “not dissatisfied” products.

Consideration of policy leniency and knowledge of product policy enhance individual’s ability to reverse decisions (Harris, 2008, 2010). Previous studies have provided empirical evidence suggesting that changeable decisions increase regret, however, existing direct relationships between policy leniency, knowledge of returns policy, and regret in the post-purchase appraisal process were not established.

Consideration of policy leniency. In this research project, consideration of policy is the weighted perceived leniency utility function for a set of returns policy widely used by retailers, according to the latest online returns report (MICROS, 2014). In the latest meta-analysis pertaining to returns policies, Janakiraman et al. (2015) have summarised the findings of previous research with respect to leniency of returns policies into five dimensions, namely, time (deadlines), monetary (handling fees), effort (returns hassles),

scope (full refund for sale items), and exchange (cash or credit) leniency. The results showed that monetary and effort leniency are the two aspects that are the most likely to influence consumers' purchase proclivity, whereas returns proclivity has higher chances of being affected by time, scope and exchange leniency. This implies that different aspects of returns policies have varied degree of importance in consumers' minds when it comes to returns decision. Therefore, this research project adopts the weighted additive mechanism (WADD) for measuring consideration of policy leniency. WADD considers multiple factors associated with the chosen alternative and weights each factor on the basis of the relative importance in the decision-making process, and the weighted sum represents the overall utility of the chosen alternative (Payne, Bettman, & Johnson, 1993).

Knowledge of returns policy. Knowledge of returns policy refers to the extent to which consumers are familiar with the existing legal rules, regulations, and policy in terms of product returns as well as the returns policies practised by the firms in the market (Harris, 2008). Detailed information or knowledge of returns policies or regulations can work as consumers' advantage when it comes to decision reversal (Harris, 2008; Harris & Reynolds, 2004). Therefore, when secondary appraisal is activated, the stored knowledge of returns policy reinforces consumers' perception about reversing the purchase decision and restores dissonance. The possibility of reversing the current purchase decision and being able to choose other alternatives, therefore, leads to the experience of regret.

Based on the above discussion of the relationship between decision changeability/reversibility and regret (Bullens et al., 2011; Gilbert & Ebert, 2002; Roese & Summerville, 2005), following relationships are expected:

H5: a) Consideration of policy leniency; b) knowledge of returns policy are positively related with regret

4.5.2 Secondary Appraisal and Returns Likelihood: Regret and Past Experience as Mediators

Scholars have recognised that product attributes, process attributes, and market policies can all influence customer predispositions and behaviours (Humphreys & Williams, 1996). Although people prefer reversible decisions, consumers may not realise that they tend to be more satisfied with irreversible decisions, as irreversible decisions are more likely to trigger the psychological immune system and consumers have higher chances of altering the preference for irreversible decisions (Gilbert & Ebert, 2002; Roese & Summerville, 2005). The consideration of policy leniency indicates the extent to which the initial decision can be reversed in consumers' mind. In this research project, a set of standard lenient product returns policy has been examined and according to the "opportunity principle", easily reversible decisions with minimal cost (free return) can lead to more regret (Bullens et al., 2011; Gilbert & Ebert, 2002; Roese & Summerville, 2005).

Consideration of returns policy has been found to be positively correlated with apparel return behaviour (Kang & Johnson, 2009), and concern for returns policy has also been discovered to be positively related with unplanned buying (Seo et al., 2016). Previous studies have also suggested that consumers engage in deshopping because they feel that returns policies are considerably lenient (Piron & Young, 2000). Furthermore, regret is a comparison-based emotion, shaped by behavioural-focused counterfactual thinking that motivates decision reversal (Markman et al., 1993). Past research has also indicated that the more mutable the antecedents of an outcome are, the greater the scope for counterfactual thoughts is (Kahneman & Miller, 1986). Consequently, the consideration of policy leniency boosts the counterfactual thoughts and openness of the decisions, which, in turn, activates the relevant goal-directed constructs, such as decision-revoking, in order to achieve better decision outcomes (Gilbert & Ebert, 2002; Gilovich et al., 1995;

Iyengar & Lepper, 2000; Roese & Summerville, 2005; Wrosch & Heckhausen, 2002).

Therefore, this study presents the following hypothesis.

H6a: Regret mediates the relationship between consideration of policy leniency and returns likelihood

Knowledge of returns policy can aid the post-purchase appraisal process. As reflected by learning theory, extensive knowledge of product returns regulations and policies of the firms in the market makes consumers more advantageous when it comes to product returns due to the increased confidence in product returns (Harris, 2008, 2010). The knowledge of returns policy should positively influence returns likelihood. In addition, previous research pertaining to psychology showed that regret persists in those situations in which opportunity for positive action remains high (Roese & Summerville, 2005). The detailed knowledge of returns policy increases the chance for reversing the decision and getting better decision outcomes, and this openness of decision leads to the experience of regret (e.g., Gilovich & Medvec, 1994; Savitsky et al., 1997). The detailed knowledge of returns policy can serve as an advantage when it comes to product returns due to the increased confidence in product returns (Harris, 2008, 2010). The knowledge of returns policies should positively influence returns likelihood. Therefore, this study proposes the following hypothesis.

H6b: Regret mediates the relationship between knowledge of returns policy and returns likelihood

Past Returns Experience. Learning occurs through the interplay of environment, drives, stimuli, cues, responses and reinforcement (Kotler, Armstrong, Saunders, & Wong, 1996). Past studies have found that past deshopping returns experience is a facilitator of deshopping behaviour and that it can affect fraudulent proclivity (Harris, 2008; King & Dennis, 2006). In this regard, it is logical to argue that having successful returns

experience personally or returns experience with friends/relatives in the past can also increase general returns likelihood.

As suggested by the learning theory, knowledge of returns policy is accumulated through consumers' past returns experience and is stored in consumers' mind (Kotler et al., 1996). When consumers experience post-purchase dissonance and regret towards their decisions, the stored knowledge of returns policy becomes accessible and offers product returns as an immediately available coping option in consumers' minds owing to their past returns experience. Past experience represents specific knowledge regarding the behaviour in question, which is stored in memory (Schank & Abelson, 1995). Ajzen (1991) argued that past experience could be seen as an important source of information pertaining to behavioural control. Therefore, past returns experience is expected to mediate the relationships between knowledge of returns policy and returns likelihood:

H6c: Past returns experience mediates the relationship between knowledge of returns policy and returns likelihood

4.6 Control Variables

Two types of post-purchase contextual conditions (better alternative and product usage fit, in both the full sample model and the three buying situations model) and three buying scenarios (unplanned, purchase-for-trial, and customer opportunism buying, in the full model) have been coded as dummy variables and these effects are controlled in the analysis of the quantitative study (see Chapter 4, i.e., buying situations and post-purchase contextual condition designs for detailed information). As discussed in Chapter 1, additional disconfirming information can also affect consumers' post-purchase reactions (Tsiros & Mittal, 2000). The most common trigger for inducing post-purchase dissonance is the provision of disconfirming information for participants (Chang & Tseng, 2014; Tsiros & Mittal, 2000). Two types of disconfirming information have been used in the

quantitative study. The first condition provides additional information pertaining to the foregone alternative. The second condition provides additional information with respect to product usage fit. The three buying scenarios differ in terms of the decision commitment and involvement, and consequently, it is expected that consumers may react differently in the post-purchase appraisal process under different buying scenarios (George & Yaoyuneyong, 2010; Zaichkowsky, 1985). Other factors reflected from previous studies, such as gender, age, income, online purchase frequency, and consumers' initial purchase intentions with respect to the presented buying scenarios, are controlled for this study (De et al., 2013; Maity & Arnold, 2013; Petersen & Kumar, 2009; Powers & Jack, 2013).

4.7 Impact of the Situational Factor – the Role of Buying Situations

As seen from the discussion in the introductory chapter, one of the research objectives of the study is to investigate the extent to which different initial buying situations affect the post-purchase appraisal process. The key differences between the three proposed buying situations (unplanned, purchase-for-trial, and customer opportunism buying), lie in the initial purchase motive (unplanned, planned, and situational). Similar with impulse buying, unplanned buying is often associated with the sudden need to purchase something that is *previously unrecognised* (Rook, 1987). In the context of purchase-for-trial buying, the purchase behaviour is still *planned* and consumers are more involved with the decision-making process in contrast to unplanned buyers. The context of online shopping makes consumers *aware of the uncertainty and risk* related with the purchase (Grewal et al., 2004). In terms of customer opportunism, this study focuses on a situation where consumers *purchase something extra in the circumstance* in order to get *free benefits* (e.g., free delivery) and their returns intentions may be premeditated (Harris, 2010). As suggested by Lee (2015), this type of returns behaviour is inspired by firms' lenient policy. Therefore, this thesis argues that consumers are *not unscrupulous* and they still evaluate

the selected item in the post-purchase stage. The above section regarding the full model has established the serial mediation effect of multidimensional dissonance and regret on the relationship between primary appraisal (value for money and mental imagery discrepancy) and returns likelihood.

Findings from prior studies pertaining to the relationships between buying situations and cognitive dissonance have shown inconsistent results. For example, unplanned buying has been associated with post-purchase dissonance (Verplanken & Herabadi, 2001; Wood, 1998). However, the levels of cognitive dissonance of planned and unplanned buying have been actually observed to be statistically indifferent from George and Yaoyuneyong's (2010) study. In addition, Powers and Jack (2013) posited that customer opportunism should increase dissonance as the opportunists need reasons to justify their behaviour, whereas Piron and Young (2001) suggested that some consumers may disapprove deshopping behaviour and still engage in it when they perceive it as necessary. It appears that dissonance does not emerge from the post-purchase evaluation, but rather from the engagement in opportunistic behaviour in the first place. Although George and Yaoyuneyong (2010) and Powers and Jack (2013) both adopted Sweeney et al.'s (2000) three-dimensional measurement scale for cognitive dissonance, George and Yaoyuneyong (2010) did not separate the dimensions and Powers and Jack (2013) used only two dimensions. Therefore, the possible explanation for inconsistent results in terms of the relationships between buying situations and cognitive dissonance may lie in the multidimensional measurement. Sweeney and Soutar (2001) posited that the wisdom of purchase dimension of cognitive dissonance is internally attributed, whereas the concern over deal is externally attributed. Previous research suggested that blame attribution can affect post-purchase appraisal reactions (e.g., Lazarus, 1991b; Stephens & Gwinner, 1998). Therefore, the indirect influence of primary appraisal on returns likelihood in the case of different

buying situations is expected to go through *different dimensions of cognitive dissonance*.

Utilising the concept of neutralisation (Sykes & Matza, 1957), previous researchers have argued that buyers may rationalise their impulsive decisions rather than controlling their impulses (Chatzidakis, Smith, & Hibbert, 2009). Chatzidakis et al. (2009), in their qualitative study, found that denial of responsibility is one of the most popular techniques used to rationalise irresistible unplanned decisions by consumers. It indicates a situation in which the individual argues that he/she is not personally accountable for the behaviour because of factors beyond one's control. Stone and Cooper (2003) argued that when a cause of failure is attributed to the self, the degree of dissonance is lower than when it is attributed externally. All these findings imply that the internally attributed dissonance – wisdom of purchase (recognition of unnecessary decision) is unlikely to become the significant cognition in the post-purchase appraisal process for unplanned buyers. Unplanned buying is accompanied by a “sudden desire to purchase” (Rook, 1987), which leads buyers to try to blame sources other than themselves. Therefore, externally attributed dissonance (concern over deal) has higher chances of being more salient in eliciting regret and returns intention for unplanned buyers.

Emotional state, such as feelings of urgency, excitement, enthusiasm, sudden and imperative desires, are highly associated with unplanned buying (Piron, 1993). Similar with impulse buying, unplanned buying leads to the experience of guilty in the post-purchase stage, therefore, the elation accompanying an unplanned buy is likely to be partially deflated when consumers make the post-purchase evaluations (Piron, 1993). Focusing on the negative affective reaction towards an undesirable decision motivates individuals to move away from previous decision-making strategies, which indicates that emotional distress is positively associated with regret (Ratner & Herbst, 2005). Regret is also associated with general distress and anxiety (Roese et al., 2009). Therefore, given

the disparity of emotion(s) before and after the purchase decision, emotion dissonance should play an important role in the post-purchase appraisal process for unplanned buyers.

Therefore, both *concern over deal* and *emotion dissonance* are expected to transmit the indirect effect of primary appraisal on returns likelihood in the context of *unplanned buying*:

H7: a) Value for money; b) mental imagery discrepancy will indirectly influence returns likelihood through causally linked multiple mediators pertaining to concern over deal and regret in the case of unplanned buying

H7: c) Value for money; d) mental imagery discrepancy will indirectly influence returns likelihood through causally linked multiple mediators pertaining to emotion dissonance and regret in the case of unplanned buying

In the online purchase-for-trial buying situation, purchase involvement is higher, as the purchase behaviour is pre-planned, and therefore, the commitment towards decision is greater as opposed to that in an unplanned buying situation (Beatty, Homer, & Kahle, 1988; Zaichkowsky, 1985). Furthermore, the preconceived cognitions developed in the pre-purchase stage are more stable, as buyers are more committed and involved in obtaining the most desirable decision outcomes (Mittal, 1989). The involvement in the pre-purchase stage will make purchase-for-trial buyers assign the blame externally and justify their decision internally when they are exposed to suboptimal decision outcomes (Olshavsky & Miller, 1972; Stone & Cooper, 2003). Consequently, concern over deal (external attributed) will make the resultant cognitive dissonance salient in intensifying the experience of regret between the primary appraisal and product returns stages (Stone & Cooper, 2003). The indirect effect of primary/retrospective appraisal on product returns is less likely to be influenced by the internally attributed dissonance – *wisdom of purchase*.

Piron's (1993) found that planned purchasers tend to report to "feeling pleased" and "feeling good" more towards the purchased item compared with unplanned purchasers. This means that purchase-for-trial buyers are less likely to experience emotion dissonance. Hence, only *concern over deal* dimension is expected to play a role in the post-purchase appraisal mediation chain for transmitting the indirect effect of primary appraisal on returns likelihood in the case of *purchase-for-trial*.

H8: a) Value for money; b) mental imagery discrepancy will indirectly influence returns likelihood through causally linked multiple mediators of concern over deal and regret in the case of purchase-for-trial buying

With respect to opportunism buying, consumers' returns intentions are often premeditated (e.g., Cole, 1989; King & Dennis, 2006; King et al., 2008), which indicates that consumers have rather limited involvement in the purchase. In the qualitative study, it has been noted that consumers engage in the opportunism buying in order to attain free benefits under the circumstances and they consider the product returns option at the time of purchase. This type of behaviour is often promoted by the e-tailers in the market in order to gain competitive advantage (Lee, 2015). The findings from qualitative study suggested that consumers are happy with e-tailers' liberal return policies. Opportunism buyers are aware of the potential suboptimal decision outcomes and not going to blame external agents (e.g., e-tailers) for the undesirable decision outcome, which means that concern over deal has less chance of being a salient factor in the post-purchase appraisal mediation chain.

Although their level of commitment is relatively low, they are still going to evaluate the item prior to making the returns decision, as they need reasons to justify their returns decision (Harris, 2010; Powers & Jack, 2013). When confronted with an undesirable decision, whether the reason to purchase is strong or weak will affect the level of regret

(Inman & Zeelenberg, 2002). The realisation of making an unwise decision (wisdom of purchase) after the primary appraisal will, therefore, lead to the experience of regret, as getting free benefits is not a strong reason for taking the purchase decision (Inman & Zeelenberg, 2002).

As in the case of unplanned purchase, the advantage of obtaining free benefits brings emotional benefit as consumers are getting a bargain. As the decision is being re-evaluated, the potential need for revoking the decision (returning the item) will diminish the elation of getting free benefits (Bayley & Nancarrow, 1998). The emotion dissonance, therefore, will further escalate into regret (Festinger, 1957). Based on the above discussion, for *consumer opportunism buying*, *wisdom of purchase* and *emotion dissonance* dimensions are expected to play a part in the post-purchase appraisal mediation chain with respect to the relationship between primary appraisal and returns likelihood.

H9: a) Value for money; b) mental imagery discrepancy will indirectly influence returns likelihood through causally linked multiple mediators of wisdom of purchase and regret in the case of consumer opportunism buying

H9: c) Value for money; d) mental imagery discrepancy will indirectly influence returns likelihood through causally linked multiple mediators of emotion dissonance and regret in the case of consumer opportunism buying

The mediation effect of regret on the relationship between secondary appraisal and returns likelihood has been discussed in the full sample model. Due to the differences in the initial buying motives (Harris, 2010; Rook, 1987), buying situations are also expected to influence the mediating role of regret on the relationship between secondary appraisal and returns likelihood as the motivation (goal) can affect the appraisal process (Lazarus, 1966). Low involvement purchase is usually associated with low-value products

(Lichtenstein, Bloch, & Black, 1988). The product returns decision usually involves a trade-off evaluation between the salience of discomfort and the potential of product returns (Davis et al., 1998). Compared with unplanned and customer opportunism buying, purchase-for-trial buyers should have relatively high decision involvement and there is a higher probability of them being more stable in their preconceived cognitions that originally led to the purchase (Mittal, 1989). This indicates that upward counterfactual thoughts are suppressed for purchase-for-trial buyers (i.e., they should be less sensitive about the appealing features of the foregone alternatives even if they are able to reverse the initial decision) (Bullens et al., 2011). Therefore, for purchase-for-trial buyers, regret should not mediate the indirect effect of secondary appraisal (the ability to conduct the returns action) on returns likelihood.

H10: Regret mediates the relationship between consideration of policy leniency and returns likelihood under in the case of a) unplanned buying and b) customer opportunism buying

H11: Regret mediates the relationship between knowledge of returns policy and returns likelihood in the case of a) unplanned buying and b) customer opportunism buying

As argued in the previous section, past returns experience represents specific knowledge of behaviour, which is stored in memory and serves as an important source of information pertaining to behavioural control (Ajzen, 1991; Schank & Abelson, 1995). Therefore, it is expected that past returns experience mediates the relationship between knowledge of returns policy and returns likelihood in all three buying situations.

H12: Past returns experience mediates the relationships between knowledge of returns policy and returns likelihood in the case of a) unplanned buying; b) purchase-for-trial buying; c) customer opportunism buying

4.8 Chapter Summary

Figure 4-1 summarizes the overall conceptual framework of product returns decision formation. The theoretical framework is developed based on the integration of cognitive appraisal and cognitive dissonance theory. The formation of product returns decision constitutes both primary appraisal and secondary appraisal. The primary appraisal explains the reasons for feeling stressful in the post-purchase appraisal process. Primary appraisal leads to the experience of cognitive dissonance. When the multidimensional cognitive dissonance is aroused, individuals evaluate their potential of resolving the stressful situations (secondary appraisal). Supporting by cognitive dissonance theory and previous studies on the relationship between decision changeability and regret, the multidimensional cognitive dissonance and secondary appraisal can elicit the experience of regret, which in turn influence consumers' self-estimated return likelihood. Adopting cognitive appraisal theory, this thesis explains the product returns decision formation from the coping perspective. This thesis argues that consumers engage in product returns to cope with their experienced regret, rather than to cope with cognitive dissonance as previous studies suggested (Lee, 2015; Powers & Jack, 2013).

Based on the findings from qualitative study and previous relevant literature, this thesis argues that contextual factor – buying situations can affect consumers' post-purchase appraisal processes. The impact of primary appraisal can transmit through different dimensions of cognitive dissonance to regret and to self-estimated return likelihood. Additionally, the relationship between secondary appraisal and regret also differs subject to the initial buying situations.

Chapter 5 will present the second quantitative study of this thesis in order to provide empirical evidence to support the hypotheses and theoretical framework. Furthermore, the different post-purchase appraisal processes under each buying situation will also be tested.

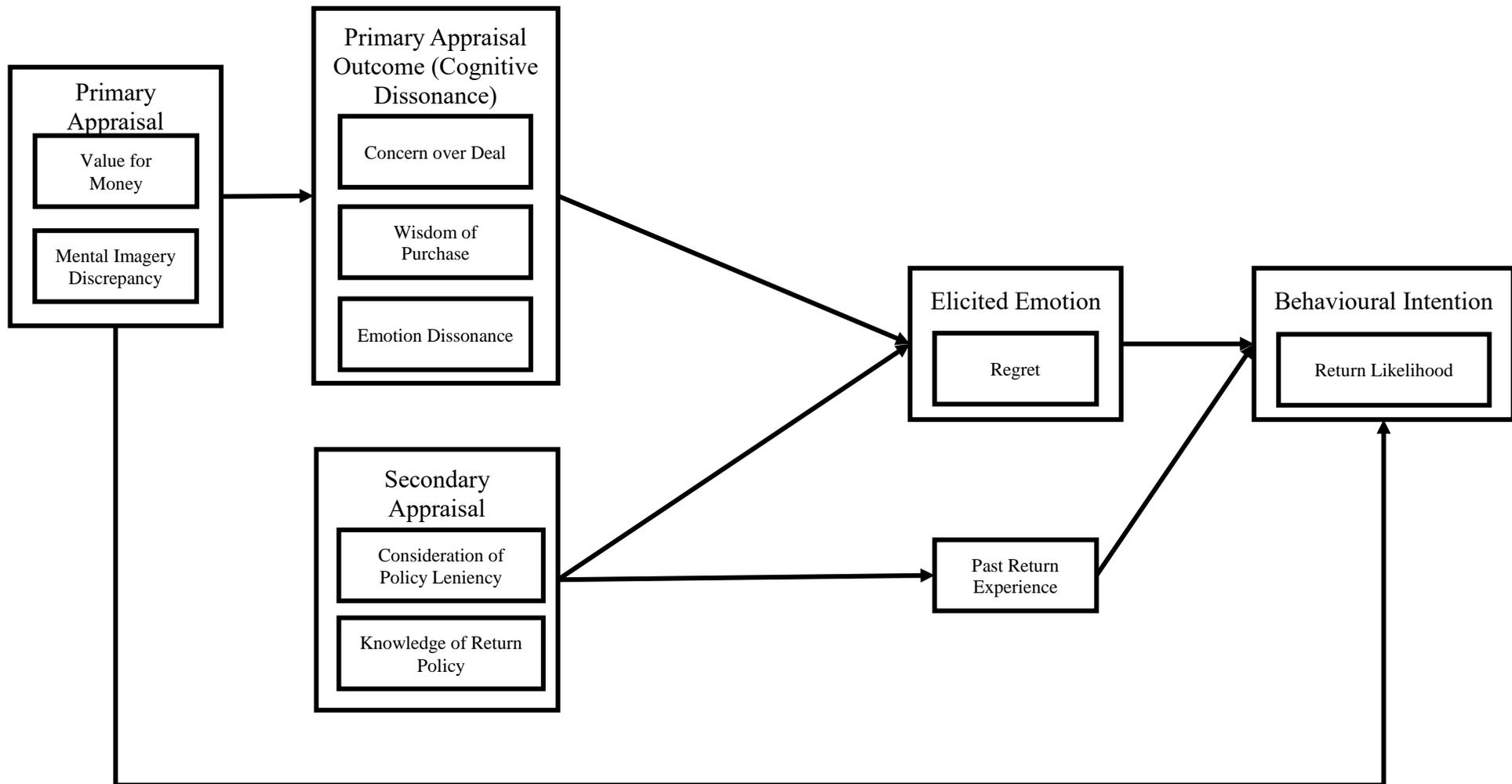


Figure 4-1: Conceptual Framework of Product Returns Decision Formation

Chapter 5 : Post-purchase Appraisal and Product Returns in the Online Purchase

Context: A Quantitative Approach

5.1 Introduction

As noted in the discussion in Chapter 3, a quantitative approach is required in addition to the exploratory study in order to answer research questions. Chapter 4 has proposed relevant hypotheses for developing a framework on the basis of cognitive appraisal theory and cognitive dissonance theory. The qualitative study in Chapter 3 has shed light on the online buying situations that are more likely to lead to product returns and salient factors in the post-purchase appraisal process under the online purchase context. Although the qualitative study has provided useful insights into merchandise returns, a qualitative design lacks statistical generalisability (Onwuegbuzie & Leech, 2005). A quantitative design is, therefore, needed to test the conceptual framework and provide empirical evidence for the appraisal process differences relevant to contextual factor (e.g., buying situations). A quantitative research design aims to answer the following research questions: 1) Why do consumers return non-defective products in the context of online shopping? 2) How does the product returns decision form through the post-purchase appraisal process across the pre- and post-purchase stages? 3) What are the appraisal differences under the decision outcomes of different initial buying situations?

This chapter will implement appropriate statistical methods in order to test the hypotheses developed in the previous chapter and provide empirical evidence to approach the research questions. First, the selection of research method and research design is deliberated and described. Second, sources of measurements, common method variance remedies, and scale purification are presented. Third, method of analysis, hypothesis testing, results and data interpretation are discussed.

5.2 Research Instrument

The qualitative study in Chapter 3 has identified salient factors in the post-purchase appraisal process and shed light on the important role of contextual factor – buying situations. Although the theoretical generalisability is claimed, empirical generalisability is constrained due to the qualitative nature of the first study. The second study of this thesis aims to empirically test the proposed conceptual framework by adopting a quantitative approach. The quantitative study employs experimental design in order to achieve the research objectives.

Most of the studies pertaining to product returns from the consumer perspective employed questionnaire/survey as the main research method (e.g., Foscht et al., 2013b; Fullerton, Kerch, & Dodge, 1996; Harris, 2008; Jolson, 1974; Maity & Arnold, 2013; Muncy & Vitell, 1992; Piron & Young, 2001; Powers & Jack, 2013, 2015; Rosenbaum & Kuntze, 2005; Rosenbaum et al., 2011; Wachter et al., 2012). Several researchers utilised interviews for gaining more insights from consumers (Harris, 2010; King & Dennis, 2006; King et al., 2008; Schmidt et al., 1999). A few studies employed lab-based experimental design (Bechwati & Siegal, 2005; Janakiraman & Ordóñez, 2012; Wang, 2009; Wood, 2001). More recently, the World Wide Web (WWW) has provided a new tool for experimental research, and researchers have just begun to use web-based experimental design for exploring the product returns issue (Seo et al., 2016; Walsh et al., 2016).

In the experiment, an intervention, treatment or stimulus is varied and subjects are randomly assigned to treatment vs. control conditions and the outcomes are measured (Campbell & Stanley, 2015). Because of random assignment, the variation in outcomes can be attributed to the treatment. Consequently, experiment has the advantage of controlling the independent variable(s), and it allows researchers to eliminate the undesired extraneous variables. This indicates the possibility of determining a cause and

effect relationship (Kirk, 1982). The experimental research designs are repeatable, and therefore, results can be checked and verified in the future studies (Bernard & Bernard, 2012). Traditionally, there are two forms of experiments: the laboratory experiment and the field experiment. However, laboratory experiments in consumer research suffers from the limitation of external validity (i.e., the extent to which the effect from one particular experimental design can be statistically generalised, conceptually replicated and capture the real-world setting) and field experiment has the problem of limited internal validity due to limited control (Berkowitz & Donnerstein, 1982; Campbell & Stanley, 2015; Lynch Jr, 1982). Additionally, the traditional experimental approaches have limited sample populations, as for decades subjects have been mostly young students of local area (e.g., Reips, 2000).

In order to overcome the limitations of traditional experimental approaches, improve the validity and acceptance of experimental research, the Web scenario-based experiment is used in this study. Web experiments provide the researcher with easy access to a much wider and geographically diverse sample population. It allows participants to remain in more familiar and natural situation at the computer at home or at work and spare participants from the hassle to come to the lab. All these characteristics of Web experiments improve external validity of the experiments (Reips, 2000). Scenarios are “descriptions of possible futures that reflect different perspectives on the past, the present and the future, which can serve as a basis for action” (Van Notten, Slegers, & van Asselt, 2005, p. 176). Therefore, the results from a scenario-based design can be extrapolated to a real-world setting (Kim & Jang, 2014).

Initial buying situations have been identified as important factors that contribute to product returns in the previous qualitative study. Additionally, the qualitative study also discovered relevant evidence supporting the fact that the psychological processes for

these buying situations are different. It is beneficial to obtain empirical evidence to support the findings of the previous study such that practitioners can take appropriate interventions on the basis of different customer behavioural profiles. For this study, the buying situations are based on the findings from recent academic research and industry reports (Chang & Tseng, 2014; Lee, 2015; Morley, 2016; *Omnichannel Retail Survey 2016*, 2016; Seo et al., 2016). The details of the buying situations are further developed depending on the findings from the qualitative study. The hypothetical scenario-based approach reduces the artificiality of the setting and recreates real world buying scenarios for the participants (Lee, Park, & Han, 2008). The hypothetical scenarios have been used in research pertaining to consumer deshopping and buying motivation previously (Fullerton et al., 1996; Rook & Fisher, 1995; Schmidt et al., 1999). These have provided scenario building guideline for this study.

5.2.1 Sample Size Determination

As the quantitative study employs structural equation modelling (SEM), a typical minimum sample size in studies where SEM is used is about 200 cases. This number corresponds to the approximate median sample size in surveys of published articles in which SEM results are reported (Kline, 2015).

5.2.2 Participants

Due to the limited time frame of the study and the fact that the desired sample size is relatively large, the convenience sampling method is adopted for this study. More specifically, online crowdsourcing is utilised. It is operationally defined as “the paid recruitment of an online, independent global workforce for the objective of working on a specifically defined task or set of tasks” (Behrend, Sharek, Meade, & Wiebe, 2011, p. 801). Collecting data through the Internet is more convenient and flexible, aiding the researcher in gathering a large number of participants in a cost-efficient manner (Truell,

Bartlett, & Alexander, 2002). Convenience sampling has been criticised for the failure to represent the population (Cherkassky & Mulier, 2007). However, this sampling method can still provide useful information if the sample is representative of the population of interest and there are no obvious sources of bias in the given sample (Cherkassky & Mulier, 2007). This is owing to the fact that the focal issue for this study is product returns under a remote-purchase environment, and therefore, the use of Web scenario-based experiment is considered appropriate. The final sample is also considered reasonably representative as discussed in the following section.

Participants were recruited from a large online crowdsourcing platform called Prolific Academic. There are some clear advantages of using crowdsourcing: 1) larger sample pool access, 2) diversified sample pool, 3) relatively low cost (Mason & Suri, 2012). In comparison with a traditional university based-participant pool, crowdsourcing participants are more representative and diverse in terms of geographic area, age, income, education, ethnic group, and so forth (Behrend et al., 2011). Existing research has shown that the in-person paper-and-pencil method and the online data collection methods are largely equivalent in terms of the psychometric properties (Cole, Bedeian, & Feild, 2006; De Beuckelaer & Lievens, 2009; Meade, Michels, & Lautenschlager, 2007; Meyerson & Tryon, 2003), impression management/social desirability (Booth-Kewley, Edwards, & Rosenfeld, 1992) and data completeness (Stanton, 1998).

5.2.3 Descriptions of Participants

Table 5-1: Sample Demographic Profile

Demographic Profile	No.	Percentage
<i>Gender</i>		
Male	247	39%
Female	390	61%
<i>Age</i>		
18-24	159	25%
25-34	253	40%

35-44	116	18%
45-54	78	12%
55+	31	5%
<i>Occupation</i>		
Full-time job	338	53%
Full-time student	136	21%
Unemployed	58	9%
Retired	9	1%
Self-employed	96	15%
<i>Family Income</i>		
Under £20,000	131	20%
£20,000 - £29,999	149	22%
£30,000 - £39,999	163	25%
£40,000 - £ 49,999	87	13%
£50,000 - 59,999	61	9%
more than £60,000	73	11%
<i>Education</i>		
High school/college or below	255	40%
Bachelor's Degree	257	40%
Master's Degree	103	16%
Doctorate Degree	22	3%
<i>Region</i>		
North East	36	6%
North West	74	12%
Yorkshire and the Humber	48	8%
East Midlands	42	7%
West Midlands	45	7%
East of England	33	5%
London	110	17%
South East	100	16%
South West	52	8%
Wales	35	5%
Scotland	40	6%
Northern Ireland	12	2%
Outside the UK	10	2%

As Table 5-1 shows, the sample of participants was composed of more women (61%) than men (39%). Past research has suggested that women are more likely to participate in

online studies (Curtin, Presser, & Singer, 2000; Moore & Tarnai, 2002; Singer, Van Hoewyk, & Maher, 2000), and therefore, this ratio is expected. With respect to age, the majority of the participants were between 25 and 34 (40%), followed by participants aged between 18 and 24 (25%). In terms of education, 40% of the participants' educational levels were at high school/college or below. The same percentage of participants (40%) hold a bachelor's degree. The majority of the respondents (67%) have family income below £40,000 per year. Geographic information was also collected for this study. As Figure 5-1 illustrates, the sample region distribution was quite similar with the UK Internet users' region distribution (*Internet access – households and individuals: 2017, 2017*). Respondents recruited from a wide geographical area can improve the sample representativeness (Mann & Stewart, 2000).

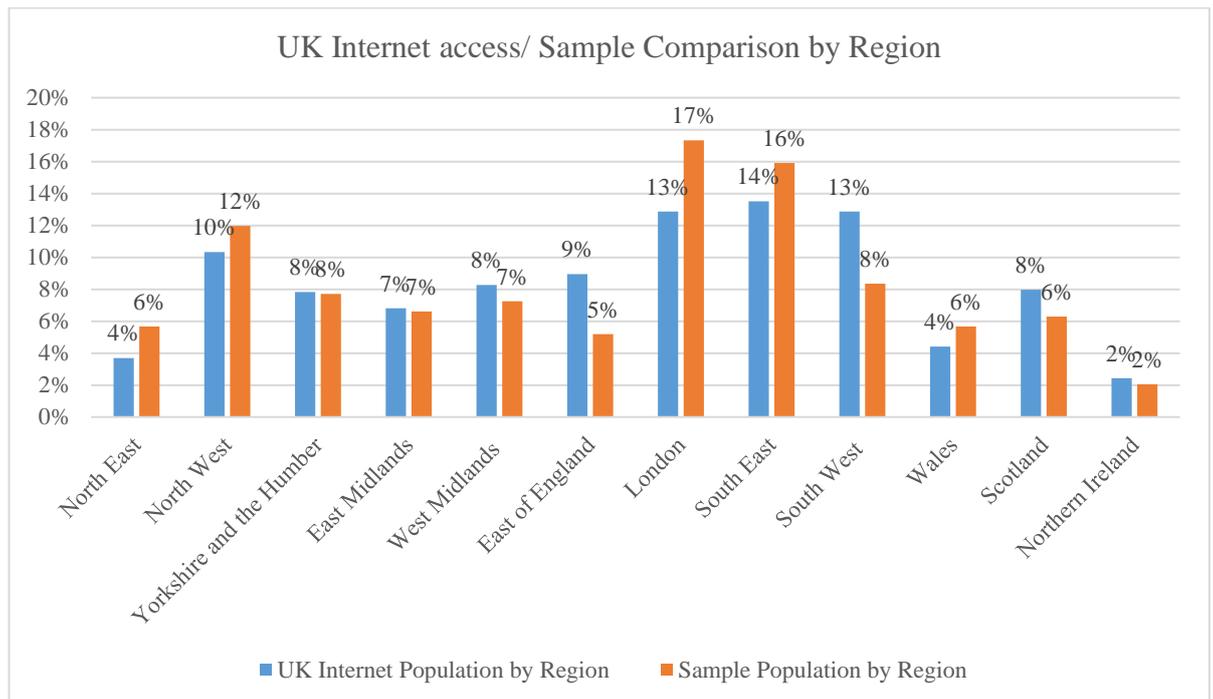


Figure 5-1: Population and Sample Comparison – Source: Office for National Statistics

5.2.4 Experimental Design and Procedures

As deliberated in the introduction of this section, the Web scenario-based experiments were used for data collection. Existing literature and the findings from the first qualitative study were referenced in order to develop the scenarios. The scenarios were designed on

the basis of previous empirical studies and the findings of the qualitative study. The final scenarios were identified through a pilot study. The quantitative study employed a 3 (unplanned buying vs. purchase-for-trial vs. customer opportunism) \times 2 (better alternative vs. usage fit) design to examine consumers' post-purchase appraisal process. The purchase-for-trial buying serves as the control condition in the experiment, as this is a more common situation for online shopping because of the relatively high perceived risk (Grewal et al., 2004). Participants were randomly assigned to one of the three buying scenarios first, followed by the two post-purchase additional contextual information conditions. Relevant variables were measured based on the presented scenario.

At the beginning of the experiment, an introduction to the study was presented and consent agreement was obtained from every participant. Voluntariness, confidentiality, and anonymity were assured for each participant.

As addressed in Chapter 1, this study will emphasise the two-decision process in the Internet retailing setting. Therefore, the experiment proceeds from the pre-purchase stage to the post-purchase stage. Participants were randomly assigned to one of three buying scenarios (unplanned vs. purchase-for-trial vs. customer opportunism) and they were instructed to think as if they were actually in the given scenario and to attempt to make their decisions accordingly. All the three scenarios involved the decision of purchasing a portable charger.

5.2.4.1 Product Selection

According to E-commerce in Europe (2015), the returns are more prevalent in mature markets. The percentage is highest in Germany, followed by the Netherlands and the UK. Regardless of the market, the most commonly returned products are clothing items and footwear, with home electronics occupying the second place. According to Accenture's report (Douthit et al., 2011), 95 percent of consumer electronics product returns are

initially attributed to factors other than defects. As the preference for clothing items or footwear may vary largely among individuals, consumer electronics was selected to be the test item for the experimental design. In addition, consumer electronics products are more gender neutral in comparison with clothing items, which reduces the complexity of scenario design. As one of the initial buying situations is unplanned buying, it is necessary to select a product within a reasonable price range for people to make unplanned decisions and consider about re-evaluation after being exposed to disconfirming information (Chang & Tseng, 2014). Therefore, a consumer electronics item that has both functional and emotional benefits was chosen for this study. Functional benefits refer to the product attributes that provides customers with functional utility (i.e., the charging capability of a portable charger), and emotional benefits provide customers with a positive feeling when they purchase or use a particular product (i.e. the novelty design of a portable charger) (Sweeney & Soutar, 2001). A series of portable chargers with innovative designs has been selected as the subject for the scenario-based experiment.

Each scenario included the pictures of a series of portable chargers with novelty designs and textual product descriptions in order to make the buying scenario more realistic (see Figure 5-2). Furthermore, the detailed product information makes it easier for participants to evaluate the chosen item and compare the chosen one with the foregone alternatives after receiving additional information. Three common product attributes of the portable charger were described for participants and the differences between the product attributes were highlighted for subjects. In addition, the provision of specific product attributes with objective criteria (capacity and the number of devices that can be charged simultaneously) serves as the reference point for the later cognitive evaluation scenario.

Product information.

- *Capacity: **10000mAh** charges iPhone 6 or iPhone 6S three times, the Galaxy S6 almost twice or the iPad mini once.*
- *Simultaneous Charging: **2USB** charging Port for **2 devices simultaneously** at top speed. 2 USB also compatible with almost any smart device.*
- *Smart Design: 4 status LEDs keeps you informed of remaining capacity.*

In the experiment, participants were given the choice of selecting one series of portable chargers that they would like to purchase from seven series on offer (see Figure 5-2). Seven series were used in the study due to the fact that the processing capacity of the short-term memory is approximately seven chunks of information with a variance of ± 2 , as noted from cognitive psychology literature (Chernev, 2003; Miller, 1956). The purpose of this activity was to present a more realistic buying situation and ensure participants' involvement in the purchase situation.

Which type of portable chargers would you like to purchase?



Figure 5-2: Available Selections

The themes of three scenarios were derived from the result of the first qualitative study and the latest product returns behaviours that were observed from industry reports ("Why returns is the new retail battleground," 2015; Lee, 2015; Verhagen & van Dolen, 2011).

5.2.4.2 Buying Situation Scenario Design

The first scenario in this study recreates an *unplanned buying* situation, following a design developed by Rook and Fisher (1995).

Imaging you need to buy a pair of sports headphones for an outdoor hiking activity next weekend. After work, you go to the online stores to purchase the sports headphones. As you are browsing and searching between different online store websites, you see a series of very attractive portable chargers on sale for £14.99 each from £30.99. You immediately fall in love with them on first sight.

The second buying scenario is *purchase-for-trial* buying and it is designed in the following manner.

Imaging you need to purchase a new laptop backpack and a portable charger for a business trip next month. After work, you go to the online stores to purchase a travel laptop backpack. As you are browsing and searching between different online store websites, you see a series of very attractive portable chargers on sale for £14.99 each from £30.99. However, you are wondering how effective these portable chargers can be.

The design for the unplanned buying scenario and the purchase-for-trial scenario differed in terms of two characteristics: 1) the unplanned buying situation depicts a buying action undertaken without a problem having been previously recognised, whereas purchase-for-trial buying depicts a pre-planned buying action; 2) unplanned buying can be driven by stimuli in the online shopping environment (e.g., promotional offers) that trigger previously unrecognised desire, whereas purchase-for-trial buying addresses the uncertainty of the purchase decision due to the remote-purchase environment.

The customer opportunism scenario is designed to capture the advantage-seeking buying behaviour in the distant selling environment. This scenario creates a specific decision context that allows the participant to obtain free benefits by purchasing something extra.

Imagine you need to purchase a new laptop backpack for a business trip next month. After work, you go to the online stores to purchase a travel laptop backpack. As you are browsing and searching between different online store websites, you see a series of very attractive portable chargers on sale for £14.99 each from £30.99. You have already added a £89.99 laptop backpack in your shopping cart. The online store offers free next-day delivery if you bought £100 products. The standard next day delivery would have cost you £5.99.

The purchase-for-trial and consumer opportunism returns are differentiated by the following characteristics. First of all, the purchase-for-trial behaviours are often encouraged by the marketers (Stock et al., 2006) as a competitive marketing strategy. Secondly, the purchase behaviour is pre-planned for purchase-for-trial buyers, whereas the primary motive for opportunism buyers is to obtain undue advantage from retailers. Thirdly, the participants of the qualitative study acknowledged that buying extra items in order to take advantage of the free delivery and return the item for free is not “the right behaviour”. However, they regarded purchase-for-trial buying as “customer right” due to the liberal returns environment and the result of online shopping.

5.2.4.3 Post-purchase Contextual Condition Design

After making the purchase decisions and committing to the scenario-based experiments, one of the post-purchase contextual conditions was randomly presented to the participants (better alternative vs. usage fit) in order to trigger the post-purchase appraisal process. The most common trigger for inducing post-purchase dissonance is the providing of disconfirming information to the participants (Chang & Tseng, 2014; Tsiros & Mittal, 2000).

The better alternative condition aims to create a comparison between what the participants bought and what they could have bought. The condition informs participants that their

previous choice was not optimal, in light of the newly available information. As mentioned above, the product information was provided to the participants such that it would become easier for them to actually make objective comparisons and judge between what they bought initially and what they could have bought.

*One of your friends told you that he/she saw another retailer sells an upgraded version as you bought with the same price after discount. The design is very similar, **but with higher capacity and one extra USB charging port**. He/she sent you the product description (you can always go back to check the product information of your selected portable charger by clicking the back button):*

- *Capacity: **16000mAh** charges iPhone 6 or iPhone 6S five times, the Galaxy S6 almost three times or the iPad mini twice.*
- *Simultaneous Charging: **3USB** charging Port for **3 devices simultaneously** at top speed. 3 USB also compatible with almost any smart device.*
- *Smart Design: 4 status LEDs keeps you informed of remaining capacity.*

The usage fit condition provides additional information on the selected item itself in the remote-purchase environment to the participants by providing more specific context pertaining to product usage fit.

You bought one portable charger from your selected series. The relative size of your selected type of portable charger is showed as the following (relevant picture will show up based on the participants' selections and the relative size is larger than an iPhone 6 or Galaxy 6S) and it weighs twice as your phone. There are other similar smart designed, smaller, lighter and cheaper models with lower charging capacity available.

In the experiment design, the relative size comparison pictures were not available at the time the participants read the buying scenarios and product information, and it showed up after the participants had already picked their favourite items. For example, if the

subject selected a particular item, the matching image would pop up on the next page (see Figure 5-3). This condition was designed to create a discrepancy between participants' imagined context and the actual context of the products.



Figure 5-3: Usage Fit Example (see Appendix A: Web Experiment for full range)

Then, participants answered the relevant questions pertaining to factors such as value for money, mental imagery discrepancy, concern over deal, wisdom of purchase, emotion dissonance, consideration of policy leniency (leniency perception of different elements in the standard returns policy and their relative importance), past returns experience and knowledge of returns policy. As the experimental design involved the scenarios, the instructional manipulation checks were performed in the experiment in order to check whether the respondents paid attention to the instructions (see Instructional Manipulation Check in the Procedural Remedies section). Next, participants were asked to answer demographic questions and thanked for their participation.

5.2.5 Pilot Study and Manipulation Checks

To ensure that the scenarios can represent the “real” world situations, the extent to which all the six scenarios were realistic was also examined in the pilot study with 52 participants. All the six scenarios had realistic scores statistically higher than 4 (on a 7-point Likert scale) (p-value ranged from 0 to 0.044), indicating that the scenarios were highly realistic.

To ensure that the buying situations work as intended, the initial purchase intents that indicate participants' purchase likelihood for all buying situations were measured and controlled for in the data analysis. Each scenario was followed by a screening question to make sure that the participants demonstrate a certain degree of interest in making the purchase in order to evoke post-purchase dissonance at later stage (Chang & Tseng, 2014). Participants who demonstrated a low likelihood of making the purchase decision were, therefore, excluded from the experiment (i.e., participants who selected "not even think about the portable charger/want the portable charger but not buy it", "strongly disagree/disagree to purchase for a trial", or "very unlikely/unlikely to buy the portable charger to take advantage of the free next-day delivery"). Participants' purchase intentions were also controlled for in the data analysis.

For the unplanned buying situation, participants were instructed to select the one out of five purchase alternatives that they would make. These choice alternatives were designed to represent the degree of buying impulsiveness from low to high (Rook & Fisher, 1995). These alternatives were the following.

- (1) Buy the sports headphones only; not even think about the portable charger;*
- (2) Buy the sports headphones; want the portable charger but not buy it;*
- (3) Decide not to buy the sports headphones and buy the portable charger*
- (4) Buy both the sports headphones and a portable charger with credit card;*
- (5) Buy both the sports headphones and a portable charger plus a matching hiking waist pouch bag to complete the outfit.*

For the purchase-for-trial scenario, participants were asked to indicate the extent to which they agree with the statement "I am willing to buy the portable charger for a trial" on a 5-point scale, with endpoints labelled as "(1) strongly disagree" and (5) "strong agree". The

participants who answered 1 (strongly disagree) and 2 (disagree) were screened out for the experiment.

With respect to the customer opportunism scenario, participants were requested to specify the likelihood of their engaging in customer opportunism buying behaviour by indicating “how likely is it that you will choose to buy the portable charger to take advantage of the free next-day delivery, you can always return it if you don’t like it” on a 5-point scale, anchored by very unlikely (1) to very likely (5).

Participants’ responses for the two post-purchase additional information conditions were tested in the final experiment, and the effects were controlled in the data analysis for both the full sample model and the three buying situations models. For the product usage fit condition, participants are required to make comparisons of the usage fit in the virtual and the physical (hypothetical) consumption environments. Therefore, a higher expectation disconfirmation score was expected. Conversely, for the better alternative condition, participants were presented with scenarios that revealed potential better alternatives. Consequently, a higher discomfort in terms of the choice itself was expected. The product usage fit condition scored higher for disconfirming expectation (“To what extent was the product worse than you expected beforehand”, anchored by “not at all worse” and “much more worse”) ($M_{\text{better}} = 3.24$, $M_{\text{fit}} = 3.69$, $p < 0.001$), and the better alternative condition scored higher in terms of disappointment in the choice (“After this experience, how much disappointment did you feel about your choice”, anchored by “strongly disagree” and “strongly agree”) ($M_{\text{better}} = 3.84$, $M_{\text{fit}} = 3.35$, $p < 0.001$).

5.3 Measurements

5.3.1 Independent/Mediate/Moderate Variables

5.3.1.1 Value for Money

Value for money has been identified in the qualitative study as one of the most important factors that can affect the returns intention. In the quantitative study, value for money is measured on a 4-item scale derived from Sweeney and Soutar (2001), containing items such as “is reasonably priced”, “offers value for money”, “is a good product for the price”, and “would be economical” (anchored by 1 = strongly disagree to 7 = strongly agree).

5.3.1.2 Mental Imagery Discrepancy

Mental imagery discrepancy in the context of online shopping includes two similar constructs: perceived veracity and mental imagery discrepancy. Perceived veracity is adopted from Chaouachi and Rached (2012). The original scale has four items “This ad is not entirely truthful about its offerings”, “This ad shows the individual what he wants to see and not the reality”, “I think that the reality is different from what is mentioned in the ad”, and “This ad misleads the consumer about the actual performance of the product”. However, the focus of the study is not directed at the deliberate deception by the company but the perceived veracity. Therefore, the first item was deleted. The scale was reworded in order to make it fit the context of online shopping. Mental imagery discrepancy construct was revised on the basis of Babin and Burns’s (1998) elaboration of the mental imagery scale. The final items for the contextual visual discrepancy comprises the following: “The product information shows to me what I want to see and not the reality”, “I think that the reality is different from what it is mentioned in the product information”, “The product information misleads me about the actual performances of the product”, “The product is different from what I fantasized about based on the product information”, “The product is different from what I imagined what it would be like to use based on the product

information”, and “The feel of the product is different from what I imagined based on the product information” (anchored by 1 = strongly disagree to 7 = strongly agree).

5.3.1.3 Cognitive Dissonance

The cognitive dissonance was measured on a 14-item scale derived from Sweeney et al. (2000). Sweeney et al. (2000) have suggested there are three dimensions to cognitive dissonance. Emotion dissonance is measured on an 8-item (including “I feel scared”, “I felt hollow”, “I felt I’d let myself down”, “I was in pain”, “I felt depressed”, “I felt furious with myself”, “I felt sick”, and “I was in agony”) 7-point semantic differential scale ranging from 1 = strongly disagree to 7 = strongly agree. The wisdom of purchase was measured on a 2-item 7-point semantic differential scale, consisting of “I wonder if I really need this product” and “I wonder whether I should have bought anything at all” (the other two items were deleted from this scale due to loading, reliability, and validity issues, (see Chapter 5 5.5 Scale Purification) (anchored by 1 = strongly disagree to 7 = strongly agree). The concern over deal includes items such as “After I bought this product I wondered if I has been fooled”, “After I bought this product I wondered if they had spun me a line”, and “After I bought this product I wondered whether there was something wrong with the deal I got”.

5.3.1.4 Regret

Regret was measured on a 4-item scale adopted from Inman and Zeelenberg (2002) and Sweeney et al. (2000), including items such as “How much would you regret your decision to purchase that product?” (anchored by 1 = not regret at all to 7 = regret very much), “If you could do it over, would you change your decision?” (anchored by 1 = definitely would not to 7 = definitely would change), “How much happier would you have been if you had made a different decision?” (anchored by 1 = not much happier to 7 = much happier), and “I wonder if I have done the right thing in buying this product” (anchored by 1 = strongly disagree to 7 = strongly agree).

5.3.1.5 Consideration of Policy Leniency

The scale for measuring consideration of policy leniency was developed on the basis of the latest meta-analysis of return policies (Janakiraman et al., 2015) and contains one question with six criteria: “To what extent do you consider the following criteria are important when it comes to returning products? (anchored by 1 = not at all important to 7 = extremely important) (returns procedure, returns postage fees, delivery charges refund, returns deadline, availability of returns options, and returns scope, anchored by 1 = very not lenient to 7 = very lenient)”. Using the weighted additive mechanism advanced by Payne et al. (1993), this study has taken all the relevant returns policy criteria into consideration at once and created a single item indicator that weights each criterion on the relative importance given by consumers.

5.3.1.6 Knowledge of Returns Policy

The scale for accessing knowledge of returns policy was derived from Harris (2008). The scale has five items, consisting items such as “I know most stores’ rules about returning products”, “I know my rights when it comes to returning goods”, “I know very little about what rights I have when I return products”, “I know a lot about the circumstances under which stores can refuse to give a refund for a returned product”, and “I know very little about most stores’ returns policies” (anchored by 1 = strongly disagree to 7 = strongly agree).

5.3.1.7 Previous Returns Experience

Previous returns experience was measured on a 3-item scale adopted from Harris (2008). It refers to the extent to which consumers’ have previously engaged in the product returns activities. The original scale was used to measure past experience in terms of fraudulent returning. In this study, the scale was altered with respect to general returns experience in order to fit the research context. This scale contains items such as “I have a lot of experience of getting refunds when returning products”, “I have often gone with friends

or family members when they're returning products", "I have been involved in lots of returning of products", and "I have very little of experience of getting refunds when returning products (reversed item)" (anchored by 1 = strongly disagree to 7 = strongly agree).

5.3.2 Dependent Variable

5.3.2.1 Returns Likelihood

Returns likelihood refers to consumers' self-estimated returns likelihood, measured by the single indicator of "To what extent would you like to return this item back?" (anchored by 1= Improbable to 7 = Probable). Based on the recommendations given by previous studies, marketing researchers should use single-item measures for doubly concrete constructs (Bergkvist, 2015; Bergkvist & Rossiter, 2007). Doubly concrete constructs are constructs that have a simple, clear object and single-meaning attribute, such as attitude or purchase intention (Bergkvist & Rossiter, 2009).

5.4 Common Method Variance and Remedies

One potential problem in behavioural research is the common method variance. It refers to the variance that is attributed to the measurement method rather than to the construct of interest (Podsakoff, MacKenzie, Lee, & Podsakoff, 2003). Measurement error contains two elements: random error and systematic error. Random errors are errors in measurement that lead to inconsistency in measurable values when repeated measures of a constant attribute or quantity are taken (Streiner, 2003). The common method variance is a form of systematic error variance, and it can cause the observed correlations among variables to differ from their true population values. Additionally, systematic errors are not determined by chance (Doty & Glick, 1998).

Due to the use of a single medium to obtain the responses in this study, both procedural and statistical remedies were taken to diminish the common method bias.

5.4.1 Procedural Remedies

Procedurally, the respondents' answers were assured to be anonymous in order to reduce evaluation apprehension. The participants were informed that the results would be reported in an aggregate form only and could not be identified individually. Participants were also informed that they could withdraw from the study at any point of time without penalty or consequences of any kind. Moreover, the scenarios, instructions, and scale items were all kept simple, specific, and brief. The ambiguous or unfamiliar terms were discovered in the pre-test and clarified in the subsequent experiment for the participants' benefit.

In addition, in order to reduce the common method bias resulting from the priming effects of the item, the order of the measurement of the predictor and criterion variables was counterbalanced. Priming effect refers to how the exposure to one stimulus influences the response to another stimulus (Meyer & Schvaneveldt, 1971). Consequently, the order that the questions appear in the experiment may affect the responses. Hence, the question of randomisation technique was employed in the experiment in order to reduce the priming effect.

Furthermore, the different initial buying situations and types of additional post-purchase information are randomised for participants in order to reduce the bias (Campbell & Stanley, 2015).

In order to ensure the quality of the data, the instructional manipulation check (IMC) was also employed. The details of the IMC have been discussed in the following section.

5.4.1.1 Instructional Manipulation Check (IMC)

Participants in a study do not always pay full attention in reading and following instructions. When participants fail to follow instructions or read the hypothetical scenarios, noise is increased and the validity of the data is decreased (Oppenheimer,

Meyvis, & Davidenko, 2009). Krosnick (1991) addressed this problem in the form of theory of satisficing in the survey responses. The theory was built on Simon's (1957) finding that human have limited cognitive resources and they attempt to minimise cognitive effort. Therefore, participants might be satisfied with the first minimally acceptable alternative rather than making an effort to find the optimal solution. This study implemented the scenario-based design, and the participants were expected to read the scenarios, picture themselves as the focal person, and answer the questions accordingly. Responding to this type of studies requires a considerable amount of cognitive effort on the part of the participants, and therefore, participants might provide random answers in order to reduce the effort (Krosnick, 1991; Krosnick, Narayan, & Smith, 1996). In order to address this problem, the instructional manipulation check (IMC) was employed in this study. The IMC measures whether the participants are reading the instructions or not. It consists of a question embedded in the experiments that is similar to the other questions in length and the response format (e.g. Likert scale, check boxes, etc.). Nevertheless, unlike the other questions, the IMC asks participants to ignore the standard response format and follow the instruction that includes a question to confirm that they actually have read the instructions.

Two instructional manipulation checks were used in this study. The first IMC was embedded in the middle of the experiment in the following way.

Continue with the study?

Please tell us whether you would like to continue with this study. In fact, what we really want to know is whether people are reading the instructions thoroughly. To continue with this study, please select the 'leave the study' option.

Would you like to continue with this study?

- *Continue with the study*

- *Leave the study*

Participants should select “leave the study” if they had read the instructions carefully, and they were coded as having passed the first IMC.

The second IMC was positioned at the end of the experiment with all the demographic information in the following manner.

Most modern theories of decision-making recognise the fact that decisions do not take place in a vacuum. Individual preferences and knowledge, along with situational variables can greatly impact the decision process. In order to facilitate our research on decision-making we are interested in knowing certain factors about you, the decision maker. Specifically, we are interested in whether you actually take the time to read the directions; if not, then some of our manipulations that rely on changes in the instructions will be ineffective. So, in order to demonstrate that you have read the instructions, please select others and type 1 in the corresponding text box.

Which of these activities do you engage in regularly? (Click on all that apply)

- Basketball*
- Soccer*
- Running*
- Hockey*
- Football*
- Swimming*
- Tennis*
- Others (please specify)*

Following the instruction embedded in this paragraph, participants should tick the “Others” and type “1” in the corresponding text box. Those participants were coded as having

passed the second IMC. In this study, data from participants who failed both IMC and didn't respond to the reversed scale correctly were removed, yielding a final sample size of 620.

5.4.2 Statistical Remedies

Although procedural effort has been made to minimise the potential disadvantages of the common method variance, it is often impossible to eliminate all the potential procedural biases in a research project. Hence, it is necessary for the researcher to use statistical remedies to control for common method biases. One of the most widely used techniques utilised in addressing the issue of common method variance is the Harman's single-factor test (Podsakoff et al., 2003). This technique involves loading all the variables involved in the study into an exploratory factor analysis and examining the unrotated factor analysis in order to determine the number of factors that account for the variance in the variables (Podsakoff et al., 2003). The underlying assumption is that if the common method variance is present and considered to be problematic, either (a) a single factor will emerge from the factor analysis or (b) one factor will account for the majority of the variance in the data.

The single factor test suggested that for the full sample data set 29.828% variance is explained, and therefore the single factor tests were not violated. Similarly, the single factor tests for unplanned, purchase-for-trial and customer opportunism buying scenarios are 29.808%, 30.018% and 30.016% respectively. As a result, the scale purification process can be progressed.

5.5 Scale Purification

5.5.1 Principal Component Analysis (PCA)

Factor analysis and component analysis are two broadly utilised statistical procedures that share a common goal: to reduce a set of p observed variable to a set of new m variables

($m < p$) in a way that accounts for most of the variability in the pattern of correlations (Tabachnick, Fidell, & Osterlind, 2001). Researchers often use these two techniques interchangeably, and some researchers argue that the PCA is preferable (Guadagnoli & Velicer, 1988; Steiger, 1990; Velicer & Jackson, 1990). However, there are several differences between the exploratory factor analysis and the PCA. In PCA, all of the variance in the variables were used. In factor analysis, however, only the shared variance is analysed (Tabachnick et al., 2001). The PCA is a mathematical procedure for identifying a smaller number of uncorrelated “artificial” variables, called “principal components”, from a large number of observations (Guadagnoli & Velicer, 1988). The purpose of using the PCA is to explain the maximum amount of variance with the fewest number of principal components. This technique is mostly used as a tool in exploratory data analysis for purposes of variable reduction (Steiger, 1990). The PCA also has the advantage of preventing potential problems with respect to “factor indeterminacy” (Stevens, 1996). In this thesis, since the main purpose is factor reduction, the PCA is employed for investigating the independent variables. In addition, the PCA is also used to improve the reliability and validity of the hypothesis tests. Fewer robust statistically valid and reliable variables can be used for the hypothesis testing. However, it should be noted that the final structure of the factors should have a strong theoretical background (Kline, 2015).

The procedures for conducting the PCA followed by Pallant’s (2013) recommendation in three steps. The first step was to determine the appropriateness of the factor analysis. Generally, there are two concerns involved in determining the suitability of the factor analysis: the sample size and the strength of the relationship among the variables (items). Factor analysis is more suitable when the sample size is large. Tabachnick et al. (2001) suggested that five observations for each item is adequate in most of the situations. The

final total items for PCA in this study is 36 which requires a minimum sample size of 180. The total sample size for this study is 620, and therefore, is deemed adequate for the PCA.

Bartlett's Test of Sphericity (Hair, Black, Babin, Anderson, & Tatham, 2006) is a commonly used test for determining sampling adequacy. It examines if the observed correlation matrix deviates significantly from the identity matrix (under H_0 – the variables are orthogonal). In the Bartlett's Test, the determinant of the correlation matrix $|R|$ was computed. Under H_0 , $|R| = 1$; if the variables are highly correlated, $|R| \approx 0$. The test examines to the extent to which the data diverge from the reference situation $|R| = 1$.

The PCA should only be performed if the null hypothesis of independence was rejected (Dziuban & Shirkey, 1974). A significant result ($p < 0.05$) for the factor analysis is considered to be appropriate. As the test result suggested, this study had a significant Bartlett's Test result (see Table 5-2). The Kaiser-Meyer-Olkin (KMO) index has the same objective as the Bartlett's Test, i.e., measuring the sampling adequacy. The Bartlett's Test confirmed that the variables are correlated. However, the correlation between two variables may be influenced by others. The KMO measures the sampling adequacy by comparing the values of correlations between the variables and those of the partial correlations (Pallant, 2013). A low KMO value (near 0) means that the sum of the partial correlations is large in comparison with the sum of the correlations, suggesting that the correlations are not clustered among a few variables. Conversely, a high value (near 1) indicates a good fit for the factor analysis (Kaiser, 1970). Hutcheson and Sofroniou (1999) suggested that a KMO value under 0.5 is unacceptable, 0.6 – 0.7 is mediocre, 0.8 – 0.9 is meritorious, and 0.9 and above is marvellous. The KMO indices for the full sample data set and three buying scenario data sets are presented in Table 5-2, suggesting great fitting for the factor analysis.

Table 5-2: KMO and Bartlett's Test Significance for the Full Sample Data Set and Three Buying Scenario Data Sets

	KMO value	Bartlett's test significance
Full Sample	0.905	0.000
Unplanned Buying	0.870	0.000
Purchase-for-trial	0.874	0.000
Customer Opportunism	0.881	0.000

In relation to with the rotation method, there are two main approaches: orthogonal (uncorrelated) and oblique (correlated) factor rotations. Orthogonal rotations are claimed to be easier to interpret and report, whereas oblique rotations are considered to be difficult to interpret and describe (Tabachnick et al., 2001). The varimax rotation method was employed in the analysis. Varimax was considered as the most popular rotation method, which was developed by Kaiser (1970). After the varimax rotation, each original variables is very likely to be associated with one (or a small number) of the factors, and it attempts to rotate the original factors in such a way that the variance of the loading is maximised for each component (Abdi, 2003).

Stevens (2012) suggested the use of a cut-off point of 0.4, irrespective of the sample size. Therefore, 0.4 was used as the cut-off point in this study. The initial results suggested that items of “I wonder if I have made the right choice” and “I wonder if I have done the right thing in buying this product” cross loaded into both wisdom of purchase and regret for full sample. In order to achieve measurement invariance for path comparison, factor loadings were also checked for all three buying situations. The cross-loading differences were smaller for the item “I wonder if I have made the right choice” for both unplanned and customer opportunism buying situations, indicating that the inclusion of this item is more likely to lead to discriminant validity problem. Although for purchase-for-trial and customer opportunism buying, the factor loadings for the item “I wonder if I have done the right thing in buying this product” are slightly lower than 0.4 (the factor loadings for

purchase-for-trial and customer opportunism buying are 0.359 and 0.398 respectively). Hair et al. (2006) also suggest that the minimum acceptable cut-off point ranges from 0.3–0.4. In addition, the confirmatory factor analysis (CFA) model fittings suggest that the model fits for both full sample and three buying situations models are better if the item “I wonder if I have done the right thing in buying this product” is included in the regret construct. Therefore, this item is included in the construct pertaining to regret for the full sample and all the three buying situations. The final loading table is produced after the validity and reliability tests are conducted, based on the CFA results (see Table 5-4).

The second step is the factor extraction. This step is responsible for determining the smallest number of factors that can be used to reflect the interrelations among the set of items (Pallant, 2013). There are two most common criteria for determining the most suitable number of variables, namely, Kaiser’s criterion and scree test. Kaiser’s criterion is also known as the eigenvalue rule. According to this rule, factors with an eigenvalue of 1.0 or above can be retained for further investigation. The eigenvalue of a factor indicates the amount of the total variance that is explained by that factor. In this study, there are eight factors extracted from the raw data, which explain 74.321 percent of variance in the full sample. In order to maintain consistency, the factor extractions for the three buying situations are fixed to eight factors (the same as the full sample). The variance explained for unplanned, purchase-for-trial, and customer opportunism buying are 74.787 percent, 73.971 percent and 77.342 percent respectively.

5.5.2 Confirmatory Factor Analysis (CFA)

Having conducted the PCA, a CFA is employed in order to further examine the variables. CFA is a type of SEM that analyses a priori measurement models in which both the number of factors and their indicators are specified (Kline, 2015). Unlike PCA or exploratory factor analysis (EFA), CFA requires empirical or theoretical foundation to

guide the specification of the factor model (Hoyle, 2000). The main purpose of CFA is psychometric evaluation, such as the examination of scale reliability (Raykov, 2001b). The results of CFA can provide evidence for the convergent and discriminant validity of the theoretical constructs. Although the results from the parallel analysis indicated that there are eight components altogether for the observed variables, the last component is a construct pertaining to cognitive dissonance, based on the theoretical definition. Therefore, it was included in the CFA. On the basis of the model modification indices, several error terms from the same construct were covaried. Correlated measurement error can be modelled in a CFA model with substantively justified specification (Hoyle, 2000). The error terms of indicators that are reversely coded or similarly worded in a sequence order were covaried in the CFA model for this study. The CFA was conducted in the AMOS with the ML estimation fitting function. The ML estimation attempts to discover the model parameter estimates that maximise the probability of gaining the existing data if the data were gathered from the same population again (Hoyle, 2000).

There are several indices for indicating the model fit in the case of a CFA model. The classic goodness of fit index is χ^2 . A statistically significant χ^2 indicates that the model does not fit the data well. However, there are three ways in which the chi-square test could be misleading and may be reflected in this study.

1. It is sensitive to model complexity. The more complex the model, the higher the chances of a good fit. Chi-square tests analyse the difference between the researcher's model and a just-identified version of it. Therefore, the closer the model is to being just-identified, the more likely it is that the chi-square test will get rejected. The measurement model in this study was over-justified, and it is very normal that the chi-square test in this study was significant.
2. The chi-square test is highly sensitive to sample size. A large sample size usually leads to the rejection of the null hypothesis. In a large sample, even small

differences between the observed model and the most fitted model could be found to be significant. Given the fact that sample size for this study is relatively large (620), it is very likely for the chi-square test to be significant.

3. The chi-square index is also sensitive to violations of the assumption of multivariate normality. The measurement scales for research in the field of social science often violate the normality assumption. It is also seen for this study (Pallant, 2013).

Therefore, many researchers have suggested that with a reasonable sample size (e.g. over 200 observations) and a good model fit suggested by other model fit indices (discussed below), the significance of the chi-square test can be disregarded. Instead, AMOS provides the relative chi-square (normal chi-square) test result. It is given as the chi-square fit index divided by the degrees of freedom, in order to make the test less dependent on sample size. Carmines and McIver (1981) argued that the relative chi-square ratio should remain in the range of 2:1 or 3:1 for an acceptable model. Ullman and Bentler (2003) suggested that a ratio of 2:1 or below indicates good fit. Kline (1998) proposed that 3 or less is acceptable. Other most widely accepted approximate fit indices are the standardised root mean square residual (SRMR), the root mean square error of approximation (RMSEA), and the comparative fit index (CFI).

SRMR is defined as the standardised overall difference between the observed and the predicated correlations (Kline, 2015). It is an absolute measure of fit, and a value of zero indicates perfection of fit. Hu and Bentler (1999) suggested that an SRMR value that is close to 0.08 or below is an acceptable fit.

RMSEA measures the degree to which that the sample variances and covariances differ from the corresponding estimated variance and covariances based on the assumption that the researcher's model is correct (Kline, 2015). It is suggested that the cut-off points of

0.01, 0.05 and 0.08 have been used to indicate excellent, good, and mediocre fit respectively (MacCallum, Browne, & Sugawara, 1996). A 90 percent confidence interval can be calculated for the RMSEA in AMOS in order to understand the sampling error in the RMSEA. Ideally, the lower bound equals zero (or is no worse than 0.05) and the upper bound is less than 0.08. The width of the confidence interval provides information about the level of precision in the estimation of the RMSEA (Kline, 2015).

CFI compares the covariance matrix predicted by the model with the observed covariance matrix, and compares the null model (independence model) with the observed covariance matrix, in order to evaluate the percent of lack of fit of the null model with respect to the existing model (Kline, 2015). A CFI that is close to one indicates an excellent fit. Researchers have recommended using 0.90 as a cut-off point for acceptable fitting (Hair et al., 2006). This implies that the existing model can reproduce 90 percent of the covariance in the data.

The CFA tests were performed on the basis of the results of the PCA. Model fit indices (see Table 5-3) suggest that the measurement models for the full data set and three buying scenarios have met the requirements, indicating good fits.

Table 5-3: Model Fit Indices for Full Sample Model and Three Buying Scenario Models

Model Fit Indices	Full	Unplanned Buying	Purchase-for-Trial	Customer Opportunism
CMIN/DF	2.691	1.571	1.756	1.835
CFI	0.945	0.938	0.928	0.929
RMSEA	0.052	0.055	0.058	0.063
LO 90	0.049	0.048	0.052	0.057
HI 90	0.055	0.062	0.065	0.069
SRMR	0.0574	0.0702	0.0690	0.0680

5.5.3 Reliability and Validity of the Quantitative Study

Reliability and validity are important concepts in the context of research. Reliability refers to the extent to which results are consistent over time and the accuracy in the representation of the total population. Score reliability or construct reliability refers to the degree to which scores in a sample are free from random measurement errors (Kline, 2015). One of the most frequently used methods for checking the score reliability is Cronbach's Alpha coefficient (Cronbach, 1951). A value of 0.7 suggests an acceptable internal consistency (Nunnally, 1978), and a value of 0.8 is considered to be preferable (Clark & Watson, 1995). The Cronbach's Alpha values for all the measurement scales in this study are above the 0.7 cut-off point as reported in the previous section. This suggests an acceptable level of score reliability. However, Cronbach's Alpha coefficient has been criticised as being a lower bound and can underestimate the true reliability in the results (Raykov, 2001a).

Validity refers to the extent to which the measurement instruments assess what they are purported to measure (Hair et al., 2006). Generally, two types of validity are considered in the case of research: face validity and construct validity. Face validity is the extent to which the content of the items is consistent with the construct definition (Gravetter & Forzano, 2015). Face validity puts emphasis on the theoretical validity of the measure. As all the items are adopted or modified from earlier studies on the basis of an extensive literature review and have been tested for different research contexts, the scales in this study are deemed to have sufficient face validity.

Construct validity refers to the extent to which a measure actually evaluates the theoretical construct it is supposed to measure, and it can be assessed through correlation analysis (Hair et al., 2006). Construct validity consists of both convergent validity and discriminant validity. Convergent validity refers to the degree to which two measures of

constructs that should be related theoretically are actually related (Campbell & Fiske, 1959).

In order to overcome the disadvantage posed by Cronbach's Alpha index and improve the reliability and validity of this study, a more rigorous approach was adopted in this study by utilising the output of CFA in order to calculate relevant index for score reliability and convergent and discernment validity. Composite Reliability (CR), Average Variance Extracted (AVE), and Maximum Shared Variance (MSV) and Average Shared Variance (ASV) were calculated by inputting the correlations and standardised regression tables from AMOS into the "Stats Tools Package", using Microsoft Excel 2016 (Gaskin, 2012).

CR is a much less biased alternative method to measure the reliability of the factors and a value above 0.75 is desirable (Peterson & Kim, 2013). It is calculated in accordance with the following formula given by Fornell and Larcker (1981) (where λ_i is the standardised factor loading of the i^{th} indicator, and θ_i is the standardised variance of error term of the i^{th} indicator, estimated from the CFA model):

$$CR = \frac{(\sum_i \lambda_i)^2}{(\sum_i \lambda_i)^2 + \sum_i \theta_i}$$

AVE is a measure to assess convergent validity. AVE is the average amount of variance in the indicator variables (items) that a construct explains (Hair et al., 2006), and a value above 0.5 is considered to be sufficient. It is also calculated with the help of the formula presented by Fornell and Larcker (1981) (where λ_i is the standardised factor loading of the i^{th} indicator, and θ_i is the standardised variance of error term of the i^{th} indicator):

$$AVE = \frac{\sum_i \lambda_i^2}{(\sum_i \lambda_i)^2 + \sum_i \theta_i}$$

Table 5-4 presents the summary for the measurement reliability and convergent validity results of the full sample data set and three buying scenario data sets. The results indicate

that all the scales have met the measurement requirements in terms of factor loading, Cronbach's Alpha, CR, and AVE values.

Table 5-4: Factor Loadings, Cronbach's Alpha, Composite Reliability and Average Variance Extracted for Full Sample Data Set and Three Buying Scenario Data Sets

Items	Full sample Factor Loadings (N = 620)			Unplanned Buying Factor Loadings (N = 178)			Purchase-for-trial Factor Loadings (N = 222)			Customer Opportunism Factor Loadings (N = 211)		
	α	CR	AVE	α	CR	AVE	α	CR	AVE	α	CR	AVE
Value for Money	0.899	0.9	0.7	0.894	0.902	0.7	0.85	0.9	0.7	0.88	0.91	0.72
VFM1 is reasonably priced	0.864			0.868			0.837			0.885		
VFM2 offers value for money	0.882			0.879			0.858			0.899		
VFM3 is a good product for the price	0.849			0.850			0.837			0.862		
VFM4 would be economical	0.751			0.700			0.777			0.738		
Mental Imagery Discrepancy	α	CR	AVE	α	CR	AVE	α	CR	AVE	α	CR	AVE
	0.935	0.93	0.69	0.935	0.931	0.69	0.93	0.92	0.66	0.94	0.94	0.71
CD17 The product information shows to me what I want to see and not the reality	0.711			0.765			0.725			0.649		
CD18 I think that the reality is different from what it is mentioned in the product information	0.803			0.832			0.81			0.779		
CD19 The product information misleads me about the actual performances of the product	0.820			0.801			0.802			0.834		
CD20 The product is different from what I fantasized about	0.835			0.793			0.819			0.87		

CD21 The product is different from what I imagined what it would be like to use	0.867			0.845			0.867			0.877		
CD22 The feel of the product is different from what I imagined	0.854			0.846			0.815			0.883		
Concern over Deal	α	CR	AVE	α	CR	AVE	α	CR	AVE	α	CR	AVE
	0.901	0.91	0.77	0.902	0.908	0.77	0.9	0.9	0.76	0.91	0.92	0.79
CD1 After I bought this product I wondered if I'd been fooled	0.832			0.727			0.815			0.811		
CD2 After I bought this product I wondered if they had spun me a line	0.822			0.708			0.803			0.795		
CD3 After I bought this product I wondered whether there was something wrong with the deal I got	0.687			0.615			0.649			0.699		
Wisdom of Purchase	α	CR	AVE	α	CR	AVE	α	CR	AVE	α	CR	AVE
	0.822	0.83	0.7	0.829	0.831	0.71	0.88	0.88	0.79	0.73	0.73	0.58
CD4 I wonder if I really need this product	0.849			0.724			0.879			0.764		
CD5 I wonder whether I should have bought anything at all	0.827			0.744			0.876			0.737		
Emotion Dissonance	α	CR	AVE	α	CR	AVE	α	CR	AVE	α	CR	AVE
	0.930	0.93	0.59	0.923	0.922	0.57	0.92	0.92	0.57	0.94	0.94	0.64

CD8 I felt scared	0.801			0.811			0.762			0.814		
CD9 I felt hollow	0.802			0.806			0.77			0.793		
CD10 I felt uneasy	0.700			0.660			0.64			0.733		
CD11 I felt I'd let myself down	0.660			0.621			0.607			0.679		
CD12 I was in pain	0.840			0.828			0.841			0.878		
CD13 I felt depressed	0.798			0.761			0.762			0.839		
CD14 I felt furious with myself	0.723			0.689			0.675			0.775		
CD15 I felt sick	0.870			0.877			0.822			0.905		
CD16 I was in agony	0.823			0.814			0.828			0.88		
Regret	α	CR	AVE	α	CR	AVE	α	CR	AVE	α	CR	AVE
	0.838	0.84	0.58	0.830	0.836	0.56	0.84	0.85	0.58	0.84	0.85	0.58
REG1 How much would you regret your decision to purchase that product?	0.698			0.739			0.686			0.645		
REG2 If you could do it over, would you change your decision?	0.830			0.802			0.84			0.813		
REG3 How much happier would you have been if you had made a different decision?	0.844			0.872			0.882			0.76		
CD7 I wonder if I have done the right thing in buying this product	0.421			0.400			0.359			0.398		
Knowledge of Returns Policy	α	CR	AVE	α	CR	AVE	α	CR	AVE	α	CR	AVE
	0.891	0.89	0.63	0.889	0.884	0.61	0.87	0.88	0.6	0.92	0.92	0.69
PRK1 I know most stores' rules about returning products	0.750			0.756			0.669			0.804		

PRK2 I know my rights when it comes to returning goods	0.895			0.876			0.882			0.908		
PRK3 I know very little about what rights I have when I return products	0.852			0.865			0.845			0.84		
PRK4 I know a lot about the circumstances under which stores can refuse to give a refund for a returned product	0.719			0.718			0.657			0.781		
PRK5 I know very little about most stores' returns policies	0.864			0.866			0.818			0.873		
Past Returns Experience	α	CR	AVE	α	CR	AVE	α	CR	AVE	α	CR	AVE
	0.763	0.79	0.56	0.738	0.758	0.53	0.78	0.79	0.57	0.77	0.8	0.6
PRE1 I have a lot of experience of getting refunds when returning products	0.768			0.676			0.794			0.805		
PRE2 I have often gone with friends or family members when they're returning products	0.673			0.675			0.679			0.639		
PRE4 I have been involved in lots of returning of products	0.834			0.823			0.783			0.851		

Maximum Shared Squared Variance measures the extent to which the factor is explained by items outside the factor (i.e., items of other constructs). In order to examine the discriminant validity for any two constructs (A and B), the AVE for A and the AVE for B both need to be larger than the shared variance between A and B. This means that the AVE should be higher than the MSV (Fornell & Larcker, 1981; Straub, Boudreau, & Gefen, 2004). Furthermore, the ASV value should also be less than the AVE value for discriminant validity to hold good. Another condition for discriminant validity is that the square root of AVE should be greater than the inter-construct correlations. Utilising the “Stats Tools Package” (Gaskin, 2012), it is found that there are no validity concerns for the full sample measurements and three buying scenarios’ measurements. Table 5-5 shows the results of the discriminant validity test for the full sample data set and three buying scenario data sets. As the table shows, all MSV and ASV values are less than the AVE values, and all inter-construct correlations are smaller than the square root of AVE, which indicates a good discriminant measurement validity.

Table 5-5: Discriminant Validity Test Results for Full Sample Data Set and Three Buying Scenarios Sample Data Set

	AVE	MSV	ASV	Past Returns Experience	Concern over Deal	Wisdom of Purchase	Emotion Dissonance	Mental Imagery Discrepancy	Regret	Knowledge of Returns Policy	Value for Money
Full sample											
Past Returns Experience	0.561	0.310	0.046	0.749							
Concern over Deal	0.769	0.362	0.165	0.075	0.877						
Wisdom of Purchase	0.702	0.252	0.111	-0.003	0.406	0.838					
Emotion Dissonance	0.592	0.221	0.118	0.039	0.458	0.339	0.769				
Mental Imagery Discrepancy	0.695	0.265	0.150	0.007	0.515	0.502	0.434	0.833			
Regret	0.577	0.362	0.172	-0.009	0.602	0.379	0.470	0.458	0.760		
Knowledge of Returns Policy	0.627	0.310	0.047	0.557	-0.056	-0.063	-0.026	-0.085	-0.028	0.792	
Value for Money	0.706	0.267	0.106	-0.085	-0.383	-0.313	-0.300	-0.361	-0.517	0.067	0.840
Unplanned Buying											
Past Returns Experience	0.528	0.371	0.068	0.729							
Concern over Deal	0.769	0.394	0.18	0.204	0.878						
Wisdom of Purchase	0.712	0.37	0.145	0.041	0.381	0.845					
Emotion Dissonance	0.572	0.187	0.116	0.095	0.426	0.369	0.756				
Mental Imagery Discrepancy	0.695	0.37	0.175	0.147	0.58	0.578	0.451	0.829			
Regret	0.565	0.394	0.165	-0.033	0.643	0.351	0.431	0.443	0.748		
Knowledge of Returns Policy	0.606	0.4371	0.056	0.636	0.028	-0.123	0.016	-0.008	-0.059	0.783	
Value for Money	0.701	0.245	0.12	-0.171	-0.419	-0.391	-0.323	-0.386	-0.494	0.023	0.834
Purchase-for-Trial											

Past Returns

Experience	0.568	0.270	0.041	0.754							
Concern over Deal	0.759	0.279	0.152	0.018	0.871						
Wisdom of Purchase	0.792	0.181	0.069	0.082	0.237	0.890					
Emotion Dissonance	0.568	0.269	0.146	0.018	0.519	0.393	0.754				
Mental Imagery											
Discrepancy	0.663	0.246	0.137	0.051	0.496	0.425	0.481	0.814			
Regret	0.584	0.279	0.135	-0.058	0.528	0.213	0.447	0.397	0.765		
Knowledge of											
Returns Policy	0.599	0.270	0.048	0.520	-0.204	0.108	0.022	-0.035	-0.072	0.774	
Value for Money	0.698	0.256	0.109	-0.026	-0.413	-0.167	-0.409	-0.372	-0.506	0.071	0.836

Customer Opportunism

Past Returns											
Experience	0.595	0.299	0.049	0.772							
Concern over Deal	0.788	0.471	0.198	0.001	0.888						
Wisdom of Purchase	0.579	0.434	0.186	-0.111	0.608	0.761					
Emotion Dissonance	0.640	0.228	0.102	-0.005	0.461	0.246	0.800				
Mental Imagery											
Discrepancy	0.712	0.291	0.151	-0.159	0.474	0.458	0.421	0.844			
Regret	0.579	0.471	0.241	0.022	0.686	0.659	0.477	0.539	0.761		
Knowledge of											
Returns Policy	0.685	0.299	0.058	0.547	0.010	-0.235	-0.094	-0.180	0.013	0.827	
Value for Money	0.719	0.264	0.096	-0.071	-0.325	-0.398	-0.168	-0.312	-0.514	0.101	0.848

5.5.4 Methods of Analysis

5.5.4.1 Structural Equation Modelling (SEM)

SEM is employed as the data analysis method for this study in order to test the post-purchase appraisal models for both the full sample and three buying scenarios. Although analyses of the experimental method have relied heavily on classic Analysis of variance (ANOVA) or Multivariate analysis of variance (MANOVA) methods, Bagozzi and Yi (1989) showed that SEM can be used to test the same hypotheses that can be addressed by the classic approaches while overcoming the limitations of measurement error and the restrictive assumption of homogeneity. SEM refers to a diverse set of mathematical models, algorithms, and statistical methods that examine the structural relationships. SEM includes CFA, path analysis, partial least squares path analysis, LISREL and latent growth modelling (Kline, 2015). In a multiple regression model, a variable can either be a predictor (an independent variable) or an outcome (a dependent variable). However, this thesis focuses on consumers' post-purchase appraisal processes. Therefore, from a more realistic and complex view of the research context, a variable may be an outcome with respect to some variables but it may also become a predictor for other variables. For example, the perceived value for money may arouse consumers' negative emotions such as regret, which further affects the returns intention. In this analysis, two types of variables are involved: endogenous variables and exogenous variables. In a causal model, an endogenous variable is a variable that the value of which is determined by the states of the other variables in the model. An exogenous variable in a causal model is a variable whose value is independent of the states of the other variables (its value may be determined by variables outside the causal model/system of the focal study) (Kline, 2015). Although it is possible to run the multiple regression test several times, it is quite inconvenient to do so. SEM is preferred in this study owing to the fact that it estimates the multiple and interrelated dependence in a single analysis.

The structural equation models consist of two components: a measurement model and a structural model. The measurement model is concerned with the relationships between measured variables and latent variables. The structural model involves the relationships between latent variables only. The advantage of SEM is that latent variables are free of random errors, as the error has been estimated and removed, whereas the multiple regression model makes an unrealistic assumption that the predictors are perfectly reliable with no measurement error (Kline, 2015). A measured variable is a kind of variable that can be observed or measured directly. A latent variable is a type of variable that cannot be observed directly and is rather inferred from the observed variables (Tabachnick et al., 2001). The interest of this study lies in latent constructs – abstract psychological variables such as “cognitive dissonance” or “regret” – rather than in the manifest variables used to measure these constructs. By explicitly modelling measurement error, SEM allows the derivation of more unbiased and realistic estimates for the relationships between latent constructs (Kline, 2015).

Furthermore, a structural equation model indicates a structure of the covariance matrix of the measures (Kline, 2015). For this study, a hypothesised causal model was developed, and the purpose of using SEM was to test the developed model using sample data. Once the model parameters have been estimated, the model-implied covariance matrix can be compared with the data-based covariance matrix. The model fit indices can provide statistic evidence to show whether the two matrices are consistent with each other. Acceptable model fit indices provide plausible explanation for the relationships between the hypothesised model and empirical data (Kline, 2015). Nevertheless, it should be noted that SEM can be considered as a disconfirmatory technique. It helps the researcher reject false models (that have poor fit with respect to the data), but it is unable to confirm the hypothesized model with reality when the true model is unknown (Bollen, 1989). As mentioned earlier, this thesis focuses on the post-purchase cognitive

appraisal process. Consequently, a statistical method capable of providing model fit information is deemed to be appropriate.

5.6 Hypotheses Testing and Results

As deliberated in the literature review and hypotheses development chapters, this study aims to develop a framework that depicts the two-decision process of product returns in the context of online purchase. Following the structure of the hypotheses development section, the hypotheses testing consists of two main parts: the full sample model and the three buying scenario sample models. The data interpretation of the models has also been provided in a separate section.

The above sections tested the measurement reliability and validity and deliberated on the methods of analysis for this study: SEM. The following section will discuss the test results in relation with the hypotheses.

5.6.1 Full sample Post-purchase Appraisal Model

After confirming the appropriateness of the measurement model, SEM was used to test the hypothesized conceptual framework through Amos Graphics 22, using the ML estimation. The benefit of using SEM is that the whole cognitive and affective appraisal process can be tested at once. The results showed a good fit between the proposed model and the observed data ($\chi^2(866) = 1985.485$; CFI = 0.938; RMSEA = 0.046; RMSR = 0.0557, LO 90 = 0.043, HI 90 = 0.048). The normal chi-square is 2.293, which is smaller than 3, the value recommended by Carmines and McIver (1981) to indicate a good model fit, taking the sample size into consideration. Table 5-6 is the summary of the SEM results for the full sample model. The structural model serves as a base for testing the mediation effects, with the employment of the bootstrapping technique.

Table 5-6: Hypotheses Testing for Full Sample Model

Path		Estimate	S.E.
Value for Money	→ Concern over Deal	-0.205***	0.054
Value for Money	→ Wisdom of Purchase	-0.147***	0.064
Value for Money	→ Emotion Dissonance	-0.146***	0.043
Mental Imagery Discrepancy	→ Concern over Deal	0.519***	0.058
Mental Imagery Discrepancy	→ Wisdom of Purchase	0.426***	0.066
Mental Imagery Discrepancy	→ Emotion Dissonance	0.456***	0.045
Post-purchase Contextual Condition	→ Concern over Deal	-0.221***	0.01
Post-purchase Contextual Condition	→ Wisdom of Purchase	-0.009	0.117
Post-purchase Contextual Condition	→ Emotion Dissonance	-0.204***	0.08
Unplanned Buying	→ Concern over Deal	-0.063	0.116
Unplanned Buying	→ Wisdom of Purchase	0.155***	0.138
Unplanned Buying	→ Emotion Dissonance	-0.042	0.093
Customer Opportunism	→ Concern over Deal	-0.013	0.112
Customer Opportunism	→ Wisdom of Purchase	0.245***	0.133
Customer Opportunism	→ Emotion Dissonance	-0.13***	0.089
Concern over Deal	→ Regret	0.285***	0.041
Wisdom of Purchase	→ Regret	0.075	0.004
Emotion Dissonance	→ Regret	0.124***	0.051
Value for Money	→ Regret	-0.278***	0.049
Mental Imagery Discrepancy	→ Regret	0.214***	0.057
Unplanned Buying	→ Regret	-0.006	0.102
Customer Opportunism	→ Regret	-0.124***	0.101
Consideration of Policy Leniency	→ Regret	0.102***	0.059
Knowledge of Returns Policy	→ Regret	0.006	0.038
Post-purchase Contextual Condition	→ Regret	-0.311***	0.092
Knowledge of Returns Policy	→ Past Returns Experience	0.554***	0.056
Knowledge of Returns Policy	→ Returns Likelihood	-0.005	0.065
Concern over Deal	→ Returns Likelihood	0.027	0.06
Wisdom of Purchase	→ Returns Likelihood	-0.073	0.054
Emotion Dissonance	→ Returns Likelihood	-0.02	0.069
Value for Money	→ Returns Likelihood	-0.017	0.073
Mental Imagery Discrepancy	→ Returns Likelihood	0.085*	0.078
Regret	→ Returns Likelihood	0.609***	0.082
Past Returns Experience	→ Returns Likelihood	0.205***	0.053
Consideration of Policy Leniency	→ Returns Likelihood	-0.012	0.087
Purchase Intent	→ Returns Likelihood	0.045	0.075
Gender	→ Returns Likelihood	0.078**	0.113
Income	→ Returns Likelihood	-0.041	0.027
Age	→ Returns Likelihood	-0.002	0.048
Online Purchase Frequency	→ Returns Likelihood	-0.057*	0.064
Post-purchase Contextual Condition	→ Returns Likelihood	-0.012	0.138
Unplanned Buying	→ Returns Likelihood	0.052	0.147
Customer Opportunism	→ Returns Likelihood	0.029	0.141

*** Significant at 0.01 level; ** significant at 0.05 level; * significant at 0.10 level

5.6.1.1 Primary Appraisal and Its Appraisal Outcome (Cognitive Dissonance)

H1: Low perceived value for money will significantly increase consumers' feeling of (a) concern over deal; (b) wisdom of purchase; and (c) emotion dissonance

H2: Mental imagery discrepancy is positively related with a) concern over deal; b) wisdom of purchase; c) emotion dissonance

The structural equation model results suggest that both value for money ($\beta_{VFM \rightarrow COD} = -0.205$, $p_{VFM \rightarrow COD} < 0.001$; $\beta_{VFM \rightarrow WOP} = -0.147$, $p_{VFM \rightarrow WOP} < 0.001$; $\beta_{VFM \rightarrow ED} = -0.146$, $p_{VFM \rightarrow ED} < 0.001$) and mental imagery discrepancy ($\beta_{MID \rightarrow COD} = 0.519$, $p_{MID \rightarrow COD} < 0.001$; $\beta_{MID \rightarrow WOP} = 0.426$, $p_{MID \rightarrow WOP} < 0.001$; $\beta_{MID \rightarrow ED} = 0.456$, $p_{MID \rightarrow ED} < 0.001$) increase all three dimensions of cognitive dissonance. Therefore, H1a – H1c and H2a – H2c are all supported.

5.6.1.2 Emotion Elicitation – Cognitive Dissonance and Regret

H3: a) Concern over deal; b) wisdom of purchase; c) emotion dissonance is positively related with regret

As explained and discussed in the hypotheses development section, this thesis argues that cognitive dissonance and regret are two separate constructs. The test results suggested that concern over deal ($\beta_{COD \rightarrow Regret} = 0.285$, $p_{COD \rightarrow Regret} < 0.001$) and emotion dissonance ($\beta_{ED \rightarrow Regret} = 0.124$, $p_{ED \rightarrow Regret} = 0.001$) are positively related with regret. However, wisdom of purchase ($\beta_{WOP \rightarrow Regret} = 0.075$, $p_{WOP \rightarrow Regret} = 0.091$) is not statistically related with regret with the full sample size model. Therefore, H3a and H3c are supported, but H3b is only marginally significant.

5.6.1.3 Primary Appraisal and Returns Likelihood – Cognitive Dissonance and Regret as Mediators

H4a: Value for money → concern over deal → regret → returns likelihood

H4b: Value for money → wisdom of purchase → regret → returns likelihood

H4c: Value for money → emotion dissonance → regret → returns likelihood

H4d: Mental imagery discrepancy → concern over deal → regret → returns likelihood

H4e: Mental imagery discrepancy → wisdom of purchase → regret → returns likelihood

H4f: Mental imagery discrepancy → emotion dissonance → regret → returns likelihood

Instead of merely making predictions, this thesis aims to develop a theoretical framework in order to *explain* the relationships among the variables in the post-purchase appraisal process. One way to understand how or why different variables are associated in a certain way is to investigate the underlying mechanisms – through mediation analysis (MacKinnon, 2008). One of the most frequently employed approach in marketing and consumer behavioural literature for examining mediation is hierarchical regression (e.g., Bian & Moutinho, 2011; Olney, Holbrook, & Batra, 1991; Weisberg, Te'eni, & Arman, 2011), suggested by previous studies (e.g., Baron & Kenny, 1986; MacKinnon & Dwyer, 1993; MacKinnon, Lockwood, Hoffman, West, & Sheets, 2002). Baron and Kenny's (1986) traditional four-step approach has been criticised by Hayes (2009). His work challenges Baron and Kenny's (1986) criteria for establishing mediation. Baron and Kenny (1986, p. 1176) argued that there are four statistical steps for determining the existence of a mediation effect.

Step 1: The independent variable is correlated with the dependent variable. This step ensures that there is an effect that can be mediated.

Step 2: The independent variable is correlated with the mediator. This step establishes the relationship between independent variable and the mediator.

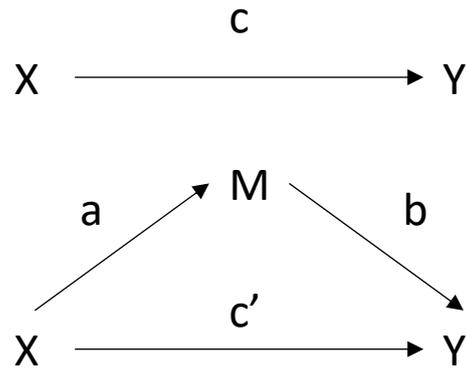
Step 3: The mediator influences the dependent variable, controlling the independent variable.

Step 4: If the mediator completely mediates the relationship between the independent and the dependent variables, the effect of the independent variable on the dependent controlling for the mediator should be zero.

$$M = i_1 + aX + e_1 \quad (1)$$

$$Y = i_2 + c'X + e_2 \quad (2)$$

$$Y = i_3 + cX + bM + e_3 \quad (3)$$



Hayes (2009) pointed out several major problems with Baron and Kenny's approach. First, Baron and Kenny (1986) asserted that the strength of the mediation is the greatest when there is an indirect effect but no direct effect in equation (3). However, Hayes argued that the strength of the mediation should be measured by the amount of indirect effect rather than the lack of direct effect. The lack of direct effect can only suggest that the scope of the omitted mediator(s) is small. The direct path is the "unexplained" part of the X-Y relationship and the existence of the direct effect often results from the omission of one or multiple mediators from the model (Hayes, 2009; Shrout & Bolger, 2002). Second, there is no need for an "effect to be mediated" in equation (2). He has suggested that the only requirement for establishing mediation is that the indirect effect should be significant, and the Baron and Kenny's classification into full, partial, and no mediation is misleading. The difference between Hayes' approach and Baron and Kenny's approach is that c' represents the total effect rather than the "effect to be mediated". Consequently, a significant c' does not necessarily indicate mediation and vice versa. Other scholars also

provided support for Hayes' arguments. For example, Kenny, Kashy, and Bolger (1998) suggested that the step 4 in Baron and Kenny's approach does not need to be met unless a complete mediation is expected. MacKinnon, Fairchild, and Fritz (2007) proposed that if the direction of c' were opposite to that of ab , there is an inconsistent mediation. In that case, step 1 would not be met, but the mediation effect still exists. This provides evidence for the competitive mediation in Hayes' approach. For example, coping mediates the relationship between stress and mood. Indeed, the direct effect should be negative: high level of stress leads to negative mood. However, the effect of stress on coping is positive (stress motivates coping) and the effect of coping on mood is positive (coping leads to better mood), which, in turn, leads to a positive indirect effect (MacKinnon et al., 2007). Studies using the hierarchical regression approach relied on the Sobel test (Sobel, 1982). Sobel test has been found to be flawed by researchers (Hayes, 2009; Preacher & Hayes, 2004). Sobel test works on the assumption of normal distribution while testing the significance of the mediation effect. However, empirical evidence suggested that the distribution of the mediation effect is not normal (Bollen & Stine, 1990; Stone & Sobel, 1990). Therefore, using the Sobel test for examining the significance of the mediation effect may not be appropriate. MacKinnon and his colleagues conducted several studies in order to find a more accurate method for testing the indirect effect and found that the bias-corrected bootstrapping method produces the most accurate confidence intervals (MacKinnon, Lockwood, & Williams, 2004). The bootstrapping technique is applied in order to improve the robustness of the results and overcome the sample size and non-normal distribution requirements (Preacher & Hayes, 2004). Consequently, the bootstrapping method has been proposed as the remedy for the Sobel test while conducting mediation analysis (Preacher & Hayes, 2004, 2008). However, hierarchical regression works on the assumption of no measurement error, which is unrealistic. This results in a biased estimation of the mediation effects and confidence intervals (Cheung

& Lau, 2007). Scholars therefore argued that testing mediation in SEM is superior to the standard regression methods with the employment of Baron and Kenny's traditional approach as the measurement errors in the model can be controlled for when relationships among variables are examined. In addition, SEM can consider multiple mediators and dependent variables simultaneously (Hoyle & Smith, 1994). This allows for the analysis of a more complicated model with the inclusion of all relevant paths (Baron & Kenny, 1986). In case of the SEM regression, only the indirect effect needs to be significant in order to establish the mediation effect, using the bootstrapping tests (Hayes, 2009, 2013; MacKinnon et al., 2007).

The mediation analysis was performed by Amos bootstrapping within the structural equation model, based on 95 percent bias-corrected confidence intervals with 2000 times bootstrap resampling.

Table 5-7: Summary of the Mediation Results of Cognitive Dissonance and Regret for Bootstrapping

Direct Effect	b	CI
Value for money → concern over deal	-0.281	[-0.399, -0.162]
Value for money → wisdom of purchase	-0.215	[-0.342, -0.074]
Value for money → emotion dissonance	-0.149	[-0.255, -0.051]
Value for money → regret	-0.365	[-0.469, -0.262]
Value for money → returns likelihood	-0.028	[-0.189, 0.122]
Mental imagery discrepancy → concern over deal	0.634	[0.533, 0.745]
Mental imagery discrepancy → wisdom of purchase	0.553	[0.428, 0.691]
Mental imagery discrepancy → emotion dissonance	0.416	[0.323, 0.518]
Mental imagery discrepancy → regret	0.25	[0.126, 0.388]
Mental imagery discrepancy → returns likelihood	0.13	[-0.058, 0.321]
Concern over deal → regret	0.272	[0.18, 0.363]
Wisdom of purchase → regret	0.067	[-0.023, 0.153]
Emotion dissonance → regret	0.159	[0.042, 0.291]
Concern over deal → returns likelihood	0.034	[-0.106, 0.168]
Wisdom of purchase → returns likelihood	-0.087	[-0.188, 0.032]
Emotion dissonance → returns likelihood	-0.034	[-0.18, 0.101]
Regret → returns likelihood	0.799	[0.621, 0.985]
Indirect Effect		
Value for money → concern over deal → returns likelihood	-0.009	[-0.053, 0.029]
Value for money → concern over deal → regret → returns likelihood	-0.061	[-0.104, -0.030]

Value for money → wisdom of purchase → returns likelihood	0.019	[-0.003, 0.058]
Value for money → wisdom of purchase → regret → returns likelihood	-0.012	[-0.038, 0.002]
Value for money → emotion dissonance → returns likelihood	0.005	[-0.015, 0.034]
Value for money → emotion dissonance → regret → returns likelihood	-0.019	[-0.049, -0.004]
Value for money → regret → returns likelihood	-0.292	[-0.417, -0.198]
Mental imagery discrepancy → concern over deal → returns likelihood	0.021	[-0.064, 0.108]
Mental imagery discrepancy → concern over deal → regret → returns likelihood	0.138	[0.083, 0.206]
Mental imagery discrepancy → wisdom of purchase → returns likelihood	-0.048	[-0.109, 0.014]
Mental imagery discrepancy → wisdom of purchase → regret → returns likelihood	0.03	[-0.007, 0.075]
Mental imagery discrepancy → emotion dissonance → returns likelihood	-0.014	[-0.076, 0.042]
Mental imagery discrepancy → emotion dissonance → regret → returns likelihood	0.053	[0.014, 0.103]
Mental imagery discrepancy → regret → returns likelihood	0.199	[0.095, 0.337]

Table 5-7 presents the mediation bootstrapping results conducted with the help of SEM for the full sample size data, taking the effect of the three buying scenarios and two types of contextual post-purchase information and other control variables into consideration. In the case of value for money, the results indicated that the indirect effect of value for money on returns likelihood is indeed explained by the causally linked multiple mediators of concern over deal and regret ($b = -0.061$, $CI [-0.104, -0.030]$), supporting *H4a*. The chain effect of value for money → emotion dissonance → regret → returns likelihood is also statistically significant ($b = -0.019$, $CI [-0.049, -0.004]$), supporting *H4c*. The indirect effect of value for money on returns likelihood is not transmitted through the path of wisdom of purchase to regret ($b = -0.002$, $CI [-0.03, 0.0058]$). Therefore, *H4b* is rejected. The bootstrapping results showed that for the full sample model, the causal chains of value for money → concern over deal → returns likelihood ($b = -0.009$, $CI [-0.0053, 0.029]$), and value for money → emotion dissonance → returns likelihood ($b =$

0.005, $CI [-0.015, 0.034]$) are insignificant. The causal chain of value for money \rightarrow wisdom of purchase \rightarrow returns likelihood ($b = 0.019$, $CI [-0.003, 0.058]$) is not also significant. Regret acts as a mediator between value for money and returns likelihood ($b = -0.292$, $CI [-0.417, -0.198]$). The results indicated that when other factors are considered, the direct effect of value for money ($b = -0.028$, $CI [-0.189, 0.122]$) on returns likelihood is insignificant.

Proceeding to mental imagery discrepancy, the bootstrapping results were similar with those of value for money. The chain effect of mental imagery discrepancy \rightarrow concern over deal \rightarrow regret \rightarrow returns likelihood is significant ($b = 0.138$, $CI [0.083, 0.206]$), supporting H4d. The chain effect of mental imagery discrepancy \rightarrow wisdom of purchase \rightarrow regret \rightarrow returns likelihood is insignificant ($b = 0.03$, $CI [-0.007, 0.075]$). Therefore, H4e is rejected. As predicted by H4f, mental imagery discrepancy indirectly influences returns likelihood through the causally linked multiple mediators of emotion dissonance and regret ($b = 0.053$, $CI [0.014, 0.103]$). The indirect keys of mental imagery discrepancy \rightarrow concern over deal \rightarrow returns likelihood ($b = 0.021$, $CI [-0.064, 0.108]$), mental imagery discrepancy \rightarrow wisdom of purchase \rightarrow returns likelihood ($b = -0.048$, $CI [-0.109, 0.014]$), and mental imagery discrepancy \rightarrow emotion dissonance \rightarrow returns likelihood ($b = -0.014$, $CI [-0.076, 0.042]$) are all insignificant as CIs all include zero. Regret has a significant mediation effect between mental imagery discrepancy and returns likelihood ($b = 0.199$, $CI [0.095, 0.337]$). The direct effect of mental imagery discrepancy on returns likelihood is insignificant in the structural model ($b = 0.13$, $CI [-0.058, 0.321]$). The bootstrapping results supported the argument that it is not cognitive dissonance but regret that triggers the decision reversal. Cognitive dissonance is an intermediate state in the post-purchase appraisal process.

4.6.1.4 Secondary/Prospective Appraisal and Regret – A Decision Changeability

Perspective

H5: a) Consideration of policy leniency; b) knowledge of returns policy is positively related with regret

Some researchers previously argued that the coping potential reduces stress in the context of complaint behaviour (Stephens & Gwinner, 1998). Although complaint behaviour and returns behaviour share a certain level of similarity, consumers' changing attitude towards product returns leads product returns to be perceived as a normal part of consumption, especially in the context of online retailing (Fullerton et al., 1996). Consequently, this thesis argues that decision changeability increases regret (Gilbert & Ebert, 2002; Gilovich et al., 1995; Iyengar & Lepper, 2000; Roese & Summerville, 2005; Wrosch & Heckhausen, 2002). The findings *support H5a*, i.e., consideration of policy leniency intensifies the feeling of regret ($\beta_{CPL \rightarrow Regret} = 0.102$, $p_{CPL \rightarrow Regret} < 0.001$). However, the results suggest that knowledge of returns policy is unrelated with regret ($\beta_{KOP \rightarrow Regret} = 0.006$, $p_{KOP \rightarrow Regret} = 0.846$). Therefore, *H5b is rejected*.

5.6.1.4 Secondary Appraisal and Returns Likelihood – Regret and Past Returns

Experience as Mediators

H6a: Regret mediates the relationship between consideration of policy leniency and returns likelihood

H6b: Regret mediates the relationship between knowledge of return policy and returns likelihood

H6c: Past returns experience mediates the relationship between knowledge of returns policy and returns likelihood

The quantitative hypotheses that secondary appraisal indirectly influences returns likelihood through regret and past returns experience. The results of the bootstrapping mediation analysis (see Table 5-8) showed that the indirect effect of consideration of

policy leniency on returns likelihood is mainly transmitted through regret ($b = 0.156$, $CI [0.069, 0.256]$) and the direct effect is insignificant ($b = -0.031$, $CI [-0.203, 0.143]$). On the other hand, the indirect effect of knowledge of returns policy on returns likelihood is mainly transmitted through past returns experience ($b = 0.174$, $CI [0.105, 0.267]$), but not regret ($b = 0.006$, $CI [-0.063, 0.073]$) and the direct effect is insignificant ($b = -0.008$, $CI [-0.146, 0.127]$). Therefore, *H6a and H6c are supported and H6b is rejected*. Nevertheless, this result is based on the full sample model. As deliberated in the hypotheses development section, the post-purchase appraisal processes are expected to be different for different buying scenarios. The mediation analysis has been conducted again for comparison of the buying scenarios.

Table 5-8: Summary of the Mediation Results of Regret and Past Returns Experience for Bootstrapping

Direct Effect	b	CI
Consideration of policy leniency → regret	0.195	[0.091, 0.316]
Consideration of policy leniency → returns likelihood	-0.031	[-0.203, 0.143]
Knowledge of returns policy → regret	0.007	[-0.079, 0.089]
Knowledge of returns policy → Past returns experience	0.692	[0.568, 0.824]
Knowledge of returns policy → returns likelihood	-0.008	[-0.146, 0.127]
Regret → returns likelihood	0.799	[0.612, 0.985]
Past returns experience → returns likelihood	0.251	[0.148, 0.369]
Indirect Effect		
Consideration of policy leniency → regret → returns likelihood	0.156	[0.069, 0.256]
Knowledge of returns policy → regret → returns likelihood	0.006	[-0.063, 0.073]
Knowledge of returns policy → past returns experience → returns likelihood	0.174	[0.105, 0.267]

5.6.1.5 Control Variables

As this study adopts the scenario-based experiment as research instrument and it was conducted online, the effects of variables, such as the initial purchase intent, gender, income, age, online purchase frequency and post-purchase contextual condition, and the buying situations (for the full sample size data model) are controlled for in this study. Two post-purchase contextual conditions were used for triggering the post-purchase appraisal process in the quantitative study: better alternative and product usage fit. Based

on the structural equation model results, better alternative condition results in a higher degree of concern over deal ($\beta_{InfoType \rightarrow COD} = -0.221$, $p_{InfoType \rightarrow COD} < 0.001$) and emotion dissonance ($\beta_{InfoType \rightarrow ED} = -0.204$, $p_{InfoType \rightarrow ED} < 0.001$) in comparison with product usage fit condition. However, there is no difference between the two post-purchase contextual conditions for wisdom of purchase ($\beta_{InfoType \rightarrow WOP} = -0.063$, $p_{InfoType \rightarrow WOP} = 0.830$). Additionally, the better alternative condition also results in a higher level of regret in comparison with product usage fit condition ($\beta_{InfoType \rightarrow Regret} = -0.311$, $p_{InfoType \rightarrow Regret} < 0.001$). A difference between the two types of post-purchase additional information was not found ($\beta_{InfoType \rightarrow ReturnsLikelihood} = -0.012$, $p_{InfoType \rightarrow ReturnsLikelihood} = 0.771$).

As this model relates to the full sample size data, it is necessary to take the influence of different buying situations into account in order to obtain more accurate estimations for the coefficients. The results suggested that in comparison with purchase-for-trial customers, unplanned buyers have a higher chance of experiencing wisdom of purchase ($\beta_{Unplanned \rightarrow WOP} = 0.155$, $p_{Unplanned \rightarrow WOP} < 0.001$). Concern over deal is also greater for unplanned buyers than purchase-for-trial buyers, but the result is insignificant ($\beta_{Unplanned \rightarrow COD} = -0.063$, $p_{Unplanned \rightarrow COD} = 0.111$). No differences were found between these two buying scenarios in terms of emotion dissonance ($\beta_{Unplanned \rightarrow ED} = -0.042$, $p_{Unplanned \rightarrow ED} = 0.325$). Although previous studies have argued that unplanned buyers are more likely to experience regret (Verplanken & Herabadi, 2001; Wood, 1998), the results from the quantitative study showed that both unplanned buyers and purchase-for-trial buyers experience the same level of regret ($\beta_{Unplanned \rightarrow Regret} = -0.006$, $p_{Unplanned \rightarrow Regret} = 0.858$).

In case of opportunism buyers, wisdom of purchase is more highly significant than for purchase-for-trial buyers ($\beta_{Opportunism \rightarrow WOP} = 0.245$, $p_{Unplanned \rightarrow WOP} < 0.001$), whereas emotion dissonance is significantly lower than that for the customers of purchase-for-trial buying ($\beta_{Opportunism \rightarrow ED} = -0.13$, $p_{Opportunism \rightarrow ED} = 0.002$). No difference was found for

between these two buying situations in terms of concern over deal ($\beta_{\text{Opportunism} \rightarrow \text{COD}} = -0.013$, $p_{\text{Opportunism} \rightarrow \text{COD}} = 0.741$). However, opportunism buyers experience less regret than purchase-for-trial buyers ($\beta_{\text{Opportunism} \rightarrow \text{Regret}} = -0.124$, $p_{\text{Opportunism} \rightarrow \text{Regret}} < 0.001$).

No differences were found in terms of the level of returns likelihood between unplanned buyers and purchase-for-trial buyers ($\beta_{\text{Unplanned} \rightarrow \text{ReturnsLikelihood}} = 0.052$, $p_{\text{Unplanned} \rightarrow \text{ReturnsLikelihood}} = 0.194$) or opportunism buyers and purchase-for-trial buyers ($\beta_{\text{Opportunism} \rightarrow \text{ReturnsLikelihood}} = 0.029$, $p_{\text{Opportunism} \rightarrow \text{ReturnsLikelihood}} = 0.466$).

With respect to other control variables, gender has a significant influence on returns likelihood for the full sample size data model. Male participants actually have a higher self-estimated returns likelihood ($\beta_{\text{Gender} \rightarrow \text{ReturnsLikelihood}} = 0.078$, $p_{\text{Gender} \rightarrow \text{ReturnsLikelihood}} = 0.016$). The online purchase frequency has a marginally negative significant influence on returns likelihood ($\beta_{\text{OPF} \rightarrow \text{ReturnsLikelihood}} = -0.057$, $p_{\text{OPF} \rightarrow \text{ReturnsLikelihood}} = 0.085$). The initial purchase intent is not related with returns likelihood ($\beta_{\text{PI} \rightarrow \text{ReturnsLikelihood}} = 0.045$, $p_{\text{PI} \rightarrow \text{ReturnsLikelihood}} = 0.216$). Income ($\beta_{\text{Income} \rightarrow \text{ReturnsLikelihood}} = -0.041$, $p_{\text{Income} \rightarrow \text{ReturnsLikelihood}} = 0.202$) and age ($\beta_{\text{Age} \rightarrow \text{ReturnsLikelihood}} = -0.002$, $p_{\text{Age} \rightarrow \text{ReturnsLikelihood}} = 0.956$) are unrelated with returns likelihood.

5.6.2 Impact of the Situational Factor – The Role of Buying Situations

This study also seeks to compare the process model difference among the three buying scenarios using SEM. Consequently, the measurement models for different groups need to be tested for invariance across the groups. If the measurement models are different across the compared groups, there is no value for comparing the differences between path models or full structure models. Additionally, if invariance cannot be verified for the structural model, path differences should be examined on the basis of the theories in order to examine the difference among the groups (Byrne, 2013). The multi-group analysis was

performed with the employment of AMOS version 22.0 and the ‘Stats Tools Package’ (Gaskin, 2012).

Table 5-9: Measurement Model Invariant Test for Buying Situations

	<u>Chi-square</u>	<u>df</u>	<u>p-val</u>	<u>Invariant?</u>
<u>Full sample Model</u>				
Unconstrained	2813.204	1635		
Fully constrained	2868.378	1691		
Number of groups		2		
Difference	55.174	56	0.506	YES

Table 5-10: Structural Model Invariant Test for Buying Situations

	<u>Chi-square</u>	<u>df</u>	<u>p-val</u>	<u>Invariant?</u>
<u>Full sample Model</u>				
Unconstrained	3974.644	2424		
Fully constrained	4132.057	2546		
Number of groups		2		
Difference	157.413	122	0.017	NO

With respect to the buying scenarios, the results indicate that the measurement models of the three buying scenarios are invariant $\Delta X^2(56) = 55.174$ (see Table 5-9). Therefore, the invariance test for the path models were assessed. Contrary to the measurement models, the path models were found to be statistically different $\Delta X^2(122) = 157.413$ (see Table 5-10). The model invariant test suggested that the differences between the three models were significant at model level, indicating that the post-purchase appraisal processes are different under the three buying situations. The individual path differences comparison results can be found in Appendix B: SEM Results and Path Comparison for Buying Situations.

Table 5-11: Structural Model Fits for Buying Situations

Structural Model Fit Indices	Unplanned Buying	Purchase-for-Trial	Customer Opportunism
CMIN/DF	1.559	1.684	1.676
CFI	0.915	0.910	0.918
RMSEA	0.055	0.056	0.057
LO 90	0.049	0.050	0.051
HI 90	0.061	0.061	0.062
SRMR	0.0746	0.0720	0.0674

As Table 5-11 indicates, the indices for the structural model fits for each buying situations are within the acceptable range.

H7a: Value for money → concern over deal → regret → returns likelihood (in the case of unplanned buying)

H7b: Mental imagery discrepancy → concern over deal → regret → returns likelihood (in the case of unplanned buying)

H7c: Value for money → emotion dissonance → regret → returns likelihood (i in the case of unplanned buying)

H7d: Mental imagery discrepancy → emotion dissonance → regret → returns likelihood (in the case of unplanned buying)

H8a: Value for money → concern over deal → regret → returns likelihood (in the case of purchase-for-trial)

H8b: Mental imagery discrepancy → concern over deal → regret → returns likelihood (in the case of purchase-for-trial)

H9a: Value for money → wisdom of purchase → regret → returns likelihood (in the case of customer opportunism)

H9b: Mental imagery discrepancy → wisdom of purchase → regret → returns likelihood (in the case of customer opportunism)

H9c: Mental imagery discrepancy → emotion dissonance → regret → returns likelihood (in the case of customer opportunism)

H9d: Mental imagery discrepancy → emotion dissonance → regret → returns likelihood (in the case of customer opportunism)

In order to test the serial mediation effect of different dimensions of cognitive dissonance and regret, bootstrapping was performed with the help of the structural equation model for the three buying situations. Table 5-12 shows the bootstrapping results for the three buying scenarios.

The chain effect of value for money → concern over deal → regret → returns likelihood is significant for unplanned buyers ($b = -0.096$, $CI [-0.223, -0.027]$). The chain effect of mental imagery discrepancy → concern over deal → regret → returns likelihood for unplanned buyers is also significant ($b = 0.269$, $CI [0.126, 0.491]$). Therefore, both *H7a and H7b are supported*. Interestingly, the causal chain effects of value for money → concern over deal → returns likelihood ($b = 0.02$, $CI [-0.047, 0.101]$) and mental imagery discrepancy → concern over deal → returns likelihood ($b = -0.058$, $CI [-0.243, 0.138]$) are insignificant. This highlights the importance of regret as a mediator.

The chain effect of value for money → emotion dissonance → regret → returns likelihood is insignificant at 95 percent confidence intervals ($b = -0.034$, $CI [-0.141, 0.001]$). However, it should be noticed that it is significant at 90 per cent confidence intervals ($p = 0.055$). Therefore, *H7c is rejected*. Mental imagery discrepancy, on the other hand, indirectly influences returns likelihood through causally linked multiple mediators of emotion dissonance and regret ($b = 0.097$, $CI [0.017, 0.258]$), *supporting H7d*.

It should be noted that the chain effect of value for money → emotion dissonance → returns likelihood is significant ($b = 0.052$, $CI = [0.000, 0.162]$). The indirect effect of value for money on returns likelihood through emotion dissonance is positive, which indicates that emotion dissonance actually suppresses returns likelihood. A similar result was found with respect to the causal effect of mental imagery discrepancy → emotion

dissonance → returns likelihood ($b = -0.139$, $CI = [-0.308, -0.042]$). Both value for money ($b = 0.208$, $CI = [-0.063, 0.484]$) and mental imagery discrepancy ($b = 0.275$, $CI = [-0.157, 0.645]$) do not have significant direct effect on returns likelihood when all other relevant factors are taken into consideration in the unplanned buying situation.

For purchase-for-trial buying, *as predicted by H8a and H8b*, only concern over deal plays an important part in the post-purchase appraisal process. The mediation chain of value for money → concern over deal → regret → returns likelihood is significant ($b = -0.056$, $CI [-0.156, -0.010]$). In addition, the mediation chain of mental imagery discrepancy → concern over deal → regret → returns likelihood is also significant ($b = 0.101$, $CI [0.028, 0.236]$).

As discussed in the hypotheses development section, the mediation chains of value for money → wisdom of purchase → regret → returns likelihood ($b = -0.001$, $CI [-0.027, 0.010]$) and value for money → emotion dissonance → regret → returns likelihood ($b = -0.003$, $CI [-0.053, 0.043]$) are insignificant. Additionally, the mediation chains of mental imagery discrepancy → wisdom of purchase → regret → returns likelihood ($b = 0.015$, $CI [-0.041, 0.077]$) and mental imagery discrepancy → emotion dissonance → regret → returns likelihood ($b = 0.006$, $CI [-0.073, 0.083]$) are not found to be significant.

In the case of customer opportunism buying, although all the three dimensions of cognitive dissonance lead to regret. The results from the bootstrapping mediation analysis indicate that not all the three dimensions of cognitive dissonance have significant impact in the post-purchase appraisal process. The serial mediation effect of value for money → concern over deal → regret → returns likelihood was found to be insignificant, as 95 percent CI straddled zero ($b = -0.034$, $CI [-0.138, 0.005]$). Similarly, the serial mediation effect of mental imagery discrepancy → concern over deal → regret → returns likelihood is insignificant ($b = 0.074$, $CI [-0.019, 0.232]$). As seen from the discussion in the

hypotheses development section, wisdom of purchase plays an important role in the post-purchase appraisal process only for opportunism buyers. The indirect key of value for money \rightarrow wisdom of purchase \rightarrow regret \rightarrow returns likelihood is significant ($b = -0.088$, $CI [-0.398, -0.017]$). The sequence mediation effect of mental imagery discrepancy \rightarrow wisdom of purchase \rightarrow regret \rightarrow returns likelihood is also significant ($b = 0.109$, $CI [0.025, 0.443]$). *H9a and H9b, therefore, are supported.*

The mediation chains of value for money \rightarrow wisdom of purchase \rightarrow returns likelihood ($b = 0.125$, $CI [0.005, 0.431]$) and mental imagery discrepancy \rightarrow wisdom of purchase \rightarrow returns likelihood ($b = -0.156$, $CI [-0.484, -0.001]$) are also significant, indicating the important role of wisdom of purchase in customer opportunism buying. Interestingly, the direct effect of wisdom of purchase on returns likelihood in the SEM model is negative ($\beta_{WOP \rightarrow ReturnLikelihood} = -0.259$, $p_{WOP \rightarrow ReturnLikelihood} = 0.034$) (see Table 0-1). Additionally, before and after taking regret into consideration, the indirect effect of the primary appraisal (for both value for money and mental imagery discrepancy) and returns likelihood are reversed, indicating the suppressor role of wisdom of purchase on returns likelihood in customer opportunism buying.

For emotion dissonance, the bootstrapping results suggested that the indirect key of value for money \rightarrow emotion dissonance \rightarrow regret \rightarrow returns likelihood is not significant ($b = -0.008$, $CI [-0.076, 0.021]$). Nevertheless, the indirect key of mental imagery discrepancy \rightarrow emotion dissonance \rightarrow regret \rightarrow returns likelihood is significant ($b = 0.075$, $CI [0.016, 0.231]$). Thus, *H9c is rejected and H9d is supported.*

Table 5-12: Summary of the Mediation Results of Cognitive Dissonance and Regret for Buying Situations

Direct Effect	Unplanned Buying		Purchase-for-Trial		Customer Opportunism	
	b	CI	b	CI	b	CI
Value for money → concern over deal	-0.267	[-0.454, -0.069]	-0.306	[-0.531, -0.073]	-0.287	[-0.469, -0.072]
Value for money → wisdom of purchase	-0.249	[-0.438, -0.045]	-0.02	[-0.275, 0.199]	-0.352	[-0.576, -0.144]
Value for money → emotion dissonance	-0.163	[-0.351, 0.033]	-0.231	[-0.412, -0.072]	-0.046	[-0.222, 0.137]
Value for money → regret	-0.348	[-0.567, -0.182]	-0.301	[-0.486, -0.136]	-0.345	[-0.529, -0.162]
Value for money → returns likelihood	0.208	[-0.063, 0.484]	-0.024	[-0.334, 0.258]	-0.255	[-0.57, 0.094]
Mental imagery discrepancy → concern over deal	0.751	[0.574, 0.976]	0.547	[0.355, 0.746]	0.625	[0.449, 0.827]
Mental imagery discrepancy → wisdom of purchase	0.593	[0.37, 0.85]	0.518	[0.297, 0.788]	0.437	[0.218, 0.685]
Mental imagery discrepancy → emotion dissonance	0.432	[0.248, 0.65]	0.407	[0.279, 0.556]	0.433	[0.287, 0.652]
Mental imagery discrepancy → regret	0.167	[-0.106, 0.468]	0.298	[0.102, 0.526]	0.283	[0.101, 0.49]
Mental imagery discrepancy → returns likelihood	0.275	[-0.157, 0.645]	-0.05	[-0.361, 0.296]	0.074	[-0.317, 0.425]
Concern over deal → regret	0.386	[0.2, 0.594]	0.217	[0.051, 0.381]	0.163	[-0.052, 0.337]
Wisdom of purchase → regret	-0.025	[-0.256, 0.196]	0.033	[-0.094, 0.149]	0.345	[0.113, 0.641]
Emotion dissonance → regret	0.241	[0.027, 0.559]	0.016	[-0.205, 0.239]	0.239	[0.057, 0.459]
Concern over deal → returns likelihood	-0.077	[-0.322, 0.182]	0.131	[-0.121, 0.374]	0.074	[-0.224, 0.379]
Wisdom of purchase → returns likelihood	0.085	[-0.199, 0.359]	0.021	[-0.146, 0.191]	-0.357	[-0.882, 0.033]
Emotion dissonance → returns likelihood	-0.32	[-0.631, -0.083]	0.015	[-0.287, 0.291]	0.12	[-0.242, 0.398]
Regret → returns likelihood	0.928	[0.637, 1.256]	0.848	[0.513, 1.214]	0.726	[0.211, 1.452]
Indirect Effect						
Value for money → concern over deal → returns likelihood	0.02	[-0.047, 0.101]	-0.04	[-0.150, 0.026]	-0.021	[-0.137, 0.062]
Value for money → concern over deal → regret → returns likelihood	-0.096	[-0.223, -0.027]	-0.056	[-0.156, -0.010]	-0.034	[-0.138, 0.005]
Value for money → wisdom of purchase → returns likelihood	-0.021	[-0.118, 0.044]	0	[-0.038, 0.017]	0.125	[0.005, 0.431]
Value for money → wisdom of purchase → regret → returns likelihood	0.006	[-0.049, 0.075]	-0.001	[-0.027, 0.010]	-0.088	[-0.421, -0.015]

Value for money → emotion dissonance → returns likelihood	0.052	[0.000, 0.162]	-0.003	[-0.082, 0.069]	-0.005	[-0.074, 0.016]
Value for money → emotion dissonance → regret → returns likelihood	-0.036	[-0.141, 0.001]	-0.003	[-0.053, 0.043]	-0.008	[-0.070, 0.022]
Value for money → regret → returns likelihood	-0.323	[-0.594, -0.145]	-0.255	[-0.485, -0.105]	-0.251	[-0.537, -0.069]
Mental imagery discrepancy → concern over deal → returns likelihood	-0.058	[-0.243, 0.138]	0.072	[-0.063, 0.230]	0.046	[-0.135, 0.252]
Mental imagery discrepancy → concern over deal → regret → returns likelihood	0.269	[0.126, 0.491]	0.101	[0.028, 0.236]	0.074	[-0.023, 0.230]
Mental imagery discrepancy → wisdom of purchase → returns likelihood	0.05	[-0.116, 0.219]	0.011	[-0.076, 0.101]	-0.156	[-0.484, -0.001]
Mental imagery discrepancy → wisdom of purchase → regret → returns likelihood	-0.014	[-0.154, 0.121]	0.015	[-0.041, 0.077]	0.109	[0.027, 0.496]
Mental imagery discrepancy → emotion dissonance → returns likelihood	-0.139	[-0.308, -0.042]	0.006	[-0.113, 0.118]	0.052	[-0.086, 0.208]
Mental imagery discrepancy → emotion dissonance → regret → returns likelihood	0.097	[0.017, 0.258]	0.006	[-0.073, 0.083]	0.075	[0.013, 0.255]
Mental imagery discrepancy → regret → returns likelihood	0.155	[-0.104, 0.491]	0.253	[0.088, 0.521]	0.205	[0.038, 0.508]

H10: Regret mediates the relationship between consideration of policy leniency and returns likelihood in the case of a) unplanned buying and b) customer opportunism buying

H11: Regret mediates the relationship between knowledge of returns policy and returns likelihood in the case of a) unplanned buying and b) customer opportunism buying

H12: Past returns experience mediates the relationships between knowledge of returns policy and returns likelihood in the case of a) unplanned buying, b) purchase-for-trial and c) customer opportunism

The bootstrapping mediation results (see Table 5-13) showed that regret indeed mediates the relationship between consideration of policy leniency and returns likelihood for unplanned buyers ($b = 0.395$, $CI [0.153, 0.705]$). Therefore, *H10a is supported*. Interestingly, the direct relationship between consideration of policy leniency and returns likelihood is also significant in the case of unplanned buyers. However, this relationship is negative for SEM results ($\beta_{CPL \rightarrow ReturnsLikelihood} = -0.135$, $p_{CPL \rightarrow ReturnsLikelihood} = 0.037$) (see Table 0-1), meaning lenient returns policy actually reduces the returns likelihood for unplanned buyers. This indicates that the mediation effect of regret between consideration of policy leniency and returns likelihood is inconsistent (MacKinnon et al., 2007). The mediation effect of regret between consideration of policy leniency and returns likelihood in the case of opportunism buyers is only significant at 90 percent confidence intervals but not at 95 percent confidence intervals ($b = 0.113$, $CI [-0.004, 0.343]$). *H10b is rejected* on the basis of this result. However, a positive relationship has been discovered between consideration of policy leniency and regret for opportunism buying, but at a marginally significant level, from the SEM results ($\beta_{CPL \rightarrow Regret} = 0.155$, $p_{CPL \rightarrow Regret} = 0.06$) (see Table 0-1), which showed that the consideration of policy leniency indeed increases regret in opportunism buying.

The bootstrapping results suggested that regret does not have a mediation role between knowledge of returns policy and returns likelihood, as the 95 percent bootstrap CI straddled zero ($b = -0.116$, $CI [-0.294, 0.057]$). Therefore, *H11a is rejected*. As predicted by *H11b*, knowledge of returns policy indirectly influences returns likelihood through regret and the indirect effect is significant ($b = 0.099$, $CI [0.008, 0.269]$) for customer opportunism buying.

The mediation effect of past returns experience on the relationship between knowledge of returns policy on returns likelihood is insignificant in the case of unplanned buying at 95 percent level ($b = 0.164$, $CI [-0.009, 0.377]$) as the p-value is larger than 0.05 ($p=0.065$), but significant in the case of purchase-for-trial ($b = 0.179$, $CI [0.057, 0.379]$) and customer opportunism buying ($b = 0.174$, $CI [0.059, 0.323]$). The bootstrapping results also suggested that the direct effect of past returns experience on returns likelihood is insignificant ($b = 0.21$, $CI [-0.024, 0.459]$) in unplanned buying. Hence, *H12a is rejected*. *H12b and H12c are supported*.

Table 5-13: Summary of the Mediation Results of Regret and Past Returns Experience with Bootstrapping for Buying Situations

Direct Effect	Unplanned Buying		Purchase-for-Trial		Customer Opportunism	
	b	CI	b	CI	b	CI
Consideration of policy leniency → regret	0.425	[0.17, 0.69]	0.01	[-0.168, 0.176]	0.155	[-0.004, 0.341]
Consideration of policy leniency → returns likelihood	-0.37	[-0.821, 0.027]	0.238	[-0.035, 0.519]	-0.031	[-0.327, 0.237]
Knowledge of returns policy → regret	-0.125	[-0.292, 0.062]	0.007	[-0.13, 0.135]	0.136	[0.017, 0.253]
Knowledge of returns policy → Past returns experience	0.781	[0.535, 0.981]	0.63	[0.396, 0.135]	0.703	[0.516, 0.891]
Knowledge of returns policy → returns likelihood	0.143	[-0.195, 0.456]	-0.021	[-0.284, 0.236]	-0.131	[-0.36, 0.119]
Regret → returns likelihood	0.928	[0.637, 1.256]	0.848	[0.513, 1.214]	0.726	[0.211, 1.452]
Past returns experience → returns likelihood	0.21	[-0.024, 0.459]	0.285	[0.076, 0.494]	0.248	[0.078, 0.443]
Indirect Effect						
Consideration of policy leniency - regret - returns likelihood	0.395	[0.153, 0.705]	0.009	[-0.138, 0.170]	0.113	[-0.004, 0.343]
Knowledge of returns policy - regret - returns likelihood	-0.116	[-0.294, 0.057]	0.006	[-0.116, 0.131]	0.099	[0.008, 0.269]
Knowledge of returns policy - past returns experience-returns likelihood	0.164	[-0.009, 0.377]	0.179	[0.057, 0.379]	0.174	[0.059, 0.323]

5.7 Data Interpretation

5.7.1 Full sample Post-purchase Appraisal Process

Figure 5-4 explicates the general post-purchase appraisal process that leads to product returns in the context of online purchase. This study is the first of the studies pertaining to the online shopping context to empirically test the psychological appraisal process underlying consumer returns for non-defective products, incorporating the buying context in the remote-purchase environment. This study contributes to the understanding of online merchandise returns by mapping out the appraisal process in terms of why and how the product returns decision is formed, taking all the relevant factors into consideration simultaneously.

Beginning with two imperative primary post-purchase evaluative factors that underlie the remote-purchase context, namely, mental imagery discrepancy and value for money, the results suggested that these two factors play essential roles in the post-purchase appraisal process in the context of online shopping. The impact of these two factors on returns likelihood is conveyed through the post-purchase dissonance and the elicited regret, as seen from the mediation results. Both value for money and mental imagery discrepancy lead to all the three dimensions of cognitive dissonance. The impact of mental imagery discrepancy is even stronger. The direct effects of value for money on returns likelihood and mental imagery discrepancy on returns likelihood are insignificant. Additionally, for the full sample size data model, cognitive dissonance alone does not mediate the relationship between primary appraisal and returns likelihood. However, the chain mediation effect becomes significant when regret works as the second mediator. This suggests that the relative impact of the mediated emotion on consumers' behavioural intention (returns likelihood) is more salient compared with the direct impact of cognitions on consumers' behavioural intention in the context of product returns.

The mediation results indicated that the effects of value for money and mental imagery discrepancy on returns likelihood are transmitted through the different dimensions of cognitive dissonance and regret. The quantitative study revealed that different dimensions of cognitive dissonance play different roles in the post-purchase appraisal process, especially under different buying situations (see later discussion). Wisdom of purchase does not contribute to the formation of product returns decision for the full sample model. Concern over deal and emotion dissonance contribute to the explanation of the mechanism underlying the product returns decision formation process. However, it should be noted that this study adopted a scenario-based design and participants were asked to make two decisions in a very short duration of time (decision to purchase and decision to retain or return). Therefore, even if the participants were exposed to the post-purchase contextual conditions that trigger the appraisal process, it is less likely that they would feel the selected item was no longer needed in that short period of time range. Modified designs may be required in order to completely ascertain the impact of wisdom of purchase on the post-purchase appraisal process. Furthermore, as deliberated in the hypotheses development section, the role of different dimensions of cognitive dissonance differs for different buying situations.

From the initial buying decision to the returns decision, there is a goal reversal for consumers. As Wood (2001) argued, online purchase is a two-decision process. Consumers' attitude towards merchandise returns has changed, and it is perceived as a normal part of the post-purchase appraisal process (Dodge et al., 1996). Liberal returns environment allows consumers to postpone their pre-purchase evaluation to the post-purchase stage. The conflict between pre-purchase and post-purchase appraisal impels consumers to wonder about their decisions and escalate into the aversive emotion of regret. At this point, consumers' knowledge of returns policy and the leniency of returns policy remind them of the ease of decision reversal and the infinite possible choices, fostering

the experience of regret (Roese & Summerville, 2005). Although knowledge of returns policy is not related with regret in the case of the full sample model, it significantly increases the feeling of regret for opportunistic buyers (see later discussion).

Other relevant factors, such as gender, age, income, and online buying frequency, were also controlled for in this study. Previous research has suggested that the appraisal outcome has higher chances of being perceived as stressful with devotion towards long-term commitments (Lazarus, 1966; Lazarus & Folkman, 1984). However, the initial purchase intent is not related with returns likelihood in the case of both the full sample model and the buying situation models. One possible explanation for this may be because that the participants who do not demonstrate certain level of purchase intentions were excluded from this study. Previous studies did not find gender to be a significant predictor for both retail borrowing and returns in general (Maity & Arnold, 2013; Piron & Young, 2000). Interestingly, this study shows that gender has a positive relationship with returns likelihood, which means that it is more probable for male customers to return the undesired item. Mittal and Kamakura (2001) found that men's satisfaction ratings for purchase are lower than that of women. Rook and Hoch (1985) suggested that men perceive shopping as a waste of time and they are less likely to spend time in justifying their purchase decisions. The results of this thesis provided empirical evidence for these findings. Online purchase frequency is found to be positively related with returns likelihood at a marginally significant level. This is consistent with the learning theory (Petersen & Kumar, 2009; Walsh et al., 2016). When consumers are more familiar with the procedure, they are more likely to display direct behavioural responses in order to cope with their negative feelings. Age and income are not related with returns likelihood in the case of the full sample model.

The influence of the two post-purchase contextual conditions and the three buying scenarios were also controlled for in the full sample model. The results revealed that better

alternative condition leads to higher levels of concern over deal, emotion dissonance, and regret than the usage fit condition. This indicates that exposure to a better alternative in the post-purchase stage triggers stronger regret and, in turn, increases returns likelihood. Conversely, the threat to consumers' 'usage fit' generates less intensive discomfort during the post-purchase appraisal process. One should be cautious in generalising this result when it comes to other product categories. This study utilises a portable consumer electronics item as the test item. The functional benefit may play a more important role in the post-purchase appraisal process. However, for apparels, the product usage fit may have a larger impact on the post-purchase appraisal process.

In order to accurately reflect the relationships among the factors, the full sample model also takes the initial buying situations into consideration. In comparison with purchase-for-trial buyers, unplanned buyers experience a higher degree of wisdom of purchase, whereas opportunistic customers experience a higher level of wisdom of purchase and emotion dissonance. Interestingly, the results have suggested that the level of regret between unplanned buying and purchase-for-trial is indifferent. Opportunistic buyers experience lower levels of regret. However, no differences were found in terms of returns likelihood. These findings provide a preliminary comparison of the buying situations in relation with the appraisal factors. The following section discusses the impact of the situational factor (buying situations) on the appraisal process.

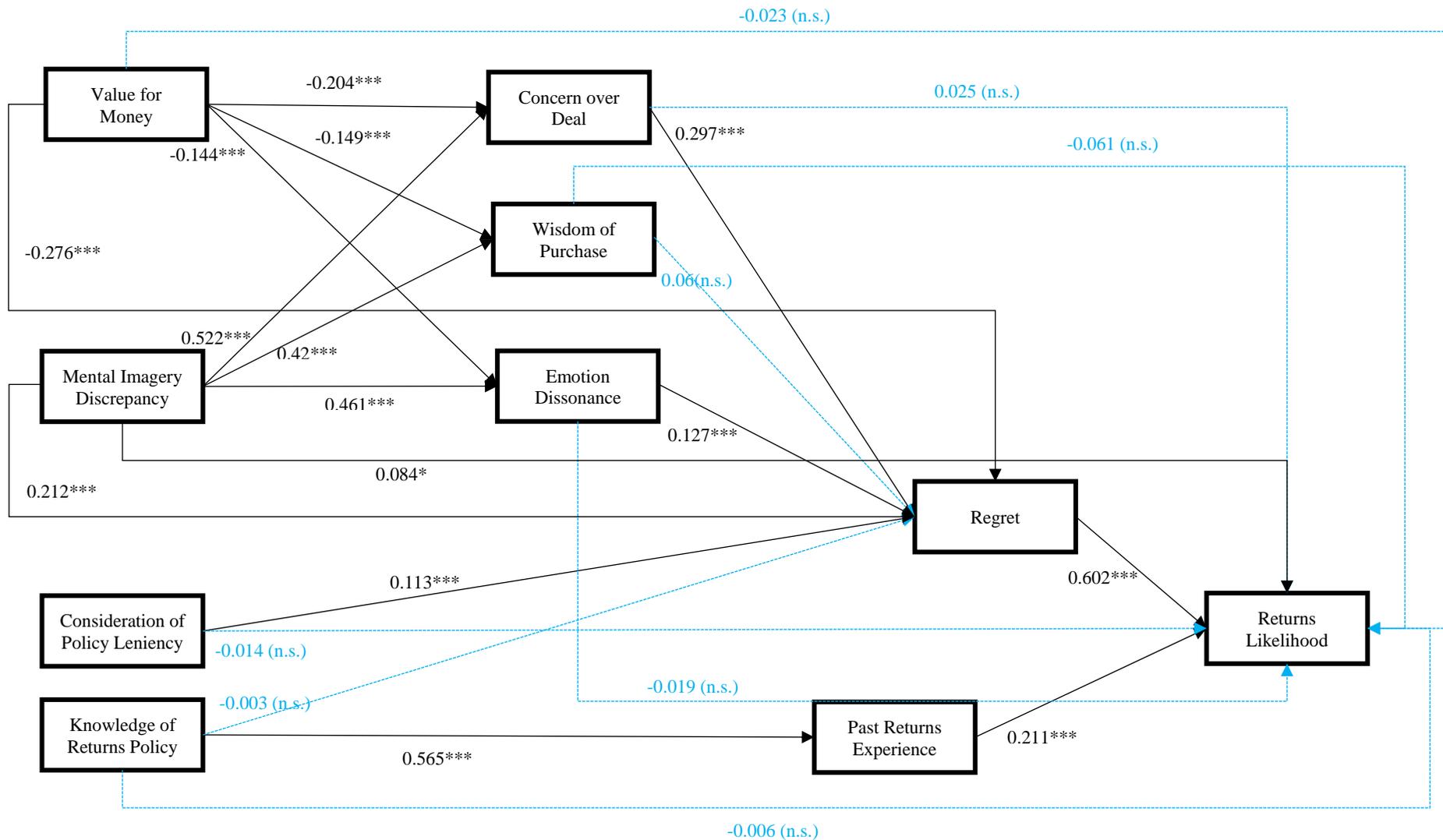


Figure 5-4: Full-Sample Relationship Visualisation (*** significant at 0.01 level; ** significant at 0.05 level; * significant at 0.10 level)

5.7.2 The Impact of the Situational Factor – The Role of Buying Situations

Moving on to the buying scenario comparison, the results suggested that the post-purchase appraisal processes pertaining to the decision outcomes in the case of different initial buying situations are significantly different at the model level. Figure 5-5, Figure 5-6, and Figure 5-7 show the post-purchase appraisal process for each buying scenario model.

As discussed in both the introductory chapter and the hypotheses development section, this thesis argues that cognitive dissonance and regret are two different constructs. This argument is further evidenced by the findings of the quantitative study. For example, only in the case of customer opportunism buying, wisdom of purchase leads to regret, whereas in the two other buying situations, this relationship is insignificant. Additionally, the mediation analysis for unplanned buying provides evidence to suggest that dissonance and regret may even have opposite effects on returns likelihood. For unplanned buyers, emotion dissonance is negatively related with returns likelihood, whereas regret is positively related with returns likelihood. This is consistent with the theoretical argument that cognitive dissonance may suppress behavioural intentions, whereas regret motivates preference reversal (Cooper et al., 1978; Kahneman & Tversky, 1982). Consumers often easily experience post-purchase dissonance in the context of online buying (Sweeney et al., 1996). However, the dissonance may or may not escalate into regret. This change is subject to the specific buying situation and the dimensions of cognitive dissonance. In the case of unplanned buying, both concern over deal and emotion dissonance stemming from the primary appraisal process can escalate into regret, but wisdom of purchase does not. In the context of purchase-for-trial, concern over deal, arising from primary appraisal, is the only dimension that is positively related with regret. This indicates that purchase-for-trial buyers have relatively stable pre-developed cognition and emotion states in the post-purchase stage. Concern over deal and regret in this sequence mediate the effect of

primary appraisal on returns likelihood. The same relationship was not observed for the sequence of wisdom of purchase and regret and the sequence of emotion dissonance and regret. As for opportunistic buying, wisdom of purchase and regret mediate the effect of primary appraisal on returns likelihood in this sequence. More interestingly, the indirect effect of primary appraisal on returns likelihood through wisdom of purchase and the indirect effect of primary appraisal on returns likelihood through the causally linked multiple mediators of wisdom of purchase and regret have opposite signs. The direct effect of wisdom of purchase on returns likelihood is negative. This means that in the case of opportunism buying, wisdom of purchase alone actually acts as a suppressor variable in the post-purchase appraisal process, consistent with cognitive dissonance theory that it motivates psychological repair (Festinger, 1957). It is regret that motivates preference reversal. Additionally, in this sequence, emotion dissonance and regret mediate the mental imagery discrepancy on returns likelihood. The findings suggested that only when opportunism buying consumers attribute their dissonance internally, the discomfort will escalate into regret, in turn, lead to product returns. This effect was not discovered for the externally attributed dissonance, i.e., concern over deal. This suggests consumers nowadays are actually not unscrupulous (Lee, 2015).

With regards to the secondary appraisal, consideration of policy leniency is positively linked with regret in both unplanned and opportunistic buying (marginally significant). Knowledge of return policy is also positively related with regret in the case of opportunistic buying. These findings are consistent with Gilbert & Ebert's (2002) study, which indicates that when consumers are faced with changeable decisions, it is more probable for them to experience regret. This is because the openness of the decision implies the access to infinite choices, which leads to upward counterfactual thinking (Gilbert & Ebert, 2002). Interestingly, the direct effect of consideration of policy leniency actually suppresses returns likelihood in the case of unplanned buying, and this is

consistent with Janakiraman and Ordóñez's (2012) experimental findings that lenient returns policy suppresses returns likelihood. The findings of the quantitative study showed that the cost of implementing liberal returns policy in order to encourage purchase is that it increases the feeling of regret, which, in turn, increases returns likelihood.

Unlike for opportunism buying, knowledge of returns policy reduces regret in the case of unplanned buying. This may be due to the premeditated returns intention. Opportunism buyers have knowledge of returns policy in the sense that they know that there is a relatively high chance that they will return the chosen item, whereas for unplanned buyers, they perceive the returns policy as a means of reducing the purchase risk. Dutta et al. (2011) found that when consumers adopt a protection focus, a price refund guarantee minimises regret, whereas if consumers adopt an information focus, a price refund guarantee is not helpful in reducing regret. Unplanned buying is usually influenced by sensation-seeking and exploratory tendencies (Arnould, Price, & Zinkhan, 2002), which means that the decisions may not be well informed. Knowledge of returns policy may then serve as a protective measure for these buyers.

The mediation analysis suggested that regret mediates the relationship between consideration of policy leniency and returns likelihood in the case of unplanned buying and the relationship between knowledge of returns policy and returns likelihood for customer opportunism buying. Knowledge of returns policy indirectly increases returns likelihood through past returns experience for purchase-for-trial and customer opportunism buying situations. The bootstrapping results suggested that the mediation effect of past returns experience on the relationship between knowledge of returns policy and returns likelihood is insignificant in the case of unplanned buying. Additionally, the direct effect of past returns experience on returns likelihood is insignificant in the case of unplanned buying. This indicates that the returns decision for unplanned buyers are less likely to be influenced by past returns experience.

With regards to the control variables, male participants are more likely to return the chosen item in unplanned and purchase-for-trial scenarios (at marginal significance). A possible explanation for this may be that men are less likely to spend time in justifying their decisions and they have higher chances of ‘deshopping’ after (immediately) trying out the good (Rook & Hoch, 1985; Schmidt et al., 1999). Although age cannot significantly predict returns likelihood in the full sample model, it is positively related with returns likelihood in the case of unplanned buying but negatively related with returns likelihood for opportunistic buying, as “delay of gratification” is seen to be inversely related with age (Green, Fry, & Myerson, 1994; Mischel, Shoda, & Rodriguez, 1989). One would expect that age is inversely related with unplanned buying and therefore older people who engage in unplanned buying are more likely to return the chosen item in order to rectify their behaviour. Age is also found to be negatively related with fraudulent or opportunistic behaviour (Fullerton et al., 1996; Harris, 2008). Consequently, it is expected that younger customers are more likely to engage in opportunistic buying and return their purchased item in order to take advantage of the return policy. Exposing to better alternatives in the unplanned buying scenario also leads to higher returns likelihood than in the product usage fit situation. However, this relationship is insignificant for both purchase-for-trial and customer opportunism buying.

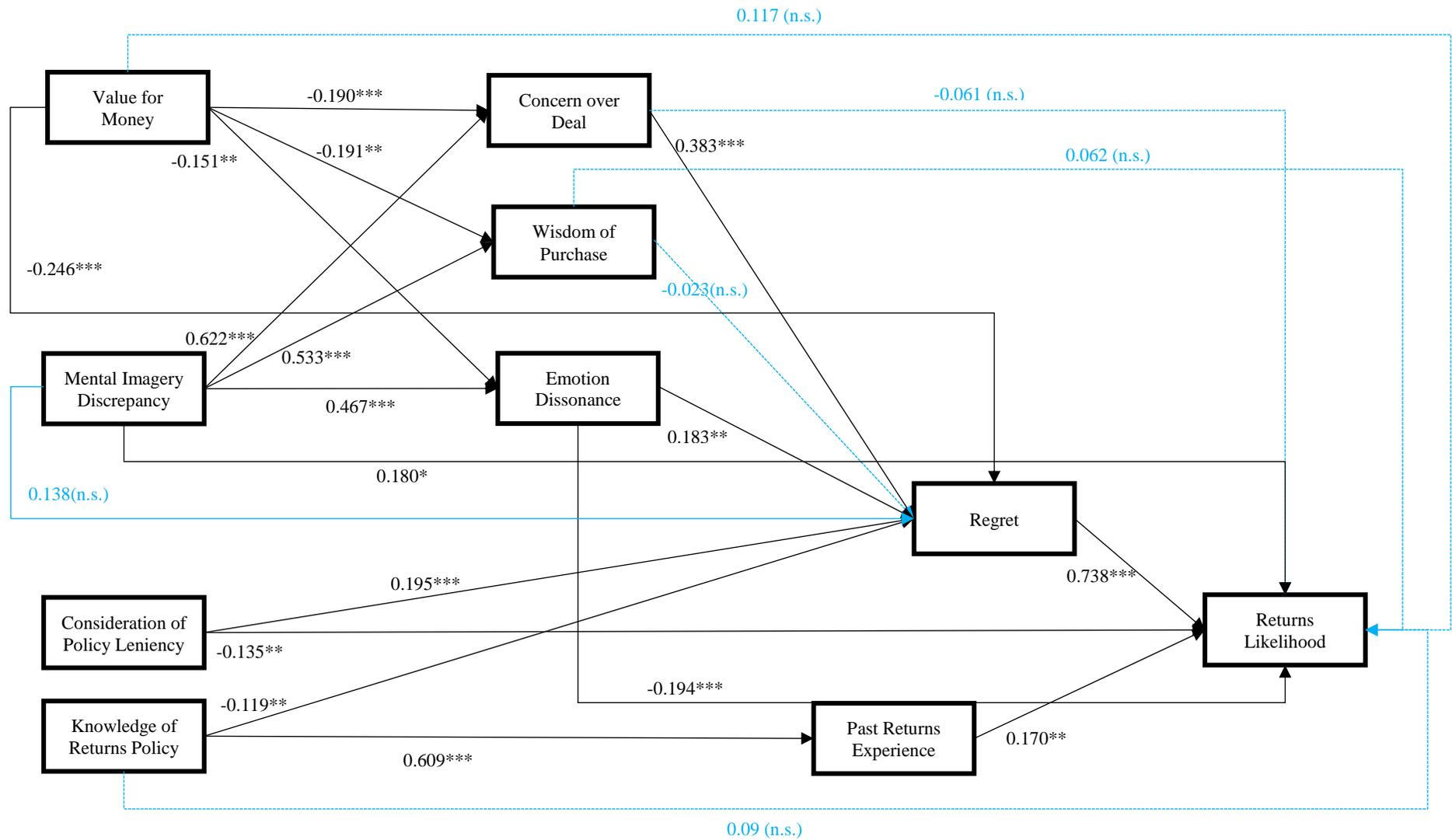


Figure 5-5: Unplanned Buying Relationship Visualisation (*** significant at 0.01 level; ** significant at 0.05 level; * significant at 0.10 level)

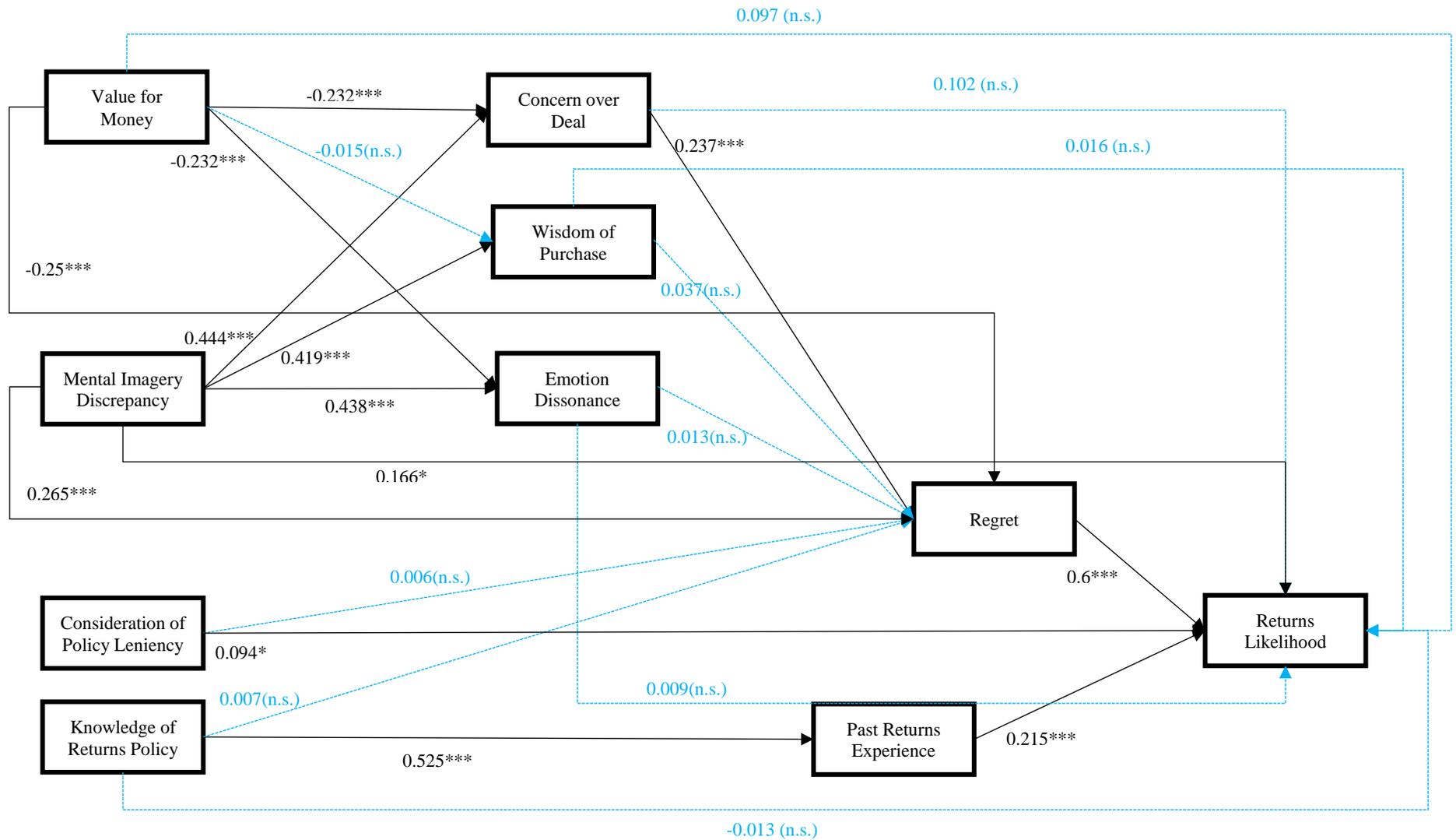


Figure 5-6: Purchase-for-Trial Buying Relationship Visualisation (***) significant at 0.01 level; ** significant at 0.05 level; * significant at 0.10 level)

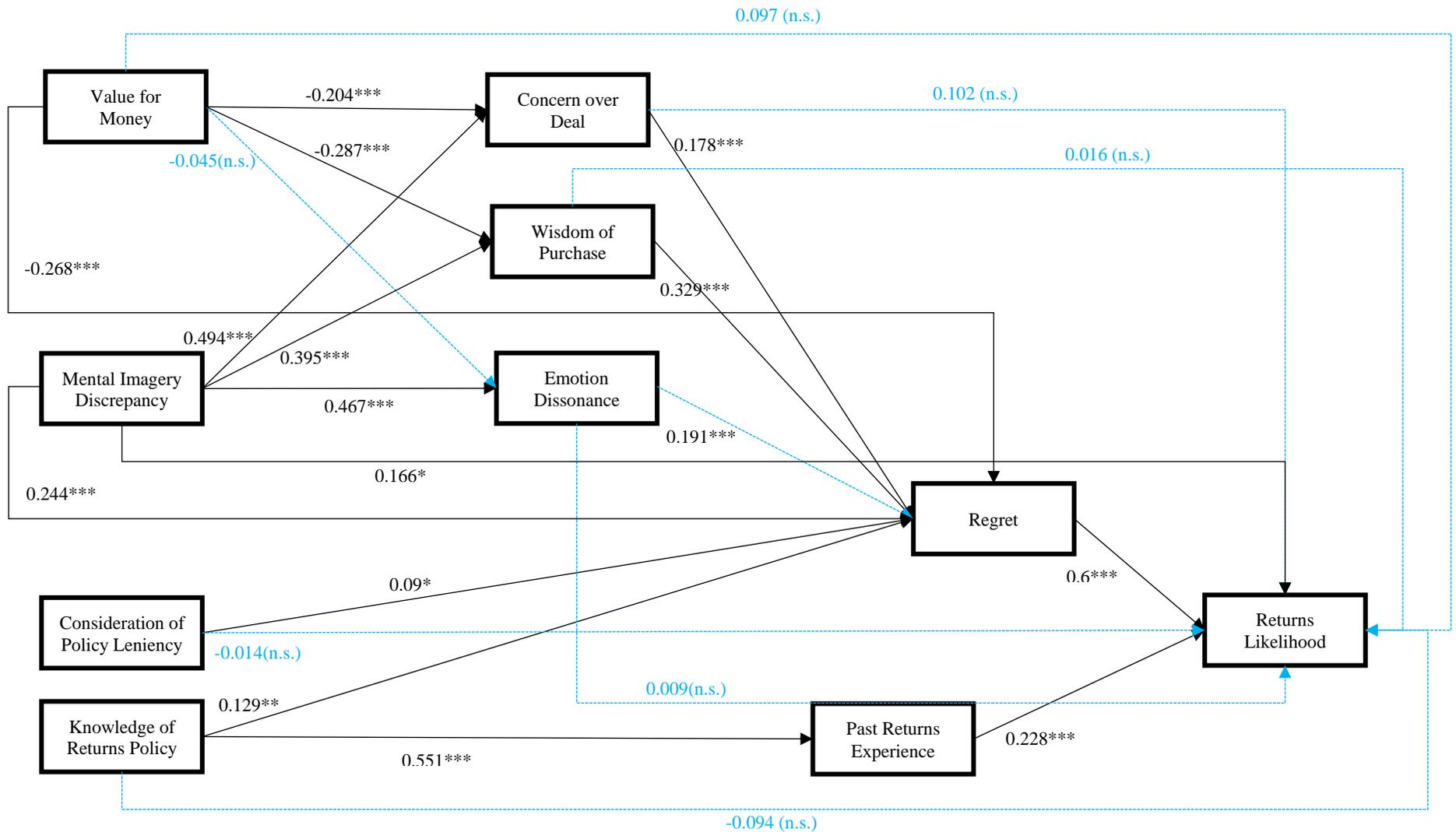


Figure 5-7: Customer Opportunism Buying Relationship Visualisation (*** significant at 0.01 level; ** significant at 0.05 level; * significant at 0.10 level)

5.8 Chapter Summary

This chapter has presented the detailed methodological approach applied in the quantitative study. The sampling method, characteristics of the participants, the Web scenario-based experiment design procedure, the pilot study, the adoption of measurement scales, the potential contributing factors for common method variance, the relevant procedural and statistical remedies used in this study, and the scale purification process were elaborated upon in this chapter. Furthermore, based on the realism research paradigm proposed in Chapter 3, the quantitative study adopted a scenario-based experiment design in order to test the theoretical framework and provide empirical evidence for the post-purchase appraisal process differences under different buying situations, utilising the SEM technique. Mediation analysis with bootstrapping sampling was conducted within SEM in order to consider all relevant variables simultaneously and control for the measurement errors. The data analysis results and the data interpretation have also been discussed and presented in this chapter. Table 5-14 highlights the summary for all hypotheses tested in the quantitative study. The next chapter proceeds to the general discussion, theoretical and managerial implications (contributions), limitations of this research project and future research prospects.

Table 5-14: Hypotheses Testing Summary

Hypotheses	Testing Results	Hypotheses	Testing Results
Full sample Model		Buying Scenarios Comparisons	
H1: Low perceived value for money will significantly increase consumers' feelings of a) concern over deal; b) wisdom of purchase; and c) emotion dissonance	H1a, H1b and H1c supported	H7: a) Value for money; b) mental imagery discrepancy will indirectly influence returns likelihood through causally linked multiple mediators pertaining to concern over deal regret in the case of unplanned buying	H7a and H7b supported
H2: Mental imagery discrepancy increases a) concern over deal; b) wisdom of purchase; c) emotion dissonance	H2a, H2b and H2c supported	H7: c) Value for money; d) mental imagery discrepancy will indirectly influence returns likelihood through causally linked multiple mediators pertaining to emotion dissonance and regret in the case of unplanned buying	H7c rejected and H7d supported
H3: a) Concern over deal; b) wisdom of purchase; c) emotion dissonance is increases experienced regret	H3a and H3c supported; H3b rejected	H8: a) Value for money; b) mental imagery discrepancy will indirectly influence returns likelihood through causally linked multiple mediators pertaining to concern over deal and regret in the case of purchase-for-trial buying	H8a and H8b supported
H4a: Value for money will indirectly influence returns likelihood through causally linked multiple mediators of concern over deal and regret.	H4a supported	H9: a) Value for money; b) mental imagery discrepancy will indirectly influence returns likelihood through causally linked multiple mediators pertaining to wisdom of purchase and regret in the case of consumer opportunism buying	H9a and H9b supported
H4b: Value for money will indirectly influence returns likelihood through causally linked multiple mediators of wisdom of purchase and regret.	H4b rejected	H9: c) Value for money; d) mental imagery discrepancy will indirectly influence returns likelihood through causally linked multiple mediators of emotion dissonance and regret in the case of consumer opportunism buying	H9c rejected; H9d supported
H4c: Value for money will indirectly influence returns likelihood through causally linked multiple mediators of emotion dissonance and regret.	H4c supported	H10: Regret mediates the relationship between consideration of policy leniency and returns likelihood in the case of a) unplanned buying and b) customer opportunism buying	H10a supported; H10b rejected

H4d: Mental imagery discrepancy will indirectly influence returns likelihood through causally linked multiple mediators of concern over deal and regret. H4d supported

H4e: Mental imagery discrepancy will indirectly influence returns likelihood through causally linked multiple mediators of wisdom of purchase and regret. H4e rejected

H4f: Mental imagery discrepancy will indirectly influence returns likelihood through causally linked multiple mediators of emotion dissonance and regret. H4f supported

H5: a) Consideration of policy leniency; b) knowledge of returns policy is positively related with regret H5a supported; H5b rejected

H6a: Regret mediates the relationship between consideration of policy leniency and returns likelihood H6a supported

H6b: Regret mediates the relationship between knowledge of returns policy and returns likelihood H6b rejected

H6c: Past returns experience mediates the relationship between knowledge of returns policy and returns likelihood H6c supported

H11: Regret mediates the relationship between knowledge of returns policy and returns likelihood in the case of a) unplanned buying and b) customer opportunism buying H11a rejected; H11b supported

H12: Past returns experience mediates the relationships between knowledge of returns policy and returns likelihood in the case of a) unplanned buying b) purchase-for-trial c) customer opportunism H12a rejected; H12b and H12c supported

Chapter 6 : General Discussion and Conclusion

6.1 Introduction

As seen from the discussion at the beginning of this thesis, merchandise returns research is an under-researched area, despite the noteworthy impact the phenomenon has on manufacturers, retailers, and customers (Bonifield et al., 2010; Seo et al., 2016). Through an extensive overview of previous literature review, this thesis identified several research gaps in the existing research. First, past studies have failed to address the two-decision nature of online shopping (decision to order and decision to retain or return) and the influence of contextual and situational factors (e.g., the buying situation) on product returns from a consumer behavioural perspective (Bonifield et al., 2010; Chang & Tseng, 2014; De et al., 2013; Rao et al., 2014; Wood, 2001). Although previous studies have explored the product returns issue, through the adoption of fragmented theories (Bonifield et al., 2010; Guide Jr, Souza, Van Wassenhove, & Blackburn, 2006; Maity & Arnold, 2013; Rao et al., 2014; Wood, 2001), an appraisal process with a foundation in marketing/consumer psychological/behavioural theory with respect to the contemporary merchandise returns is required in order to understand not only the phenomenon of consumers making product returns decision for “not dissatisfied” reasons but also to explore “how” and “why” they do it (Harris, 2010; Mollenkopf et al., 2011; Rosenbaum & Kuntze, 2005).

Second, the liberal online returns environment has bred several newly observed online buying patterns (e.g., multiple orders, customer opportunism, e-impulse buying) (Chang & Tseng, 2014; Lee, 2015), which have a higher probability of leading to product returns. However, the underlying psychological processes that lead to product returns decisions among these buying scenarios continued to be unclear. The change in consumers’ behavioural patterns and the post-purchase appraisal factors make the investigation of the situational factors relevant. Recent studies have called for the exploration of individual

and situational factors (e.g., buying situations) in the product returns appraisal process (Maity & Arnold, 2013; Powers & Jack, 2013).

Third, the competitiveness of the online retailing environment compels retailers to offer lenient returns policies. Consumers nowadays perceive the liberal returns policy as the industry “norm”. The focus of product returns reasons has veered away from the traditional definitive reasons such as defective products, unsuited products leading to decisional conflicts, and reasons that involve factors other than pure dissatisfaction (D’Innocenzio, 2011; Lawton, 2008; Lee, 2015; Seo et al., 2016). Consequently, several issues related to the underlying post-purchase appraisal process are open for investigation. For example, as discussed in the first chapter, this thesis investigates the product returns issue from the ‘not dissatisfied’ perspective and, therefore, focuses on the post-purchase dissonance (the inconsistency across the pre-purchase and the post-purchase stages). Studies pertaining to psychological literature have suggested that cognitive dissonance motivates consumers to adopt psychological repair work and subjectively increases their liking towards the selected outcomes (e.g., Barrick & Mount, 1996; Festinger, 1957; Lazarus, 1993; Miller & Ross, 1975; Speisman, Lazarus, Mordkoff, & Davison, 1964; Steele, 1988). However, recent studies suggested that cognitive dissonance is the immediate cause that leads to product returns (Lee, 2015; Maity, 2015; Powers & Jack, 2013, 2015). The exact role of post-purchase dissonance (and its different dimensions) in the post-purchase appraisal process that contributes to product returns requires further clarification.

In addition, the role of emotion in the post-purchase appraisal process has been neglected. Emotions have only been briefly mentioned as post-action affective responses within the context of fraudulent return (King & Dennis, 2006; Piron & Young, 2001; Schmidt et al., 1999), despite the important role of emotion in the post-purchase behavioural responses (e.g., Zeelenberg & Pieters, 2004).

Previous studies have suggested that individuals may differ in terms of experiencing post-purchase discomfort, which suggests that individual factors may affect the post-purchase appraisal process (Furse, Punj, & Stewart, 1984; Powers & Jack, 2013). Moreover, past research related to returns policy claims that lenient returns policy can increase the likelihood of product returns and even leads to deshopping (e.g., Harris, 2008, 2010; Johnson & Rhee, 2008; Kang & Johnson, 2009; King & Dennis, 2006). However, recent studies have showed that lenient returns policy actually suppresses product returns (Janakiraman & Ordóñez, 2012) and reduces post-purchase dissonance (Powers & Jack, 2013). Hence, the underlying mechanism for lenient returns policy in the formation of product returns decision is worth further exploration.

In order to bridge the identified research gaps, this thesis aimed to answer the following research questions.

1. Why do consumers return non-defective products in the context of online shopping?
2. How does the product returns decision form through the post-purchase appraisal process across the pre- and post-purchase stages?
3. What are the appraisal differences under the decision outcomes of different initial buying situations?

In this chapter, the theoretical and managerial implications, limitations of this study and future research directions will be discussed. First, the theoretical contributions of cognitive appraisal theory in relation to the merchandise returns context will be deliberated. Following this, based on the findings and the theoretical contribution, advise on the way in which retailers should handle the product returns issue will be provided. Next, the limitations of this thesis in terms of research design and content will be addressed. Finally, the possible future research directions will be discussed on the basis of the research limitations.

6.2 Theoretical Contributions

6.2.1 The Extended Cognitive Appraisal Theory of Product Returns

Past studies have adopted fragmented theories in order to explain individual variables pertaining to the issue of product returns. For example, expectancy theory and dissonance theory have been used to explain product satisfaction and distribution service satisfaction (Guide Jr et al., 2006; Maity & Arnold, 2013; Rao et al., 2014). Signalling theory has been adopted to explore the relationship between lenient returns policy and the perceived product quality (Bonifield et al., 2010; Wood, 2001). Despite the fact that these studies provide useful insights into product returns issue, little attention has been directed at exploring the psychological process underlying the product returns decision in order to explain “how” and “why” consumers return products when they are not entirely dissatisfied, in the context of online purchase. As addressed in the introductory chapter, research related to the product returns issue specifically in the context of online purchase, from a consumer psychological perspective, is scant (Bonifield et al., 2010; De et al., 2013; Rao et al., 2014). Existing studies related to product returns issues have failed to reflect the two-decision process nature in the online context (decision to order and decision to retain or return) (Wood, 2001). Using cognitive appraisal theory as a theoretical foundation, this thesis built a theoretical framework for consumer merchandise returns, answering the call of previous researchers for developing a theoretical framework in order to understand the way in which consumers go through the post-purchase appraisal process to form their product returns decisions (Harris, 2010; Mollenkopf et al., 2011; Rosenbaum & Kuntze, 2005). Salient factors in the post-purchase appraisal process that provoke product returns decision such as mental imagery discrepancy, value for money, multidimensional cognitive dissonance, regret, consideration of policy leniency, knowledge of returns policy and past returns experience were identified in the first qualitative study, and the causal relationship of these factors were empirically tested in

the second quantitative study, using SEM. The underlying mediation and serial mediation effects were also tested, applying the bootstrapping sampling process within the structural models. The SEM highlighted new findings in comparison with existing studies and have contributed to both cognitive appraisal theory and product returns literature in the online context:

First, this thesis extended cognitive appraisal theory by investigating the influence of situational factors (buying situations) on the entire post-purchase appraisal process rather than merely treating the buying situations as antecedents as previous studies had suggested (Lazarus & Folkman, 1984; Stephens & Gwinner, 1998). The qualitative study identified three buying situations that are more likely to lead to product returns in the context of online purchase: unplanned, purchase-for-trial, and customer opportunism buying. Findings of the quantitative study indicated that different initial buying situations vary not only in terms of on the magnitude of the post-purchase cognitive and affective appraisal factors (the three dimensions of cognitive dissonance, and regret), but also with respect to the underlying post-purchase psychological mechanism (relationships between these factors).

The mediation results suggested that the effects of primary appraisal (value for money and mental imagery discrepancy) on returns likelihood are transmitted through different dimensions of cognitive dissonance and then to regret in different buying scenarios. For example, for unplanned buying, primary appraisal (both mental imagery discrepancy and value for money) indirectly influences returns likelihood through the causally linked mediators of concern over deal and regret as well as the serial mediators of emotion dissonance and regret. However, wisdom of purchase does not increase regret or returns likelihood in the unplanned buying situation. This implies that internally attributed dissonance does not play a role in the post-purchase appraisal process in contrast to externally attributed dissonance (Stone & Cooper, 2003). Interestingly, emotion

dissonance itself reduces returns likelihood for unplanned buyers when the impact of regret is not taken into account. This is consistent with the findings of previous studies that unplanned buyers engage in the cognitive process in an attempt to rationalise their behaviour (e.g., Bayley & Nancarrow, 1998; Dholakia, 2000). However, emotion dissonance still positively related with regret in the case of unplanned buyers, indicating that it is regret that leads to the preference reversal.

For purchase-for-trial buying, findings showed that the indirect effect of primary appraisal (value for money and mental imagery discrepancy) are only transmitted through the serial mediators of concern over deal and regret. Wisdom of purchase and emotion dissonance do not lead to the experience of regret in the case of purchase-for-trial buying. This is probably due to the fact that purchase behaviours are pre-planned and the cognitions that purchase-for-trial buyers developed in the pre-purchase stage are more stable (George & Yaoyuneyong, 2010; Mittal, 1989). Unless they attribute their dissonance to external influence (concern over deal), the two other dimensions of cognitive dissonance will not elicit regret.

With regards to customer opportunism buying, findings suggested that opportunistic buyers are not unscrupulous. The indirect effect of primary appraisal does not transmit through the serial mediators of concern over deal and regret, indicating that consumers are less likely to return products in the opportunism buying situation for blaming the e-tailer for their discomfort. The wisdom of purchase dimension plays an important role in the post-purchase appraisal process for opportunism buying. A consumer who engages in opportunism buying, clearly knows that the chances of returning the selected items are relatively high at the pre-purchase stage, as the returns action is likely to be premeditated (Harris, 2010; King & Dennis, 2003). This anticipated sense of self-responsibility will lead to the experience regret in the post-purchase stage (Zeelenberg & Pieters, 2007). Similar with the role of emotion dissonance in the unplanned buying situation, wisdom

of purchase actually has a direct negative relationship with returns likelihood in the case of opportunism buying. This means that if the individual believes that his/her thoughtlessness is the source of the dissonance, the psychological immune system is activated and returns likelihood is decreased. This also provides empirically evidence to support the argument that cognitive dissonance and regret are two separate constructs. Although intensive dissonance can lead to regret, depending on the specific buying situation, dissonance and regret may have opposite influences on returns likelihood.

Second, unlike previous studies that have examined the secondary appraisal process from a coping potential perspective, the role of prospective/secondary appraisal in this thesis was examined from the perspective of decision changeability rather than coping potential herein. Previous literature pertaining to the role of coping potential is divided into two directions: few studies treat coping potential as the consequence of emotion (e.g., Smith & Ellsworth, 1985; Watson & Spence, 2007), others argue that low coping potential increases individual's stressfulness (e.g., Bolting, 1989; Stephens & Gwinner, 1998). Mediation results of quantitative study suggested that the prospective/secondary appraisal process actually increases product returns by increasing the experience of regret.

Furthermore, quantitative found that the impact of secondary/prospective appraisal varies for different buying situations. Mediation analysis suggested that in the case of unplanned buying, consumers are more likely to be affected by the consideration of policy leniency (which largely depends on e-tailers' product returns policy). It has a direct negative relationship with returns likelihood, which implies that liberal returns policy suppresses product returns. This supports the results forwarded by Janakiraman and Ordóñez's (2012) experiments. Furthermore, the indirect effect of consideration of policy leniency is positive, and the impact is transmitted through regret. Therefore, in the case of unplanned buying, liberal returns policy increases the ease of decision reversal and it is more probable for unplanned buyers to experience regret. The findings have explained the role

of lenient returns policy and have also provided an explanation of the underlying mechanism for lenient returns policy in the case of unplanned buying.

In the context of purchase-for-trial buying, the indirect effects of consideration of policy leniency and knowledge of returns policy on returns likelihood do not transmit through regret. Consideration of policy leniency has a marginally significant positive impact on returns likelihood, indicating that in the purchase-for-trial situation, liberal returns policy indeed contributes to product returns.

The secondary/prospective appraisal process is relatively important in the case of customer opportunism buying. Mediation results suggested that knowledge of returns policy indirectly influences returns likelihood through regret for opportunistic buyers, supporting the argument that changeable decisions breed regret (Gilbert & Ebert, 2002; Roese & Summerville, 2005). Consideration of policy leniency also has a marginally significant positive relationship with regret. Furthermore, the indirect impact of knowledge of returns policy on returns likelihood is also influenced by past returns experience. The results have indicated that product returns intention is very likely to be affected by consumers' product returns executing ability/perception in the case of opportunism buying.

Third, new insights for both scholars and practitioners in terms of the importance of the two-decision process have been provided herein, reflecting on the findings of mental imagery discrepancy. Existing studies have mainly focused on the positive impact of mental imagery on the first stage of online purchase, i.e., the decision to purchase (e.g., Fiore & Yu, 2001; Laurie & Burns, 1997). However, this research project demonstrates the danger of overly stimulating mental imagery. This thesis has discovered mental imagery discrepancy to be a significant appraisal factor that gives rise to cognitive dissonance and regret and further leads to product returns in the online context.

Fourth, the findings of this thesis extended cognitive appraisal theory in the context of product returns by differentiating and integrating it with the cognitive dissonance and regret theory in order to clarify the previously observed fluctuating impact of cognitive dissonance on consumers' self-estimated product returns likelihood. Emotions play an important role in predicting post-purchase behaviours, but they have been neglected in the product returns context (Bower & Maxham III, 2012; Wang, 2009). Several recent studies have argued that consumers return products in order to cope with their cognitive dissonance and cognitive dissonance is the immediate cause for product returns (Lee, 2015; Maity, 2015; Powers & Jack, 2013). Previous studies in the marketing literature have used post-purchase dissonance and post-purchase regret interchangeably (e.g., Chang & Tseng, 2014; George & Yaoyuneyong, 2010; Lee, 2015; Saleh, 2012). In this research project, however, cognitive dissonance has been identified as an important multidimensional construct in the post-purchase appraisal process that explains the reason for which consumers return a product even before they have had enough time to evaluate its performance. The serial mediation analysis suggested that cognitive dissonance and regret are two separate constructs, which may even have opposite effects on the post-purchase appraisal process depending upon the specific buying situations, and not all dimensions of cognitive dissonance lead to the experience of regret. According to core psychological literature, cognitive dissonance should encourage individuals to neutralise the contradictions, conflicts, or discomfort by subjectively optimising their view of the outcomes such that those outcomes are perceived more positively (e.g., Bell, 1967; Brehm, 1956, 1966; Cooper & Fazio, 1984; Festinger, 1957; Steele, 1988). Conversely, regret is a 'comparison-based' emotion, which is related with upward counterfactual thinking (Ritov, 1996; Roese, 1997). Upward counterfactual thinking may lead to the devaluation of the factual outcome (Taylor & Schneider, 1989; Wells et al., 1987), but can motivate the desire for betterment with respect to the current circumstance at the same time

(Markman et al., 1993). Consequently, in comparison with cognitive dissonance, regret is more likely to stimulate decision reversal.

6.3 Managerial Contributions

This thesis has strong practical implications for marketers. The thesis has investigated and explained the underlying cognitive and affective evaluative post-purchase appraisal process for three online buying situations that easily rise to returns behaviour. Retailers should effectively manage the products return issue by segmenting different purchase behaviours and offer different intervention strategies in order to reduce dissonance, regret, and ultimately the returns likelihood. This research project discovered that regret is the salient emotion that leads to product returns, while cognitive dissonance may reduce returns likelihood when all the other relevant factors are considered. For instance, emotion dissonance in the case of unplanned buying and wisdom of purchase in the context of customer opportunism buying actually have negative direct relationships with returns likelihood. This means that e-tailers should focus on preventing dissonance from escalating into regret, for example, by providing post-purchase reinforcement in order to reduce consumers' upward counterfactual thoughts.

The findings have also provided new insights into different buying situations. For example, for customer opportunism buying, secondary appraisal has a larger contribution to product returns in comparison with the other two buying scenarios. Although retailers cannot reduce the opportunistic nature of their customers, they may be able to isolate specific segments of customers who are more opportunistic than the others, through tracking the returns by the type of customer who makes them (Powers & Jack, 2013). Complementary to the findings from Lee's (2015) study, the results from the mediation analysis for opportunistic customers suggested that the consumers are not unscrupulous. The findings indicated that the effects of primary appraisal factors (value for money and mental imagery discrepancy) on returns likelihood do not transmit through the concern

over deal dimension of post-purchase dissonance for individuals who engage in opportunistic behaviour, indicating that these consumers have lower chances of blaming e-tailers for the undesirable decision outcomes. Value for money has a direct marginally significant effect on returns likelihood, even after taking all the other relevant variables into consideration. Therefore, e-tailers should make attempt to enhance opportunistic buyers' perception of value for money throughout the purchase process. For instance, if the selected item for opportunism buying has a low monetary value, all retailers need to do is to provide the consumers with a small reason to demotivate their return intention. Opportunistic consumers, stay relatively calm and the aversive emotions do not have an extreme impact on the formation of the product returns decision for them, in contrast to consumers in unplanned and purchase-for-trial buying situations, reflected by the low predicting power of regret in terms of returns likelihood. Although the primary function of the selected item is to gain extra benefit, consumers still pick up something they are interested in.

Previous studies have found that it is less probable for low monetary value items to get returned (Anderson et al., 2009). Consumers only need a little nudge to keep the products, as they will balance the trade-off between returns effort and the products or services they gain from the retailers. For example, if retailers offer post-purchase reinforcement such as unexpected free gifts, it may increase customer delight in other aspects. Additionally, post-purchase reinforcements can boost consumers' confidence level towards the selected items and make them feel that their choices are appropriate and wise (Hunt, 1970). Another strategy is to derive profit from this type of buying behaviour. For instance, retailers could develop a premium delivery service, specifically targeting opportunistic buyers in order to maintain customer loyalty and reduce the negative consequences of product returns at the same time.

The analysis results have also suggested that the indirect effect of knowledge of returns policy on returns likelihood is transmitted through past returns experience. Therefore, it is important for retailers to classify different types of customers, such as “wear-and-returns”, “over-buyers”, normal buyers, “high-value” shoppers, and “first time buyers”. According to Clear Returns (“UK online retail fraud,” 2013), a small amount of over-buyers and wear-and-returns are responsible for 10 percent of the cost of returns. Up to 80 percent of the first-time buyers who experience a return never shop again. Retailers may customise returns procedures in accordance with the different categories of customers in the future. For example, according to the Daily Mail (2012), in the US, 62 percent of stores require photo identification for returning a product and a large service database called *The Retail Equation* is used to identify/monitor frequent returners who may lose their right to bring back purchases anywhere. Better data management programs can thus help retailers tackle returns problems more effectively.

As for unplanned buying, unplanned buyers experience a series of post-purchase appraisal factors from the initial evaluation of decisional conflicts to cognitive dissonance to regret before making the final returns decisions. Retailers could implement different intervention strategies at different stages in order to prevent unplanned buyers from becoming regular returners and persuade them to retain the products and never return them. Unlike the suggestion of previous research, rather than reducing the post-purchase stress (Powers & Jack, 2013), lenient returns policy actually increases the experience of regret and, in turn, increases returns likelihood. However, lenient returns policy has also been found to have a direct negative impact on returns likelihood, indicating that lenient return policy can suppress return. As such, the key is to reduce the post-purchase regret in the case of unplanned buyers. Moreover, as regret has the strongest predicting power for returns likelihood in the case of unplanned buying, retailers should make extra efforts to reduce the experience of post-purchase regret.

Concern over deal is the only significant dimension of cognitive dissonance that conveys the impact of primary appraisal on returns likelihood for all the three buying scenarios. This suggests that e-tailers should reduce their influence on consumers and try to present information as objective as they can (e.g., providing accurate size dimensions, presenting product visual and text information without any modifications, and offering detailed product descriptions for consumers to make evaluation). As concern over deal is concerned with external influences, consumers who experience a strong feeling of concern over deal may blame the e-tailer. The externally attributed blame is expected to influence consumers' level of stress during their post-purchase appraisal, which, in turn, may influence consumers post-purchase behavioural responses, such as avoidance behaviour (Stephens & Gwinner, 1998).

Furthermore, men are more likely to return, as suggested by the results of quantitative study, for both unplanned and purchase-for-trial buying scenarios. Age is positively related with returns likelihood for unplanned buyers but negatively related in the case of opportunistic buyers. The initial purchase intent for unplanned buying is positively related with returns likelihood. Additionally, exposure to better alternatives can directly lead to product returns for unplanned buyers, which suggests that they have relatively a low level of commitment towards purchase. E-tailers should keep track of consumers' basic demographic data and, purchase and return history for formulating effective intervention strategies.

Mental imagery discrepancy is found to have strong relationship with all the three dimensions of post-purchase cognitive dissonance, indicating it is a salient factor that contributes to the post-purchase discomfort for consumers regardless of the initial buying scenarios. Consequently, e-tailers need to make extra efforts particularly in creating the connection between a stimulus and consumers' own buying needs. For instance, providing realistic background pictures for different contexts or providing other relevant

common matching items along with the products in order to stimulate and improve the accuracy of consumers' mental imagery and processing fluency may be helpful. For example, with the expansion of e-commerce and the development in technology, e-tailers may consider the use of augmented reality technology. Augmented reality is the kind of technology that enables the real-time synchronisation of physical environment with virtual elements (Azuma et al., 2001; Carmigniani & Furht, 2011). This will help e-tailers to overcome the limitations of online shopping due to the lack of available experiential information and facilitate the interactions of personalised contextual factors with the products.

6.4 Limitations and Future Research

Although this thesis provides empirical evidence to analyse the cognitive and affective post-purchase evaluative process for different buying situations with a relatively diversified sample, one must be careful while generalising these findings to other contexts.

First, the quantitative study used small electronic devices as items for test. The salient factors and the post-purchase evaluative process may be different due to the nature of the products. For example, empirical evidence indicated that clothing has a higher returns rate for both general returns behaviour and fraudulent returns behaviour (Hjort & Lantz, 2012; Johnson & Rhee, 2008; Piron & Young, 2001). It should be noted that for items such as garments, the mental imagery discrepancy might have an even stronger influence on the cognitive and affective process. It would be interested in knowing if the findings from this thesis can be generalised across product categories.

Second, this thesis mainly investigated the role of one type of cognitive emotion - regret. Many other emotions could lead to different behavioural consequences. For example, the product returns decision involves expectation. Another very important emotion could be disappointment. Regret and disappointment share some common features. For example,

both regret and disappointment are produced from the comparison between “what is” and “what might have been” and they both generate counterfactual thoughts (Pligt et al., 1998). Nevertheless, they have a major difference. Regret originates from the comparison between the obtained outcome and an outcome that might have occurred, while disappointment is originated from the comparison between the obtained outcome and an outcome that was expected (Bell, 1985; Sugden, 1985). Martinez, Zeelenberg, and Rijsman (2011) discovered that an induction of regret eliminates the endowment, while an induction of disappointment has a reverse effect on the endowment. Therefore, it would be useful to investigate the way in which these two affective components influence the post-purchase cognitive process and the subsequent behavioural responses.

Third, this thesis identified mental imagery discrepancy as a novel post-purchase appraisal factor, specifically for the remote-purchase environment. The proliferation of e-commerce and technology advancement have impelled marketers and scholars to focus on enhancing consumers’ online shopping perceptions and experiences (Kim & Lennon, 2010; Li et al., 2001; Song et al., 2007). Stimulating mental imagery has been found to display a positive impact on consumers’ attitudes towards ads, brand, and even purchase intentions (e.g., Fiore & Yu, 2001; Laurie & Burns, 1997). However, the results from this thesis showed that mental imagery discrepancy has a great impact on the subsequent cognitive dissonance and regret, which, in turn, affects the returns likelihood. Past studies pertaining to mental imagery have focused on the evocation of stimuli such as use of pictures (e.g., Babin & Burns, 1997), use of concrete words (e.g., Walters, Sparks, & Herington, 2007), instructions to imagine (e.g., Lao, 2013; Walters et al., 2007). Some researchers have explored other facilitators for evoking mental imagery processing such as self-relatedness (e.g., Anderson, 1983; Lord, 1980), plausibility of the imaginary scenario (Anderson, 1983; Bone & Ellen, 1992; Carroll, 1978), distinctiveness (Bone & Ellen, 1990; Lutz & Lutz, 1978), object interactivity (Schlosser, 2003). The increased

sales from the positive effect of consumers' evoked mental imagery will increase profits only if product returns rates do not rise significantly. Therefore, the positive effect of mental imagery on the purchase intention alone is not enough for e-tailers. As such, it would be beneficial for scholars to investigate the relationship of web-technologies with mental imagery activation and product returns behaviour.

Fourth, this thesis focuses largely on conscious/deliberate information processing to explain consumers' product returns decision formation. However, humans have limited information processing capacity. People can only consciously process approximately 7 ± 2 chunks of information, at any given time irrespective of the type of information (Miller, 1956). Conscious thought can lead to suboptimal choices or even extremely bad choices with complex decisions since those decisions require evaluations which exceed people's information processing capacity. Given these limitations on conscious attention, various heuristic techniques have evolved to reduce the amount of information that individuals must process consciously. Dijksterhuis, Bos, Nordgren, and Van Baaren (2006) provided empirical evidence to suggest that conscious thoughts produce better result when decisions are simple, however, when it comes to complex decisions, unconscious thoughts lead to better choices. Future research, therefore, could take the unconscious information processing into consideration.

Last but not least, this thesis focuses on developed markets and the consumers have been exposed to the liberal returns environment for a long time. Consumers perceive the liberal returns policies as a norm, a part of the contemporary consumption culture. Culture in the field of sociology is defined as the ways of thinking, the ways of acting, and the material objects that together shape a people's way of life (Macionis & Gerber, 2010). This indicates that culture is an extremely important concept for understanding consumer behaviour. Yet, most of the studies pertaining to product returns had been conducted in the UK or the US, with the exception of a few papers (e.g., Škapa, 2013; Wang, 2009).

Several researchers have highlighted the necessity for a cross-cultural investigation in the field of consumer product returns (Harris, 2008; Rosenbaum & Kuntze, 2005; Škapa, 2013; Wang, 2009). Rosenbaum and Kuntze (2005) suggested that researchers can explore whether consumers in fast-growing Asian and Eastern European economies will also begin abusing return policies or whether this phenomenon is merely a characteristic of the western society. Wang (2009) also suggested that future studies should examine the way in which the cultural or regulatory differences can influence product returns.

6.5 Chapter Summary

In conclusion, the issue of product returns in the context of Internet retailing is becoming increasingly prevalent with consumers' changing attitude towards product returns (Dodge et al., 1996; Harris, 2010) and the encouragement of e-tailers (Johnson, 2003; Lee, 2015; Stock et al., 2006). Therefore, a deeper understanding of the post-purchase psychological appraisal process across the pre- and post-purchase stage in the online retailing setting can shed light on this particular consumer behaviour that has serious ramifications for both e-tailers and consumers (Maity & Arnold, 2013; Morley, 2016; Petersen & Kumar, 2009; Saleh, 2016).

This thesis answered the call of previous literature in developing a process-oriented model with specific theoretical foundations (Bechwati & Siegal, 2005; Harris, 2010; Mollenkopf et al., 2011; Rosenbaum & Kuntze, 2005). This thesis examined the collective impact of situational, and cognitive and affective appraisal factors and the underlying relationships among these factors in relation to the product returns phenomenon in the online retailing context. By integrating cognitive appraisal theory and cognitive dissonance theory, this thesis argued that the secondary/prospective appraisal happens simultaneously with cognitive dissonance, after the primary/retrospective appraisal. This is consistent with the theories of psychological literature, suggesting that cognitive dissonance has two states: cognitive arousal and cognitive motivation. Once the psychological discomfort has been

aroused, the following cognitive activities pertaining to coping are activated. Next, if consumers perceive the situation to be still changeable/revisable, along with the arousal of cognitive dissonance, the experience of regret will be elicited. Previous studies have suggested that the coping potential can reduce the post-purchase stress in the context of consumer complaint behaviour (Stephens & Gwinner, 1998). Nevertheless, this thesis supported the notion that decision changeability can intensify the experienced regret (Gilbert & Ebert, 2002; Gilovich et al., 1995; Iyengar & Lepper, 2000; Roesse & Summerville, 2005; Wrosch & Heckhausen, 2002). This finding suggested that liberal returns policy may not necessarily be a good strategy for increasing profits. Moreover, buying situations, as situational/contextual factors, not only serve as antecedents of the appraisal process but also contribute to the path differences in both primary and secondary appraisals. This means that the two decisions of online purchase jointly influence the post-purchase appraisal process and the final return decision. Furthermore, by investigating the impact of the three dimensions of cognitive dissonance, this thesis examined the impact of specific post-purchase cognitive and affective responses on product returns in the online retailing setting. This indicates that it is not merely the valence of the appraisal but also the dimensions of the appraisal that matter in the product returns issue, extending the cognitive appraisal theory by improving the explaining power. In addition, the serial mediation results suggested the influence of primary/retrospective appraisal factors transmitted through the different dimensions of cognitive dissonance when consumers appraise the same decision outcomes for different buying situations. Therefore, e-tailers should incorporate more tailored post-purchase or even pre-purchase communication strategies for consumers engaging in different types of buying situations in order to reduce the post-purchase dissonance, which will, in turn, reduce the returns intention.

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Appendix A: Web Experiment

Introduction:

Purpose of the Study: The aim of this study is to collect consumer behavioural data regarding with purchase experience under online shopping context.

What You Will Be Asked to Do in the Study: If you agree to take part in this study and demonstrate your interest in the topic, you will be invited to complete a scenario-based survey. It is important that you read the scenario and try to imagine yourself actually being in the situation. The experiment will take approximately 7 minutes.

Confidentiality: We do not foresee any risks or discomfort from your participation in this study. All data collected from this study will be used for research purposes only. Your responses will be held in strict confidentiality. Your participation in this research is completely VOLUNTARY. If you choose to participate you may subsequently withdraw from the study at any time without penalty or consequences of any kind.

Before you start, please copy and paste your Prolific ID [Note for participants: it can be found at the top of this webpage or when going to your account info]:

Please read the following scenario carefully and answer the question:

Scenario A

Imaging you need to buy a pair of sports headphones for an outdoor hiking activity next weekend. After work, you go to the online stores to purchase the sports headphones. As you are browsing and searching between different online store websites, you see a series of very attractive portable chargers on sale for £14.99 each from £30.99. You immediately fall in love with them on first sight.

Scenario B

Imagine you need to purchase a new laptop backpack and a portable charger for a business trip next month. After work, you go to the online stores to purchase a travel laptop backpack. As you are browsing and searching between different online store websites, you see a series of very attractive portable chargers on sale for £14.99 each from £30.99. However, you are wondering how effective these portable chargers can be.

Scenario C

Imagine you need to purchase a new laptop backpack for a business trip next month. After work, you go to the online stores to purchase a travel laptop backpack. As you are browsing and searching between different online store websites, you see a series of very attractive portable chargers on sale for £14.99 each from £30.99. You have already added a £89.99 laptop backpack in your shopping cart. The online store offer free next-day delivery if you bought £100 products. The standard next day delivery would have cost you £5.99.

Product Information:

Capacity: 10000mAh charges iPhone 6 or iPhone 6S three times, the Galaxy S6 almost twice or the iPad mini once.

Simultaneous Charging: 2USB charging Port for 2 devices simultaneously at top speed. 2 USB also compatible with almost any smart device.

Smart Design: 4 status LEDs keeps you informed of remaining capacity.

Product Pictures:

Type 1



Type 2



Type 3



Type 4



Type 5



Type 6



Type 7



	Buy the sports headphones only; not even think about the portable power charger (1)	Buy the sports headphones only; want the portable power charger but not buy it (2)	Decide not to buy the sports headphones and buy the portable power charger instead (3)	Buy both the sports headphones and a portable power charger with credit card (4)	Buy both the portable power charger and sports headphones plus a matching hiking waist pouch bag to complete the outfit (5)
Based on the presented scenario, please select which of the following five purchase decision alternatives you should make. (1)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

Please answer the following question based on the presented scenario.

	Strongly disagree (1)	Disagree (2)	Neither agree nor disagree (3)	Agree (4)	Strongly agree (5)
I am willing to buy the portable charger for a trial (1)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

Please answer the following question based on the presented scenario.

	Very unlikely (1)	Unlikely (2)	Undecided (3)	Likely (4)	Very likely (5)
Please indicate how likely you will choose to buy the portable charger to take advantage of the free next-day delivery, you can always return it if you don't like it (2)	<input type="radio"/>				

Scenario A (same scenario with previous page)

Imaging you need to buy a pair of sports headphones for an outdoor hiking activity next weekend. After work, you go to the online stores to purchase the sports headphones. As you are browsing and searching between different online store websites, you see a series of very attractive portable chargers on sale for £14.99 each from £30.99. You immediately fall in love with them on first sight.

Scenario B (same scenario with previous page)

Imaging you need to purchase a new laptop backpack and a portable charger for a business trip next month. After work, you go to the online stores to purchase a travel laptop backpack. As you are browsing and searching between different online store websites, you see a series of very attractive portable chargers on sale for £14.99 each from £30.99. However, you are wondering how effective these portable chargers can be.

Scenario C (same scenario with previous page)

Imaging you need to purchase a new laptop backpack for a business trip next month. After work, you go to the online stores to purchase a travel laptop backpack. As you are browsing and searching between different online store websites, you see a series of very attractive portable chargers on sale for

£14.99 each from £30.99. You have already added a £89.99 laptop backpack in your shopping cart. The online store offer free next-day delivery if you bought £100 products. The standard next day delivery would have cost you £5.99.

Product Information:

Capacity: 10000mAh charges iPhone 6 or iPhone 6S three times, the Galaxy S6 almost twice or the iPad mini once.

Simultaneous Charging: 2USB charging Port for 2 devices simultaneously at top speed. 2 USB also compatible with almost any smart device.

Smart Design: 4 status LEDs keeps you informed of remaining capacity.

Which type of portable chargers would you like to purchase?

Type 1



Type 2



Type 3



Type 4



Type 5



Type 6



Type 7



You bought one portable charger from your selected series.



One of your friends told you that he/she saw another retailer sells an upgraded version as you bought with the **same price after discount**. The design is very similar, but with **higher capacity and one extra USB charging port**. He/she sent you the product description (you can always go back to check the product information of your selected portable charger by clicking the back button):

Capacity: **16000mAh** charges iPhone 6 or iPhone 6S **five times**, the Galaxy S6 almost **three times** or the iPad mini **twice**.

Simultaneous Charging: **3USB charging Port for 3 devices simultaneously** at top speed. 3 USB also **compatible with almost any smart device**.

Smart Design: 4 status LEDs keeps you informed of remaining capacity.

You bought one portable charger from your selected series.

The relative size of your selected type of portable charger is shown as the following and it weighs twice as your phone. There are other similar smart designed, smaller, lighter and cheaper models with lower charging capacity available (you can always go back to check the product information of your selected portable charger by clicking the back button).



Please answer the following questions based on the presented scenario, you can always go back to check the scenario and additional information by clicking the back button.

How do you feel about the decision to purchase this portable charger?

	Strongly Disagree (1)	Disagree (2)	Somewhat Disagree (3)	Neither Agree nor Disagree (4)	Somewhat Agree (5)	Agree (6)	Strongly Agree (7)
After I bought this product I wondered if I'd been fooled	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
After I bought this product I wondered if they had spun me a line	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
After I bought this product I wondered whether there was something wrong with the deal I got	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
I wonder if I really need this product	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
I wonder whether I should have bought anything at all	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
I wonder if I have made the right choice	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
I wonder if I have done the right thing in buying this product	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
I felt scared	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
I felt hollow	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
I felt uneasy	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
I felt I'd let myself down	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
I was in pain	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
I felt depressed	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
I felt furious with myself	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
I felt sick	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
I was in agony	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

The product information shows to me what I want to see and not the reality	<input type="radio"/>						
I think that the reality is different from what it is mentioned in the product information	<input type="radio"/>						
The product information misleads me about the actual performances of the product	<input type="radio"/>						
The product is different from what I fantasized about	<input type="radio"/>						
The product is different from what I imagined what it would be like to use	<input type="radio"/>						
The feel of the product is different from what I imagined	<input type="radio"/>						

How much would you regret your decision to purchase that portable charger?

	1 (Not regret at all)	2	3	4	5	6	7 (Regret very much)
Not regret at all:Regret very much	<input type="radio"/>						

If you could do it over, would you change your decision?

	1 (Definitely would not change)	2	3	4	5	6	7 (Definitely would change)
Definitely would not change: Definitely would change	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

How much happier would you have been if you had made a different decision?

	1 (Not much happier)	2	3	4	5	6	7 (Much happier)
Not much happier: Much happier	<input type="radio"/>						

After this experience, how much disappointment did you feel about your choice?

	1 (None)	2	3	4	5	6	7 (Very much)
None: Very Much	<input type="radio"/>						

To what extent was the portable charger worse than you expected beforehand?

	1 (Not at all worse)	2	3	4	5	6	7 (Much more worse)
Not at all Worse:Much more Worse	<input type="radio"/>						

Please indicate your feeling towards the portable charger that you purchased.

	Strongly Disagree (1)	Disagree (2)	Somewhat Disagree (3)	Neither Agree nor Disagree (4)	Somewhat Agree (5)	Agree (6)	Strongly Agree (7)
is reasonably priced	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
offers value for money	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
is a good product for the price	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
would be economical	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
is one that I would enjoy	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
would make me want to use it	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
is one that I would feel relaxed about using	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
would make me feel good	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
would give me pleasure	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

To what extent would you like to return the portable charger back?

	1 (Unlikely/impossible/improbable)	2	3	4	5	6	7 (likely/possible/probable)
Unlikely:Likely	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Impossible:Possible	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Improbable:Probable	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

Continue with the study?

Please tell us whether you would like to continue with this study. In fact, what we really want to know is whether or not people are reading the instruction thoroughly. To continue with this study, please select the 'leave the study' option. Would you like to continue with this study?

- Continue with the study**
- Leave the study**

Please indicate the extent to which you believe each return policy statement best describes the level of product return leniency.

	Very not lenient (1)	Not lenient (2)	Somewhat not lenient (3)	Neutral (4)	Somewhat lenient (5)	Lenient (6)	Very lenient (7)
If you're unhappy with your purchase, please return your unwanted goods within 14 days of purchase in a saleable condition.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
If you're unhappy with your purchase, please return your unwanted goods within 28 days of purchase in a saleable condition.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
If you're unhappy with your purchase, please return your unwanted goods within 90 days of purchase in a saleable condition.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Unfortunately, we are not responsible for the postage fees	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
We offer free return	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
You need to get a return authorization online and print out the return label yourself (free return)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Attach the return label (free return) which is included in the delivery package to your parcel	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
We can only offer credit or product exchange for discounted products	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
We offer full refund for discounted products	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
You can make returns of our website via our shops, Royal Mail, Collect+ or my Hermes	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Online purchases can only be returned through post office	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

Unfortunately, we are unable to refund your delivery charges	<input type="radio"/>						
We will refund you the cost of the products as well as your delivery charges	<input type="radio"/>						

To what extent do you consider the following criteria are important to you when it comes to returning products?

	Not at all important (1)	Very unimportant (2)	Somewhat unimportant (3)	Neither important nor unimportant (4)	Somewhat important (5)	Very important (6)	Extremely important (7)
Return Procedures	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Return Postage Fee	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Delivery Charges Refund	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Return Deadline	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Return Options Availability (i.e. post/ in-store return/ collect+/ courier)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Return Scope (i.e. be able to get full monetary refund for discounted items)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

Thank you for taking part in this study, we would like to learn your opinion on the following questions:

	Strongly Disagree (1)	Disagree (2)	Somewhat Disagree (3)	Neither Agree nor Disagree (4)	Somewhat Agree (5)	Agree (6)	Strongly Agree (7)
I know most stores' rules about returning products	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
I know my rights when it comes to returning goods	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
I know very little about what rights I have when I return products	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
I know a lot about the circumstances under which stores can refuse to give a refund for a returned product	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
I know very little about most stores' returns policies	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
I have a lot of experience of getting refunds when returning products	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
I have often gone with friends or family members when they're returning products	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
I have very little of experience of getting refunds when returning products	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
I have been involved in lots of returning of products	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
I am not afraid to buy anything because of the liberal return policies	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
I can just return it back if I change my mind	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

It is the customers' right to return whatever they are not happy with	<input type="radio"/>						
Liberal return policies allow me to try different products out first before I make the final purchase decision	<input type="radio"/>						
Returning items back to retailers is easy in my mind	<input type="radio"/>						

Thank you for taking part in this study, we would like to learn your opinion on the following questions (continued):

	Never (1)	Very Rarely (2)	Rarely (3)	Neutral (4)	Occasionally (5)	Frequently (6)	Very Frequently (7)
How often do you purchase products online in general?	<input type="radio"/>						
How often do you return products that you purchased online in general?	<input type="radio"/>						

Please indicate your employment status.

- Full-time job (1)
- Full-time student (2)
- Unemployed (3)
- Retired (5)
- Other (Please specify) (6) _____

What is/are your nationality/nationalities?

What is your ethnic group?

- Arab (18)
- Asian or Asian British - Bangladeshi (9)
- Asian or Asian British - Chinese (10)
- Asian or Asian British - Indian (7)
- Asian or Asian British - Pakistani (8)
- Black or Black British - African (16)
- Black or Black British - Caribbean (17)
- Mixed - White & Asian (6)
- Mixed - White & Black African (5)
- Mixed - White & Black Caribbean (4)
- Other Asian background (21)
- Other Black background (22)
- Other Ethnic background (23)
- Other Mixed background (20)
- Other White background (19)
- Prefer not to say (24)
- White - English/ Welsh/ Scottish/ Northern Irish/ British (1)
- White - Irish (2)
- White - Gypsy or Irish Traveller (3)

Please indicate your current country of residence.

- Afghanistan (1)
- Albania (2)
- Algeria (3)
- Andorra (4)
- Angola (5)
- Antigua and Barbuda (6)
- Argentina (7)
- Armenia (8)
- Australia (9)
- Austria (10)
- Azerbaijan (11)
- Bahamas (12)
- Bahrain (13)
- Bangladesh (14)
- Barbados (15)
- Belarus (16)
- Belgium (17)
- Belize (18)
- Benin (19)
- Bhutan (20)
- Bolivia (21)
- Bosnia and Herzegovina (22)
- Botswana (23)
- Brazil (24)
- Brunei (25)
- Bulgaria (26)
- Burkina Faso (27)
- Burma/Myanmar (28)
- Burundi (29)
- Cambodia (30)
- Cameroon (31)
- Canada (32)
- Cape Verde (33)
- Central African Republic (34)
- Chad (35)
- Chile (36)
- China (37)
- Colombia (38)
- Comoros (39)
- Congo (40)
- Congo, Democratic Republic of (41)
- Costa Rica (42)
- Cote d'Ivoire/Ivory Coast (43)
- Croatia (44)

- Cuba (45)
- Cyprus (46)
- Czech Republic (47)
- Denmark (48)
- Djibouti (49)
- Dominica (50)
- Dominican Republic (51)
- East Timor (52)
- Ecuador (53)
- Egypt (54)
- El Salvador (55)
- Equatorial Guinea (56)
- Eritrea (57)
- Estonia (58)
- Ethiopia Fiji (59)
- Finland (60)
- France (61)
- Gabon (62)
- Gambia (63)
- Georgia (64)
- Germany (65)
- Ghana (66)
- Greece (67)
- Grenada (68)
- Guatemala (69)
- Guinea (70)
- Guinea-Bissau (Bissau) (AF) (71)
- Guyana (72)
- Haiti (73)
- Honduras (74)
- Hungary (75)
- Iceland (76)
- India (77)
- Indonesia (78)
- Iran (79)
- Iraq (80)
- Ireland (81)
- Israel (82)
- Italy (83)
- Jamaica (84)
- Japan (85)
- Jordan (86)
- Kazakstan (87)
- Kenya (88)
- Kiribati (89)

- Korea, North (90)
- Korea, South (91)
- Kuwait (92)
- Kyrgyzstan (93)
- Laos (94)
- Latvia (95)
- Lebanon (96)
- Lesotho (97)
- Liberia (98)
- Libya (99)
- Liechtenstein (100)
- Lithuania (101)
- Luxembourg (102)
- Macedonia (103)
- Madagascar (104)
- Malawi (105)
- Malaysia (106)
- Maldives (107)
- Mali (108)
- Malta (109)
- Marshall Islands (110)
- Mauritania (111)
- Mauritius (112)
- Mexico (113)
- Micronesia (114)
- Moldova (115)
- Monaco (116)
- Mongolia (117)
- Montenegro (118)
- Morocco (119)
- Mozambique (120)
- Namibia (121)
- Nauru (122)
- Nepal (123)
- Netherlands (124)
- New Zealand (125)
- Nicaragua (126)
- Niger (127)
- Nigeria (128)
- Norway (129)
- Oman (130)
- Pakistan (131)
- Palau (132)
- Panama (133)
- Papua New Guinea (134)

- Paraguay (135)
- Peru (136)
- Philippines (137)
- Poland (138)
- Portugal (139)
- Qatar (140)
- Romania (141)
- Russian Federation (142)
- Rwanda (143)
- Saint Kitts and Nevis (144)
- Saint Lucia (145)
- Saint Vincent and the Grenadines (146)
- Samoa (147)
- San Marino (148)
- Sao Tome and Principe (149)
- Saudi Arabia (150)
- Senegal (151)
- Serbia (152)
- Seychelles (153)
- Sierra Leone (154)
- Singapore (155)
- Slovakia (156)
- Slovenia (157)
- Solomon Islands (158)
- Somalia (159)
- South Africa (160)
- Spain (161)
- Sri Lanka (162)
- Sudan (163)
- Suriname (164)
- Swaziland (165)
- Sweden (166)
- Switzerland (167)
- Syria (168)
- Taiwan (169)
- Tajikistan (170)
- Tanzania (171)
- Thailand (172)
- Togo (173)
- Tonga (174)
- Trinidad and Tobago (175)
- Tunisia (176)
- Turkey (177)
- Turkmenistan (178)
- Tuvalu (179)

- Uganda (180)
- Ukraine (181)
- United Arab Emirates (182)
- United Kingdom (183)
- United States (184)
- Uruguay (185)
- Uzbekistan (186)
- Vanuatu (187)
- Vatican City (188)
- Venezuela (189)
- Vietnam (190)
- Yemen (191)
- Zambia (192)
- Zimbabwe (193)
- Other (194)

How long have you been living in that country?

- 1 year (1)
- 2 years (2)
- 3 years (3)
- 4 years (4)
- 5 years (5)
- 6 years (6)
- 7 years (7)
- 8 years (8)
- 9 years (9)
- 10 years and above (10)

In which region do you live (If you are not currently residing in the UK, please select not applicable)?

- South East (England) (1)
- London (2)
- North West (England) (3)
- East of England (4)
- West Midlands (England) (5)
- South West (England) (6)
- Yorkshire and the Humber (7)
- East Midlands (England) (8)
- North East (England) (9)
- Scotland (10)
- Wales (11)
- Northern Ireland (12)
- Not Applicable (13)

Please indicate your family income.

- under £20,000 (1)
- £20,000 - £29,999 (2)
- £30,000 - £34,999 (3)
- £35,000 - £39,999 (4)
- £40,000 - £49,999 (5)
- £50,000 - £59,999 (6)
- More than £60,000 (7)

Please indicate your obtained educational level.

- High school/college or below (1)
- Bachelor's Degree (2)
- Master's Degree (3)
- Doctorate Degree (4)

Please indicate your age group.

- 18 - 24 (1)
- 25 - 34 (2)
- 35 - 44 (3)
- 45 - 54 (4)
- 55+ (5)

Please state whether you are male or female.

- Male (1)
- Female (2)

Most modern theories of decision-making recognise the fact that decisions do not take place in a vacuum. Individual preferences and knowledge, along with situational variables can greatly impact the decision process. In order to facilitate our research on decision-making we are interested in knowing certain factors about you, the decision maker. Specifically, we are interested in whether you actually take the time to read the directions; if not, then some of our manipulations that rely on changes in the instructions will be ineffective. So, in order to demonstrate that you have read the instructions, please select others and type 1 in the corresponding text box.

Which of these activities do you engage in regularly? (Click on all that apply)

- Basketball (1)
- Soccer (2)
- Running (3)
- Hockey (4)
- Football (5)
- Swimming (6)
- Tennis (7)
- Others (please specify) (8) _____

Please click on this completion URL to show that you have finished the study: Prolific Academic completion URL insert here

Appendix B: SEM Results and Path Comparison for Buying Situations

Table 0-1: SEM Results and Path Comparison for Buying Situations

Path	Unplanned	Trial	Opportunism	Unplanned vs. Trial	Trial vs. Opportunism	Opportunism vs. Unplanned
	Estimate	Estimate	Estimate	z-stat	z-stat	z-stat
Value for Money → Concern over Deal	-0.19***	-0.232***	-0.204***	-0.297	0.149	-0.149
Value for Money → Wisdom of Purchase	-0.191**	-0.015	-0.287***	1.638	-2.367**	-0.729
Value for Money → Emotion Dissonance	-0.151*	-0.232***	-0.045	-0.628	1.842*	1.054
Mental Imagery Discrepancy → Concern over Deal	0.622***	0.444***	0.494***	-1.413	0.558	-0.849
Mental Imagery Discrepancy → Wisdom of Purchase	0.533***	0.419***	0.395***	-0.475	-0.537	-1.036
Mental Imagery Discrepancy → Emotion Dissonance	0.467***	0.438***	0.467***	-0.221	0.241	0.008
Post-purchase Contextual Condition → Concern over Deal	-0.289***	-0.153**	-0.246***	1.567	-1.009	0.615
Post-purchase Contextual Condition → Wisdom of Purchase	-0.03	0.003	-0.073	0.056	-0.689	-0.612
Post-purchase Contextual Condition → Emotion Dissonance	-0.207***	-0.194***	-0.184***	0.253	0.193	0.416
Concern over Deal → Regret	0.383***	0.237***	0.178**	-1.577	-0.557	-1.994**
Wisdom of Purchase → Regret	-0.023	0.037	0.329***	0.533	2.843***	2.777***
Emotion Dissonance → Regret	0.183***	0.013	0.191***	-1.729*	1.924*	-0.013
Value for Money → Regret	-0.246***	-0.25***	-0.268***	0.37	-0.411	0.022
Mental Imagery Discrepancy → Regret	0.138	0.265***	0.244***	0.84	-0.126	0.755
Consideration of Policy Leniency → Regret	0.195***	0.006	0.09*	-2.63***	1.172	-1.772*
Knowledge of Returns Policy → Regret	-0.099**	0.007	0.129**	1.352	1.614	2.751***
Post-purchase Contextual Condition → Regret	-0.196***	-0.483***	-0.245***	-2.507**	2.966***	-0.174
Regret → Returns Likelihood	0.738***	0.6***	0.554***	-0.414	-0.483	-0.812
Consideration of Policy Leniency → Returns Likelihood	-0.135**	0.094*	-0.014	2.722***	-1.379	1.495
Knowledge of Returns Policy → Returns Likelihood	0.09	-0.013	-0.094	-0.994	-0.737	-1.641
Knowledge of Returns Policy → Past Returns Experience	0.609***	0.525***	0.551***	-1.066	0.56	-0.57

Past Returns Experience → Returns Likelihood	0.17**	0.215***	0.228***	0.56	-0.309	0.301
Concern over Deal → Returns Likelihood	-0.061	0.102	0.062	1.414	-0.392	0.954
Wisdom of Purchase → Returns Likelihood	0.062	0.016	-0.259**	-0.463	-2.038**	-2.185**
Emotion Dissonance → Returns Likelihood	-0.194**	0.009	0.073	1.954*	0.593	2.542**
Mental Imagery Discrepancy → Returns Likelihood	0.18*	-0.031	0.048	-1.613	0.663	-0.973
Value for Money → Returns Likelihood	0.117	-0.014	-0.151*	-1.313	-1.287	-2.477**
Purchase Intent → Returns Likelihood	0.089	-0.031	0.03	-1.248	0.774	-0.43
Gender → Returns Likelihood	0.056	0.093*	0.037	0.446	-0.743	-0.288
Income → Returns Likelihood	-0.088	0.02	0.001	1.423	-0.257	1.186
Age → Returns Likelihood	0.107**	0.044	-0.115**	-0.766	-1.99**	-2.801***
Online Purchase Frequency → Returns Likelihood	-0.054	-0.012	-0.079	0.474	-0.79	-0.286
Post-purchase Contextual Condition → Returns Likelihood	-0.161**	0	0.095	1.596	0.877	2.504**

*** Significant at 0.01 level; ** significant at 0.05 level; * significant at 0.10 level