

Investigating the Effects of Consumption-associated Cues on Disappointment, Regret and Post-consumption Behaviours

**A Thesis Submitted in Partial Fulfilment of the Requirements
for the Degree of
Doctor of Philosophy**

By

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Investigating the Effects of Consumption-Associated Cues on Disappointment, Regret and Post-consumption Behaviours

Abstract

Consumers invariably encounter both positive and negative consumption experiences in their lives. Prior research finds that negative consumption experiences result in particular affective and behavioural reactions. This research focuses on how consumers respond to consumption-associated cues, in particular, *causal attributions, expectations, and perceived information search*, in terms of feelings of disappointment and regret, and how these emotions subsequently influence consumers' post consumption behaviours. The uniqueness of this research lies in its attempts to ascertain the role of the multidimensionality of disappointment and regret in determining consumers' responses to negative consumption experiences. The thesis presents three scenario-based experiments. Findings in general show that causal attributions, expectations, and information search efforts indeed induce disappointment and regret in different ways across different dimensions. Findings also support the notion, proposed but untested in the literature, of a sequential relationship between disappointment and regret as they result in different behavioural actions. This research not only advances theories of attributions, expectations, and disappointment and regret, but also gives practitioners new insights into ways by which they can strategically choose to influence emotions to reduce their negative effects on post-consumption behaviours.

This thesis has six chapters.

Chapter 1 presents an overview of the background of this research. It identifies the research gaps, defines the research objectives and develops the research questions. It then

points out the theoretical and managerial contributions of this research and provides the outline of the thesis.

Chapter 2 examines the relevant literature with a focus on negative consumption experience, the resultant feeling of disappointment and regret including their dimensions and these emotions' effects on consumer behaviour, specifically repurchase and coping intentions. The chapter first presents an overview of cognitive appraisal theory that shows the causal chain of cognitions-emotions-behaviours. This is followed by a review of the consumption-associated cues that produce negative emotions, in particular disappointment and regret. This thesis then presents the literature relating to the effects of negative emotions on the behavioural responses with a focus on consumers' repurchase and coping intentions. The review presented in this chapter offers an impetus in discovering the suitable research design and measurement instruments to answer the flagged research questions (Chapter 3) as well as in developing the conceptual models and research hypotheses (Chapter 4, Chapter 5 and Chapter 6).

Chapter 3 details the research design including an outline of the research methods used to test the research hypotheses. More importantly, this chapter explains briefly the type and stages of the scenario-based experiments as well as the methods used to analyse the data. The details of the experimental studies including the hypotheses, the independent variables, type of study specific experimental design, study subjects and sampling procedure, details of research questionnaire, specific data analysis techniques and the findings relevant to each study are provided later in specific chapters that deal with specific studies (i.e. Chapter 4, Chapter 5 and Chapter 6). The next chapter details Study 1.

Chapter 4 presents study 1. It states the research hypotheses manifesting the effects of causal attributions and expectations in producing disappointment and the dimensions of regret which in turn sequentially influence consumers' repurchase and coping intention behaviours after a negative consumption experience. The chapter then presents a scenario-based experiment that follows a 2 x 2 x 2 between subjects' full-factorial design and the methods used to analyse the data. ANOVA is used to test the main, interaction effects and Hayes' Process Macro (2013), in particular model 6, is used to run the sequential mediation analysis. Study 1 finds that causal attributions and expectations differently trigger consumers' feeling of disappointment and dimensions of regret in negative consumption experiences. Causal attributions and expectations are also found to interact while affecting the dimensions of regret in such consumption experiences. In addition, it finds that disappointment and regret sequentially drive consumers' repurchase and coping intention behaviours.

Chapter 5 presents study 2, which tests the hypotheses relating to the effects of responsibility attributions, expectations and information search. It consists of a scenario-based experiment using a 2 x 2 x 2 between-subjects full-factorial design. To analyse the data, this research uses ANOVA and the results show that disappointment and dimensions of regret are differentially triggered through causal attributions, expectations and information search. Study 2 also reveals an interaction of expectation and information search and its impact on the feeling of regret. Furthermore, the sequential mediation analyses show that disappointment and regret sequentially influence repurchase and coping intentions of consumers.

Chapter 6 presents study 3. It first presents the hypotheses about the effects of external responsibility attributions and stated vs. unstated expectations in triggering disappointment and regret including these emotions' dimensions. This is followed by the hypothesis that these emotions sequentially direct consumers' repurchase and coping intentions. A scenario-based

experiment using a 2 x 2 between subjects full factorial design is presented as well as the method used to analyse the data. In particular, ANOVA is used to test the main effect hypotheses and the results show that consumer perceptions of different external responsibility attributions differently trigger disappointment and regret dimensions. The results also show that stating vs. not stating expectations prior to a consumption experience contributes differently to overall disappointment and regret but not to the dimensions of disappointment and regret. In regards to the sequential mediations, the analysis run through Hayes Process Macro (2013) shows that disappointment and regret, including the dimensions, sequentially drive consumers' repurchase and coping intentions.

Chapter 7 presents the findings of the thesis in relation to the conceptual framework as drawn in Chapter 1. In particular, this research through the three experiments establishes that disappointment and regret are triggered differently by causal attributions, expectations and information search if their dimensions are taken into account. Furthermore, disappointment and regret, including their dimensions, sequentially affect consumers' repurchase and coping intention behaviours. By comparing the findings of Study 1 and Study 2 this research also reveals that when there is a change in consumer roles: observer vs. active decision-maker, the explored effects change. These findings are followed by a critical discussion on the findings and the theoretical and managerial implications of this research. In terms of theoretical implications, this research contributes to the extant literature pertaining to disappointment and regret by accommodating the multiple dimensions of disappointment and regret and shows the antecedent role of the consumption-associated cues on these. This helps to resolve the current controversies about the deterministic role of these cues in disappointment and regret. Furthermore, this research explores the sequential operationalization of disappointment and regret including their multiple dimensions. For managers, this research suggests that when a

bad outcome occurs and marketers are not responsible for it, they need to reinforce external factors for such an outcome through explanation. Furthermore, they need to manage consumers' expectations even after the consumption experience to reduce their perception of a mismatch and thus the feeling of disappointment and regret. The chapter ends with identifying several limitations and directions for future research.

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Declaration

This thesis does not accommodate any material which has been accepted for the award of any other degree or diploma in any university or other institution. To the best of my knowledge, this thesis does not contain any material previously published or written by any other person, except where adequate reference is provided in the text of the thesis.

Signed:



Presentations and Publications

Hossain, Muhammad Ismail, Harmen Oppewal, and Dewi Tojib (2014), *Investigating the effects of expectations on disappointment, regret, and post-consumption behaviours*, Paper presented at the 43rd European Marketing Academy Conference, 3-6 June, Valencia, Spain.

- *Parts of this conference paper were used in Chapters 2 and 5 of this thesis*

Hossain, Muhammad Ismail, Harmen Oppewal, and Dewi Tojib (2013), *Coping with negative consumption experiences: how attribution influences disappointment, regret, word of mouth and complaining behaviours*, Paper presented at the 16th Biennial World Marketing Congress, 17-19 July, Melbourne, Australia.

- *Parts of this conference paper were used in Chapters 2 and 4 of this thesis*

Hossain, Muhammad Ismail, Harmen Oppewal, and Dewi Tojib (2012), *The effect of regret on consumers' coping responses*, Paper presented at the Melbourne and Monash University Joint Doctoral Colloquium, 2nd November, Melbourne, Australia.

- *Parts of this colloquium paper were used in Chapters 2, 4 and 5 of this thesis*

Hossain, Muhammad Ismail, Harmen Oppewal, and Dewi Tojib (2011), *The effect of product failure induced disappointment and regret on consumers' disadoption behaviours*, Paper presented at the Australia New Zealand Marketing Academy Doctoral Colloquium, 26-27 November, Perth, Australia.

- *Parts of this colloquium paper were used in Chapters 2, 4 and 5 of this thesis*

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CHAPTER 1 : INTRODUCTION

1.1 Introduction

Chapter 1 presents the background of the research under investigation. It then articulates the research gaps, research objectives, and research questions pertaining to this research. The theoretical and managerial contributions of this research are also presented. The chapter concludes with the outline of this thesis.

1.2 Research background

When people encounter a negative consumption experience, they typically experience negative emotions (Tronvoll, 2007). Prior research suggests that negative consumption experiences can only induce general negative feelings such as feeling bad about the outcome (Weiner, 1985a). They generate specific negative emotions such as anger, disappointment and regret only when consumers probe further into the details about the incident. While probing into details in such situations, consumers generally enter into a cognitive appraisal process where they assess the extent to which they are in control of the circumstances and explore ways to remedy the unfortunate situation (Stephens & Gwinner, 1998). Two common natural reactions involved in this process are to compare the negative experience with their initial expectations and investigate the reasons for the negative outcome (Lazarus, 1991a; Weiner, 1985b, 2000). Such reactions toward negative outcomes are often accompanied by discrete negative emotions in addition to the general negative feelings about the outcome (Ruth, Brunel, & Otnes, 2002; Zeelenberg, van Dijk, Manstead, & van der Pligt, 2000). This could later lead to tangible behavioural actions such as spreading negative word-of-mouth, voicing complaints, or switching service providers (Choi & Mattila, 2008; Kaltcheva, Winsor, & Parasuraman, 2013; Nyer, 1997).

Prior studies on consumer decision-making have demonstrated that after experiencing an unfavourable decision outcome such as a negative consumption experience, the two most common negative emotions are disappointment and regret (Diener, Smith, & Fujita, 1995; Schimmack & Diener, 1997; Shimanoff, 1984; Zeelenberg, van Dijk, Manstead, & van der Pligt, 1998). In the literature, *disappointment* is defined as a negative emotion that is felt when an outcome is worse than expected (Ortony, Clore, & Collins, 1988). *Regret* is conceptualized as a negative emotion that occurs when a foregone alternative turns out to be (or is imagined to be) a better choice than the selected alternative (Zeelenberg et al., 2000). Disappointment and regret share several distinctive features such as both having negative valence, being common in people's lives, and resulting from unwanted outcomes (Landman, 1993; Zeelenberg et al., 2000). However, the two emotions are different and distinct from each other because they are associated with different appraisal patterns, experiential contents, and action tendencies (Landman, 1993; Lazarus, 1991b; Roseman, Antoniou, & Jose, 1996; Scherer, 1999; Zeelenberg et al., 2000; Zeelenberg, van Dijk, van der Pligt, et al., 1998).

Furthermore, prior research shows that specific consumption-associated cues such as expectations and causal attributions trigger feelings of both disappointment and regret (Lin, Huang, & Zeelenberg, 2006; van Dijk, van der Pligt, & Zeelenberg, 1999; van Dijk, Zeelenberg, & van der Pligt, 2003; Zeelenberg & Pieters, 2004). Recent studies have further advanced our understanding by demonstrating that the experienced disappointment and regret lead to different behavioural outcomes. For instance, individuals who experience disappointment are more likely to spread negative word-of-mouth (WOM) than those who experience regret. In contrast, those experiencing regret are more likely to switch than those experiencing disappointment (Jang, Cho, & Kim, 2013; Zeelenberg & Pieters, 2004).

1.3 Research gaps

Although research on disappointment and regret has made significant progress, this research domain still has many gaps and limitations to be addressed by new research. For example, ambiguities are apparent regarding the role of causal attributions as antecedents to disappointment and regret in spite of the long stream of prior attribution research (see for e.g., Dabholkar & Spaid, 2012; Folkes, 1984; Hess, Ganesan, & Klein, 2003; Swanson & Hsu, 2011). Some studies established responsibility attribution as a causal antecedent to disappointment and regret (Gooding & Kinicki, 1995; Zeelenberg & Pieters, 1999, 2004) while other studies could not establish such relationships (Giorgetta, Zeelenberg, Ferlazzo, & D'Olimpio, 2012; Simonson, 1992). Furthermore, although it is typical for consumers to engage in stability attribution after a bad outcome (Weiner, 1980, 1985a; Weiner, Graham, & Chandler, 1982), few studies to date have explored its antecedent role in disappointment and regret.

Another limitation is that while expectation has recently been established as an antecedent to disappointment and regret (Huang & Tseng, 2007; Huang & Zeelenberg, 2012), this was only in contexts unrelated to a consumer's common consumption experience. Limitations are also evident regarding the role of pre-decisional information search in triggering disappointment and regret. In particular, some studies find that the intensity of such search contributes to disappointment and regret differently (Pieters & Zeelenberg, 2005; van Dijk, van der Pligt, et al., 1999); however, others find it as non-conclusive due to contradictory findings (see for e.g., Luce, 1998; Park, 2011; Sparks, Ehrlinger, & Eibach, 2012). Therefore, exploring the role of consumption-associated cues such as causal attribution, expectations and perceived information search in disappointment and regret can offer important theoretical insights to this fragmented literature. This will also help marketers to

understand better the role played by these cues in triggering disappointment and regret in a post-consumption situation.

Another limitation of previous work is that most prior studies treated disappointment and regret as uni-dimensional constructs (Contractor & Kumar, 2012; Frijda, Kuipers, & ter Schure, 1989; Zeelenberg & Pieters, 2004). Instead, van Dijk and Zeelenberg (2002b) and Lee and Cotte (2009) propose that disappointment and regret are both multi-dimensional. The latter authors suggest that the dimensions of these negative emotions are triggered differently and that each emotional dimension may lead to different behavioural actions. For example, van Dijk and Zeelenberg (2002b) in their study find that individual's action-oriented responses due to the multiple dimensions of disappointment are different. Pieters and Zeelenberg (2005) find that the multiple dimensions of regret have different impacts on consumers' action sequences. It is therefore important to unravel the dimensionality of disappointment and regret. It may help academic researchers to better understand these emotions and also to find explanations for some inconsistent findings recorded in the literature (e.g., Simonson, 1992; van Dijk, van der Pligt, et al., 1999; Zeelenberg & Pieters, 2004; Zeelenberg, van Dijk, & Manstead, 1998).

A related reason for studying disappointment and regret is that prior research proposed the possibility of sequential operationalization of disappointment and regret but this has not been tested empirically. Such a sequence was first suggested by Zeelenberg, van Dijk, Manstead, et al. (1998) and is somewhat aligned with cognitive appraisal theorists who have long suggested that emotions are episodes of continuous processes rather than static states (Moors, Ellsworth, Scherer, & Frijda, 2013). A better understanding of the sequential nature of these negative emotions may therefore offer new insights into how multiple emotions act in sequence to affect behavioural actions.

1.4 Research objectives

This thesis thus aims to fill these research gaps and enhance our understanding of disappointment and regret in a negative consumption experience by investigating the effects of consumption-associated cues on disappointment, regret, and post-consumption behaviours. First, the antecedent role of the consumption-associated cues in triggering disappointment and regret including the multiple dimensions are investigated. This will help to refine the multi-dimensional conceptualization of disappointment and regret. Second, the sequential role of disappointment and regret in the context of post-decision negative consumption experiences is explored. This is to assess to what extent disappointment tends to generate regret while affecting the post-consumption behaviours.

In particular, the research objectives of this dissertation are: to

- (1) investigate the effects of consumption associated cues on disappointment and regret;
- (2) explore the sequential role of disappointment and regret in determining post-consumption behaviours; and
- (3) show the causal chain flowing from cognition to emotion to behaviours.

1.5 Research questions

To achieve these objectives, several conceptual models are developed that integrate the common consumption-associated cues as antecedents of disappointment and regret and their effects on post-consumption behavioural actions, in particular repurchase intentions and coping behaviours. Figure 1.1 presents the conceptual models that have been tested by means of three scenario-based experiments. Conceptual model 1 was tested in Study 1, which investigates the role of causal attributions and expectations in inducing the feeling of

disappointment and types of regret in a negative consumption experience context. In addition, it explores the sequential mediating role played by disappointment and types of regret in repurchase intention and coping behaviours. Study 2 tests conceptual model 2 and further extends the findings of Study 1. In particular, it explores the effects of responsibility attributions, expectations, and information search on disappointment and types of regret as well as these emotions' sequential mediating effect on repurchase intention and coping behaviours. To extend the findings of Study 1 and Study 2 further and to test conceptual model 3, Study 3 investigates the role of external responsibility attributions and expectations in inducing various types of disappointment and regret. Furthermore, it examines the sequential mediating effect of the types of disappointment and regret on repurchase intention and coping behaviours.

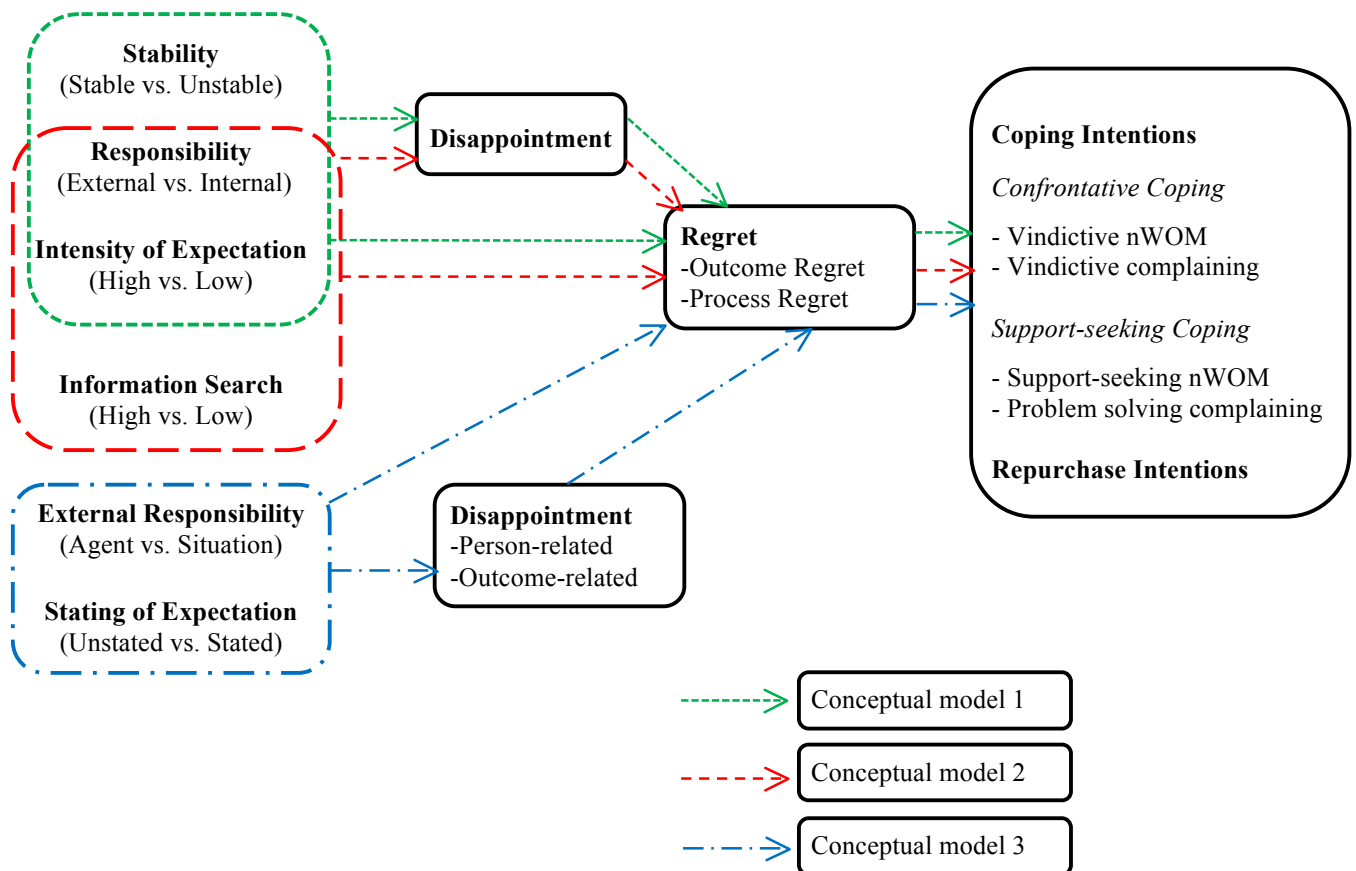


Figure 1.1: Conceptual models

In light of the above conceptual models and the research intentions, this study is designed to obtain answers of the following research questions:

1. Do different causal attributions, expectations, and information search contribute to disappointment and the dimensions of regret differently after a negative consumption experience?
2. What external responsibility dimensions are salient in inducing the dimensions of disappointment and regret after a negative consumption experience?
3. Do variations in consumers' expectations contribute to the dimensions of disappointment and regret differently after a negative consumption experience?
4. How do induced disappointment and regret influence consumers' repurchase intention and coping behaviours after a negative consumption experience?

1.6 Contribution to the literature

The contribution of this research is four-fold. First, it adds to the literature pertaining to disappointment and regret specifically, by clarifying the reasoning behind the prior inconsistent findings as well as establishing the role of common consumption-associated cues in triggering disappointment and regret. Second, it is the first empirical research to investigate the antecedent role of attributions, expectations and information search to the multiple dimensions of disappointment and regret, thereby refining the current conceptualization of disappointment and regret and their dimensions. Third, this research makes a unique contribution to the research on the emotions of disappointment and regret by exploring the sequential operationalization of these emotions and their multiple dimensions. Fourth, this research offers an inclusive perspective to appraisal-emotion and action in a consumption experience context by accommodating the most common consumption associated cues, emotions and actions.

1.7 Contribution to the practice

The practical contributions of this research are that marketers will be made aware of the antecedent role of particular consumption associated cues in inducing disappointment and regret, including their multiple dimensions, in a negative outcome situation. Moreover, it offers suggestions to marketers on how to reduce the negative impact of these emotions on consumers' behavioural actions, especially repurchase and coping intentions. This includes, but is not limited to: the type of attributions and expectations to watch for and manage; the type of comparative assessments to be managed; and the way to use inter-emotional influence on the behavioural actions.

1.8 Conclusion

This chapter has provided an overview of the thesis, including the background of the research, research gaps, research objectives, and research questions. The remaining chapters of this thesis will elaborate on these thus: Chapter 2 presents the literature relevant to the conceptual models investigated in this research. Chapter 3 explains the overall research method and design used to examine the proposed conceptual models. Chapter 4 presents the hypotheses, specific research design, the questionnaire used to collect the data and detailed results of the first empirical study. Similarly, Chapter 5 gives the details (i.e. hypotheses, research design, and questionnaire) and the results of the second empirical study. Chapter 6 presents the hypotheses, research design, questionnaire, and results of the third study. Chapter 7 concludes this thesis by discussing the overall results from the three empirical studies, the theoretical and managerial implications of this research, the limitations of this study, and directions for future research.

CHAPTER 2 : LITERATURE REVIEW

2.1 Introduction

Chapter 1 identified the lack of research on examining the antecedents of not only the overall feelings of disappointment and regret, but also the dimensionality of these two negative emotions. Furthermore, paradoxical findings of prior literature are identified, particularly in relation to the effect of causal attributions, expectations, and information search on these two negative emotions and consumers' behavioural responses. The chapter draws on cognitive appraisal theory to explain how consumers develop these two negative emotions and their subsequent reactions after having a negative consumption experience. The present chapter provides an overview of the literature relevant to this research. This literature review provides the theoretical foundation for the conceptual models and proposed research hypotheses.

2.2 Appraisal theory

The study of individual's emotions is a century-old scholarly topic. This was first functionally approached by Darwin (1872) followed by the elicitation and differentiation of emotion by James (1890). Lazarus (1966) offered a systematic look at these early ideas of emotion through his pioneering work that is commonly known as 'appraisal theory'. The central tenet of this theory is that emotions are adaptive responses triggered by the appraisals of the characteristics of the environment that are important for the organism's wellbeing (Moors et al., 2013). The appraisal theory asserts that when an event occurs, the individuals concerned assess the significance of this event by using a number of criteria: its importance and consequences for the wellbeing of the individuals, whether it works to facilitate or obstruct individuals' plans and goals, and individuals' abilities to cope with the event and its

related consequences (Roseman & Smith, 2001; Sander, Grafman, & Zalla, 2003). Lazarus (1966) held that when individuals face an event, they first use primary appraisals to evaluate the situation. In particular, they appraise three aspects of the encounter: goal relevance, goal congruence or incongruence, and goal content. Individual assessment of these primary stakes is followed by another evaluation: secondary appraisal. In secondary appraisals, individuals appraise three things: blame or credit for the situation, the responsibility of such blame or credit that means whether it is directed to individuals or others, and individuals' coping potentials and future expectations (Lazarus, 1991b).

The combinations of these appraisals determine individuals' emotional significance in any event (Lazarus & Smith, 1988). The emotional significance in any encounter determines individuals' behavioural reactions such as coping. The stress and coping model of Folkman and Lazarus (1988) asserts that individuals with stressful situations and the emotions elicited by the appraisals use different types of coping strategies. Furthermore, prior research finds that people exhibit different behavioural actions depending on the emotions triggered by different appraisals (Gross, 2001). Therefore, appraisal theories seem to suggest a causal link between appraisals, emotions and the behavioural responses. However, little research has been conducted so far to investigate these process-oriented causal links between appraisals, specific emotions and the emotion-driven coping strategies in spite of prior evidence of such links (for e.g., Nyer, 1997) (Gross & John, 2003).

Current appraisal theories define emotions as a process referred to as an episode rather than a static state. This episode is componential and involves changes in a number of 'organismic subsystems or components' (Moors et al., 2013). Therefore, the emotions triggered by appraisals are considered to be continuous where changes in one emotional component feed back to other emotional components. Several appraisal theories that are built

on the notion of ‘immediate efference’ acknowledge the notion that the completion of processes in each component is not essential before they can produce changes in later components (for e.g., Ellsworth, 1991; Scherer, 2009). Thus, an emotional episode may run in parallel so also in sequential. Although little prior research states the possibility of parallel and sequential occurrence of emotions, studies are yet to explore this through a causal componential chain like cognition affecting several emotions in parallel or in sequence, which in turn affects the behavioural response. For example, it is suggested that disappointment and regret are closely connected emotions and thus can occur simultaneously (Loomes & Sugden, 1987; Yi & Baumgartner, 2004) and sequentially (Zeelenberg, van Dijk, Manstead, et al., 1998). However, this has not yet been tested; nor has the influence of one emotion over another which belong to a causal chain.

As indicated in the preceding paragraphs, individuals’ cognitive assessments in an individual-environment encounter trigger their emotional reactions, which in turn determine their use of different coping strategies. Drawing on such causal chain in the consumption context, a consumer can use consumption-associated cues as tools of cognitive assessments in a consumer-environment interaction such as a negative consumption experience. Prior research has found that causal attributions, expectations, and perceived information search are some of the common consumption-associated cues that consumers use in a negative consumption experience (see for e.g., Folkes, 1984; Huang & Tseng, 2007; Park, 2011). Such cues are found to induce consumers’ negative emotions, in particular disappointment and regret in the post-consumption situation (e.g., Huang & Zeelenberg, 2012; Sparks et al., 2012; van Dijk et al., 2003; Zeelenberg & Pieters, 2004). Prior research also found that these two emotions determine consumers’ behavioural intentions such as repurchase and nWOM, complaining (e.g., Jones & Reynolds, 2006; Mattila & Ro, 2008; Zeelenberg & Pieters, 2004).

As cognitive appraisal theory is the overarching framework of this research, the subsequent sub-sections explain the three consumption-associated cues, the two negative emotions, and post-consumption behavioural intentions.

2.3 Causal attributions

Consumers tend to engage in attributional search in unexpected events such as negative consumption experiences that occur in their lives (Lau & Russell, 1980; Ross & Fletcher, 1985; Wong & Weiner, 1981). Poon, Hui, and Au (2004) refer to causal attributions as people's perceptions about who or what is responsible for certain events. Prior research finds that bad outcomes such as negative consumption experiences stimulate consumers' causal attributions (Weiner, 2000) and, depending on the outcome of the attribution, consumers decide their reactions (Bettman, 1979; Folkes, 1984; Mattila & Patterson, 2004; Rose, Meuter, & Curran, 2005; Taylor, 1994; van Rajj & Pruyn, 1998).

Consumers can refer to a variety of causes when attributing the causality after a bad consumption outcome. However, Weiner in his extensive research on attributions offered the most comprehensive categorization of consumer causal attributions (Folkes, 1984). The three causal attribution dimensions proposed by Weiner (1985b) are: Locus (Who is responsible?), control (Did the responsible party had control over the cause?) and stability (Is the cause temporary or permanent?). Prior research found that the dimensions of locus and control are highly correlated (Folkes, 1984). It is this combination that determines responsibility for critical events (Tsiros, Mittal, & Ross jr, 2004; Weiner, 2000). Therefore, two (i.e. stability and responsibility) instead of the earlier three dimensions are suggested as the salient attribution dimensions in understanding consumers' post-consumption reactions (Weiner, 2000). This research therefore considers responsibility and stability as the salient attribution dimensions.

2.3.1 Responsibility attributions

Attribution of responsibility relates to finding out who is responsible for the negative consumption experience. Consumers can attribute the cause of the bad outcome to internal or external entities (Weiner, 2000). Internal attribution in general refers to a situation where individuals attribute the responsibility to themselves while external attribution involves attributing the responsibility for the experienced bad outcome to external entities. Prior research further identifies different dimensions of external responsibility attribution: agent-related and situation-related attributions (deCharms, 1968; Ryan & Connell, 1989). Consumers are said to make agent-responsibility attributions when they attribute the cause of a bad outcome to other persons or agents such as manufacturers, providers, or employees, while situation-related attribution takes place when they attribute responsibility to particular situational or environmental factors such as customer traffic or bad weather as the cause of the bad outcome.

The attributions of responsibility for a negative outcome have many ramifications including negative emotions (Curren & Folkes, 1987; Folkes, 1984; Gooding & Kinicki, 1995). Consumers exhibit greater forgiveness if they perceive that the firm has little to do with the negative outcome (Maxham & Netemeyer, 2002). However, they tend to feel intense negative emotions when the firm is held responsible and the situation is perceived to be within their control (Folkes, 1984; Folkes, Koletsky, & Graham, 1987). Consumers express negative affects when the other agency is responsible for the negative outcome, whereas substantially lower negative affects were exhibited when the self-agency is responsible for the outcome (Frijda et al., 1989).

Prior research shows that responsibility attributions influence disappointment and regret (Curren & Folkes, 1987; Gooding & Kinicki, 1995; van Dijk & Zeelenberg, 2002b;

Zeelenberg & Pieters, 2004). However, these findings are not conclusive as some studies find disappointment to be affected by responsibility attribution (Frijda et al., 1989; Zeelenberg & Pieters, 1999, 2004) while others did not find such evidence (van Dijk, Zeelenberg, & van der Pligt, 1999). Controversies also exist about the antecedent status of responsibility attribution to regret (Connolly, Ordoñez, & Coughlan, 1997; Frijda et al., 1989; Simonson, 1992; van Dijk, van der Pligt, et al., 1999; Zeelenberg, van Dijk, Manstead, et al., 1998). Furthermore, studies are yet to explore the antecedent effect of responsibility attribution on the dimensions of disappointment and regret (Lee & Cotte, 2009; van Dijk & Zeelenberg, 2002b).

2.3.2 Stability attributions

Stability refers to the extent to which the cause of a negative consumption experience is considered as temporary or permanent (Folkes, 1988; Hess et al., 2003). It is generally presumed that a negative consumption experience with stable causes should have a higher frequency of recurrence compared with unstable causes (Hess et al., 2003; Magnini, Ford, Markowski, & Honeycutt jr, 2007). Consumers who face a negative consumption experience caused by stable factors tend to perceive injustice and this perception of unfairness influences their satisfaction levels (Mattila, 2001; McCollough, Berry, & Yadav, 2000; Smith, Bolton, & Wagner, 1999; Tax, Brown, & Chandrashekar, 1998). However, prior research has found that stability of attributions does not affect satisfaction (de Matos, Rossi, Veiga, & Vieira, 2009). Meanwhile, product, service failure and service recovery literature show that stability of attributions has a significant impact on the affective responses of consumers (Blodgett, Granbois, & Walters, 1993; Folkes, 1988; Vázquez-Casielles, del Río-Lanza, & Díaz-Martín, 2007). The stability attribution is considered to be an antecedent to negative emotional reactions (Vázquez-Casielles et al., 2007); however, to the best of our knowledge, no prior

studies show its contribution to discrete negative emotions, in particular those of disappointment and regret.

2.4 Expectations

Expectations are people's anticipations of future consequences. They depend on prior experience, present circumstances, or other sources of information (Oliver, 1996).

Expectations typically act as reference points when consumers evaluate a consumption experience (Cherry, Ordóñez, & Gilliland, 2003). This is aligned with the expectation-disconfirmation theory, which asserts that consumers typically develop pre-consumption expectations and later use such expectations to evaluate product or service performance, resulting in perceptions of confirmation or disconfirmation of expectations (Oliver, 1981; Tse & Wilton, 1988).

Mellers, Schwartz, Ho, and Ritov (1997) and Ritov (2000) further find that the psychological process of comparing pre-consumption expectations with the actual experience influences consumers' emotional reactions. However, prior research on the emotional consequences of expectations is highly skewed toward exploring the association between expectation and satisfaction/dissatisfaction (see for e.g., Oliver, 1980; Oliver, 1981, 1993; Wirtz & Bateson, 1999; Woodruff, Cadotte, & Jenkins, 1983). Few studies explore the effects of expectations on consumers' feelings of discrete negative emotions. For instance, in the context of intelligence testing, van Dijk et al. (2003) find that lowering the level of expectations is one way to avoid disappointment. In other contexts, such as investment and sales management decisions, Huang and Zeelenberg (2012) and Huang and Tseng (2007) find that when the decision-maker's expectations are violated, they are most likely to feel regret. This is due to the production of counterfactuals about the attractiveness of alternative possibilities. However, these studies were not related to consumers' everyday consumption

experiences. Furthermore, they primarily explore the effects of the violation of expectations rather the extent to which expectation have been violated and their effects on consumers' feelings of disappointment and regret.

Prior research shows that consumers who state their expectations prior to a service or shopping experience evaluate the experience more negatively than do those consumers who do not state their expectations (Ofir & Simonson, 2001, 2007). This is because, by stating prior expectations, consumers are more vigilant about the experience; therefore, they evaluate the experience more negatively. This negative evaluation may result in feeling disappointed and regretful if the consumption experience turns out to be negative. However, no prior studies have investigated this issue. Furthermore, the violations of stated vs. unstated expectations, as well as the extent of violations, have yet to be explored as contributors to the dimensions of disappointment and regret.

2.5 Information search

Consumers typically engage in information search so that they can assess and choose the best alternative for a desired outcome (Beatty & Smith, 1987; Newman, 1977; Punj & Staelin, 1983; Schmidt & Spreng, 1996). Adequate information search is therefore crucial for obtaining a desirable outcome. Prior research suggests that the thoroughness of the information search determines the quality of any consumption decision outcome and the decision process (Das & Kerr, 2010; Pieters & Zeelenberg, 2005).

A greater amount of thinking associated with the processing of adequate information is emotionally comforting (Pieters & Zeelenberg, 2005). This happens when a range of objectives such as a careful weighing of information, or more or better arguments for the final decision outcome are achieved. Nonetheless, it appears that more thinking with the help of an

increased information search is likely to result in a better decision outcome (Pieters & Zeelenberg, 2005). In a seminal work, Janis and Mann (1977) report that intensive search for new information to evaluate decision alternatives is one of the criteria that determine the quality of the decision process. Therefore, the amount of information search before choosing any consumption alternative can determine the quality of the decision outcome and decision process (Das & Kerr, 2010). This in turn can determine the intensity of consumers' negative emotions in a negative consumption experience. However, prior findings are mixed regarding this.

Luce (1998) and Luce, Bettman, and Payne (1997) find that participants in their studies displayed higher negative emotions when they acquired more information and spent more time to analyse it. However, this contradicts the findings of Pieters and Zeelenberg (2005) as they find that a more comprehensive information search reduces the feeling of negative emotions. van Dijk, van der Pligt, et al. (1999), when exploring the effect of effort on the intensity of disappointment and regret, find that higher cognitive effort results in greater disappointment but lower regret. Meanwhile, Staw (1997) suggests that an individual's own responsibility for a decision outcome may not reduce the feeling of regret if the decision outcome is a negative one. Thus, it remains unclear how a pre-decisional information search contributes to post-consumption evaluation emotion, in particular, disappointment and regret.

Consumers use the consumption-associated cues as explained in this section; in particular: causal attributions, expectations, and information search in the post-purchase stage to assess a purchase outcome. For a positive or good purchase outcome, the use of such cues in the post-purchase stage can elicit positive emotions. In contrast, for a negative or bad outcome, the use of these cues in the post-purchase stage can elicit negative emotions.

2.6 The post-purchase evaluation emotion

The emotion research in the context of decision-making spans more than twenty years (Baron, 1992; Bell, 1982; Elster, 1985; Frank, 1988; Loomes & Sugden, 1982). However, in the past decade, it has been receiving increasing attention (Loewenstein & Lerner, 2003; Mellers, 2000; Naqvi, Shiv, & Bechara, 2006) as researchers have examined how emotions are generated by specific products (Holbrook, Chestnut, Olivia, & Greenleaf, 1984; Mehrabian & Wixen, 1986), services (Oliver, 1994), or a variety of consumption situations (Derbaix & Pham, 1991; Havlena & Holbrook, 1986; Richins, McKeage, & Najjar, 1992). Most of these studies found emotion to be an important behavioural response of consumers.

Emotions play a key mediating role between consumers' cognitions and behavioural responses (Tsiros & Mittal, 2000; Weiner, 1980). Emotions are present everywhere, especially in the post-consumption situation and are expressed in various forms such as elation, happiness, regret and disappointment (Mellers, 2000; Zeelenberg, van Dijk, van der Pligt, et al., 1998). The apparent widespread impact of consumption-related emotion or post-purchase evaluation emotion has led researchers to examine emotions ranging from a comprehensive set of specific emotions (Richins, 1997) to a more in-depth concentration on one or several specific emotions such as surprise (Derbaix & Vanhamme, 2003), regret (van Dijk & Zeelenberg, 2007; Zeelenberg & Pieters, 2004), disappointment (Inman, Dyer, & Jia, 1997; van Dijk & Zeelenberg, 2002a), embarrassment (Verbeke & Bagozzi, 2003), and anger (Bougie, Pieters, & Zeelenberg, 2003). The majority of the post-consumption emotion research dealt with negative emotions as prior research show that these emotions has many detrimental effects such as decrease of initial offers (Baron, Fortin, Frei, Hauver, & Shack, 1990), decrease of joint gain (Allred, Mallozzi, Matsui, & Raia, 1997), promotion of rejection of ultimate offers (Pilluta & Murnighan, 1996), increase in the use of competitive strategies

(Forgas, 1998), and decrease in the desire to work together in future (Allred et al., 1997).

Therefore, the post-consumption research is heavily concentrated on researching negative emotions, its antecedents, and impact on consumers' behavioural responses.

2.7 The negative emotions

Consumers experience negative emotions when the consumption experience fails to meet expectations (Mano & Oliver, 1993). Prior research finds that, depending on the degree of deficit, the negative emotion experienced by the consumer impacts on the satisfaction judgment and repurchases intentions (Andreassen, 2000). Bougie et al. (2003) find that negative emotions have destructive effects on consumer attitudes and behaviours. In a recent study, Wagner, Hennig-Thurau and Rudolph (2009) find that consumer loyalty intentions decrease due to the negative emotion triggered by consumer demotion. Negative emotions thus seem to affect consumers negatively.

Not all negative emotions are the same; they are distinct. For example, prior research finds that differences exist between discrete negative emotions in terms of subjective feelings, facial expressions, and action tendencies (Roseman, Wiest, & Swartz, 1994). A lot of work has been done on discrete negative emotions, and probably two of the most extensively studied negative emotions are regret and disappointment (Connolly & Zeelenberg, 2002). Affect and emotion studies in decision-making started out with *disappointment and regret* within an economic framework (Bell, 1982; Loomes & Sugden, 1982). In addition, the work of Johnson and Tversky (1983) on affect in risk perception has also motivated researchers to work with regret and disappointment.

Prior research suggests that although disappointment and regret share several distinctive characteristics such as negative valence, common occurrence in people's life, and

both result from unwanted outcomes (Landman, 1993; Zeelenberg et al., 2000), these two differ in respect of the experiential content (Zeelenberg, van Dijk, van der Pligt, et al., 1998) and the way they are evoked (van Dijk, van der Pligt, et al., 1999). These two emotions have different phenomenologies and impact differently on people's behaviours (Zeelenberg & Pieters, 2004; Zeelenberg, van Dijk, Manstead, et al., 1998). The following sub-sections provide an elaboration on disappointment and regret.

2.7.1 Disappointment

Disappointment is a distress related to a particular kind of undesirable event such as a negative consumption experience, more precisely the disconfirmation of a desirable event (Ortony et al., 1988). Disappointment arises from non-achievement of a desirable outcome (Bell, 1985; van Dijk & van der Pligt, 1997) and it signals reduced progress toward desired goals (Carver & Scheier, 1990). Disappointment is highly associated with the dimensions of unexpectedness (Frijda et al., 1989), motivational state (van Dijk, Zeelenberg, et al., 1999), legitimacy, and circumstances agency in a study conducted by van Dijk and Zeelenberg (2002a).

An individual can feel disappointment due to the achieved outcome in a consumption situation or due to the actions of an external party (e.g. manufacturer, service provider, and employee) or both. van Dijk and Zeelenberg (2002b) thus suggest that disappointment can be of two types: outcome-related disappointment and person/agent-related disappointment (Figure 2.1).

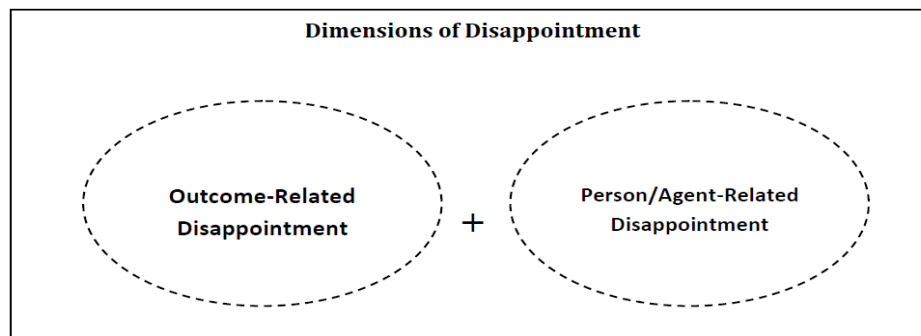


Figure 2.1: Dimensions of disappointment

Source: van Dijk and Zeelenberg (2002b).

2.7.1.1 Outcome -related disappointment

Outcome-related disappointment is a form of disappointment that stems from the outcome of an event such as a negative consumption experience. For example, a dining experience may be less enjoyable than expected and trigger disappointment. This disappointment is referred to as an outcome-related disappointment. van Dijk and Zeelenberg (2002b) categorize outcome-related disappointment as an event-based emotion where the focus is solely on the events and the related consequences of those events/situations. As an event represents a particular situation, outcome-related disappointment can also be labelled as situation-related disappointment.

Prior research has found that when people feel outcome-related disappointment, they tend to exhibit a variety of emotional reactions such as feeling empty inside, dashed hope, tendency to do something nice (van Dijk & Zeelenberg, 2002b). Outcome-related disappointment is also found to be a more individualistic emotion or an emotion that is more likely to be experienced in an individualistic context.

2.7.1.2 Person-related disappointment

Person-related disappointment is a type of disappointment that stems from persons and their actions (e.g. manufacturers, providers, employees), unlike events. It is a type of

disappointment that primarily emerges from external agents and their actions (van Dijk & Zeelenberg, 2002b). Such disappointment is triggered by the undesirable actions of some other party. For example, if the dining experience is less enjoyable due to the poor performance of the restaurant staff, it can be considered as a person-related disappointment. Prior research finds that when people feel person-related disappointment, they have several emotional reactions such as: feeling that very little can be done about the situation, feeling distance from the other person and feeling abandoned (van Dijk & Zeelenberg, 2002b). This type of disappointment has more implications in the social context, such as in negotiation, trust, and joint production.

Ortony et al. (1988) state that both outcome- and person-related disappointment are valence-based reactions; however, the perspectives that these two have towards the world are different. Furthermore, although disappointment has been associated with low control potential (Frijda et al., 1989), van Dijk and Zeelenberg (2002b) in their study find that the control potential varies depending on these two types of disappointment. Meanwhile, prior disappointment research appears to focus more on issues related to outcome-related disappointment and intrapersonal consequences of disappointment. Research on interpersonal or person-related disappointment is very difficult to find in the limited body of literature on disappointment (van Kleff, De Dreu, & Manstead, 2006). As person-related disappointment occurs in the interpersonal context, this social emotion (van Dijk & Zeelenberg, 2002b) has important implications for negative consumption experiences.

2.7.2 Regret

Regret is a counterfactual emotion, which results from individuals' thoughts about how an undesirable outcome could have turned to desirable (Landman, 1987). A number of studies show that upon making a poor decision or facing a poor outcome, people do actually

experience regret in the post-decision stage (Walster, 1964). Regret is a common and distressing emotional experience that has long-term consequences for individual health and well-being (Wrosch, Baucer, & Scheier, 2005).

Regret involves a sense of *personal responsibility* for the decision that appeared undesirable later (Connolly & Zeelenberg, 2002). *Self-blame* which arises out of self-responsibility is also considered as a determinant of regret. Prior research suggests that the intensity of consumers' felt regret is influenced by the level of responsibility and self-blame taken for that decision (Lee & Cotte, 2009). However, some prior studies find that personal responsibility and self-blame are not essential for consumers to feel regret (Connolly et al., 1997; Ordóñez & Connolly, 2000; Simonson, 1992). Consumer may feel regret without the presence of these two factors. Some studies find that consumers' *counterfactual thinking* can induce their feeling of regret (Zeelenberg & Pieters, 2006a). It is a process of making comparisons where individuals compare reality with alternative possibilities by creating hypothetical scenarios so that they can assess their attractiveness (Kahneman & Miller, 1986). Consumers' feelings of regret therefore can originate from self-responsibility due to self-blame as well as counterfactual thoughts in a situation that went in a direction other than the one desired by consumers.

An individual can feel regret due to the outcome or due to the adopted decision process or both. However, the majority of prior regret research does not take into account these multidimensional aspects of regret. Rather than distinguishing between outcome and process regret, these studies consider either outcome regret or process regret as the sole regret incident. Pieters and Zeelenberg (2005) and Zeelenberg and Pieters (2006a) try to explain the distinction between the outcome and process regret on the basis of Decision Justification Theory (DJT) that mentions two sources of regret: a. evaluation of the outcomes, and b.

evaluation of the process (Connolly & Zeelenberg, 2002). However, Lee and Cotte (2009) in a recent work offer a more detailed elaboration of outcome and process regret along with the various dimensions that comprise these two sources of regret (Figure 2.2).

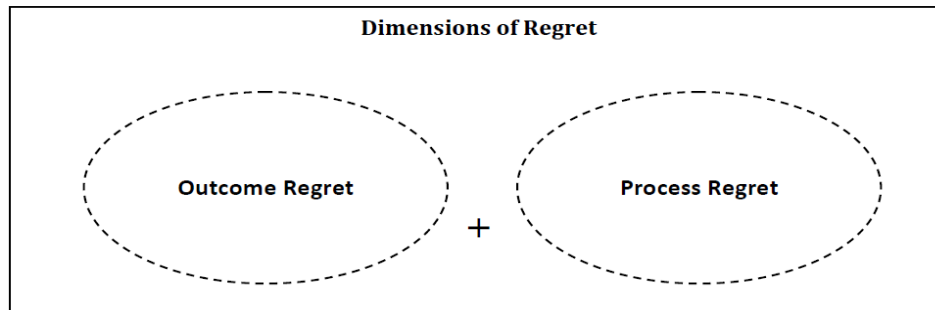


Figure 2.2: Dimensions of regret

Source: Lee and Cotte (2009).

2.7.2.1 Outcome regret

Outcome regret emerges when an unfavourable outcome is compared with the foregone alternatives with the thinking that if the forgone alternatives had been chosen, then the aversive situation could have been avoided. The source of this type of regret is referred to as ‘bad decisions’ in some prior studies (Pieters & Zeelenberg, 2005). Meanwhile, this type of regret is multidimensional in nature, which Lee and Cotte (2009) uncovered recently. In an effort to refine the conceptualization of ‘outcome regret’, they suggest that outcome regret has two dimensions, which are regret due to forgone alternatives and regret due to a change in significance. These two dimensions in combination determine how much outcome regret consumers feel in a post-purchase stage.

2.7.2.1.1 Regret due to forgone alternatives

This dimension of outcome regret manifests an individual’s comparison of the known and unknown forgone alternatives with the outcome of chosen alternative. Prior research demonstrates that consumers usually feel regret in the choice situations (Zeelenberg & Pieters,

2006b, 2006a) and traditionally it was assumed that consumers need to know the outcome of the rejected alternative in order for them to feel regret (Bell 1982). However, in a recent study Tsiros and Mittal (2000) find that consumers feel regret even in the absence of information about a better-forgone alternative. Based on these arguments, Lee and Cotte (2009) suggest that consumers can feel this dimension of outcome regret in the post-purchase stage whether they know or do not know about the outcome of the forgone alternatives. In other words, regret due to forgone alternatives is ignited by choice, as consumers regret afterwards their wrong choice although the choice appeared right at the time of selecting it.

2.7.2.1.2 Regret due to a change in significance

Regret due to a change in the significance dimension of the outcome regret refers to the notion that consumers usually make a purchase with certain goals in mind and the non-fulfilment of those goals caused by the purchased product/service tends to generate regret. The non-fulfilment of the goals changes the product's significance because of its reduced utility; thus, consumers feel regret (Bagozzi, Baumgartner, Pieters, & Zeelenberg, 2000). Individuals perceive reduced product, service, or consumption utility from the time of the purchase to a certain point in time at the post-consumption stage. For example, consumers decide to purchase and consume a certain product or service expecting to receive a certain utility from the product or service consumption. Afterwards, if the consumption experience turns out to be less than satisfactory, then at the post-consumption stage they assess how much utility they have lost compared to what they initially expected to receive from the chosen as well as comparable alternative. This leads consumers to feel regret due to a change in significance of the purchase (Lee & Cotte, 2009). Prior research largely ignores this dimension of outcome regret, although it was recently suggested by Lee and Cotte (2009).

2.7.2.2 *Process regret*

The quality of the decision process itself can also be a reason for feeling regret in spite of the independent effect of the outcome (Zeelenberg & Pieters, 2006a). The source of this regret is referred to as ‘deciding badly’ (Pieters & Zeelenberg, 2005). This type of regret is evoked at the post-consumption stage, in particular, after encountering a bad outcome if consumers compare their inferior decision process to an alternative better quality decision process. In this instance, independent of the decision outcome, the decision process itself can trigger regret, which is termed ‘process regret’ (Lee & Cotte, 2009). Meanwhile, as a source of regret, this dimension of regret is underemphasized both in the regret theory and in research (Pieters & Zeelenberg, 2005). Thus, to offer a refined and insightful conceptualization of this type of regret, Lee and Cotte (2009) proposed that two dimensions underlie process regret. These two dimensions are regret due to under-consideration and regret due to over-consideration. The feeling of process regret is made up of these two components, therefore both dimensions need to be considered when assessing consumers’ feelings of process regret at the post-purchase stage.

2.7.2.2.1 Regret due to under-consideration

Regret due to under-consideration occurs when consumers fail to consider all the decision alternatives due to the employment of decision heuristics that led them to make the purchase (Lee & Cotte, 2009). Consumers in general assess the quality of their decision process by examining both the implementation/execution and the amount of information collected for the decision purpose (Janis & Mann, 1977). Pieters and Zeelenberg (2005) in their study suggest that regret may originate from the failure to implement the behavioural intention into the decision process, thus resulting in intention-behaviour inconsistency in consumers. Apart from this, the quality and quantity of information required to make a good

decision can also be a source of feeling process regret, in particular, regret due to under-consideration of resources (Lee & Cotte, 2009). If consumers encounter a bad outcome and at the post-consumption stage perceive that their decision process lacked the quality and quantity of information needed to make a good decision, they feel process regret due to under-consideration of resources.

2.7.2.2.2 Regret due to over-consideration

There are situations where consumers consider more alternatives than required, thus expending the valuable cognitive resources that are scarce in supply (Ortoleva, 2008). In such situations, they can feel regret due to over-consideration. Although prior research found that the quality and quantity of information is crucial to making a good decision (Janis & Mann, 1977), considering too many decision alternatives may undermine the decision quality. This is because consumers have cognitive limitations (Simon, 1957) and therefore cannot adequately process too much information. If they need to process too much information, they feel cognitive pressure, which may result in their arriving at a sub-optimal decision. Levav, Heitmann, Herrmann, and Iyengar (2010) in their study find that consumers facing too many options are more inclined to choose the default options and thus want to minimize the information processing efforts. In addition to the burden of excess information and efforts expended over considering more alternatives, over-consideration of alternatives can also impose an emotional burden, cognitive overload, and stress during the decision-making process (Lee & Cotte, 2009). Thus, it is very likely that over-consideration can result in feeling regret, especially if the consumption experience turns out to be negative.

2.8 Behavioural responses to negative emotions

As indicated earlier, the cognitive assessments after a negative consumption experience can affect consumers' emotions which in turn determine their behavioural responses such as repurchase intentions and coping behaviours like NWOM, and complaining (Davidow & Dacin, 1997; Hetts, Boninger, Armor, Gleicher, & Nathanson, 2000; Markman, McMullen, & Elizaga, 2008; Wangenheim, 2005). Among the various post-consumption behavioural responses driven by negative emotions, this research primarily focuses on consumers' repurchase intentions and coping behaviours. There are several reasons for focusing on only these two types of behavioural intentions. First, repurchase intention is one of the most important areas of interest for marketers because it has a direct impact on their profits. Second, coping strategies have been widely acknowledged as critical strategies that consumers employ to reduce the impact of negative outcomes. This research focuses on the four most common coping strategies: vindictive nWOM, vindictive complaining, support-seeking nWOM, and problem-solving complaining. The following sub-sections provide a brief overview of these post-consumption behaviours.

2.8.1 Repurchase intention

Repurchase intention in general is the future likelihood that the consumer will be part of an organisation's client list (Jones & Reynolds, 2006). It reflects a customer's likelihood of becoming a repeat customer of the same company (Oliver, 1999). Prior research finds that when consumers face a negative consumption experience, the relevant consumption-associated cues such as attributions and expectations affect their repurchase intention (Blodgett et al., 1993; Choi & Mattila, 2008; Grewal, Roggeveen, & Tsiros, 2008; Tsiros et al., 2004). In particular, consumers' attributions in a negative consumption experience differently affect their repurchase intention (Choi & Mattila, 2008; Folkes et al., 1987; Poon

et al., 2004). Expectations also differently affect consumer's behavioural responses including repurchase intention (Boulding, Kalra, Staelin, & Zeithaml, 1993; Johnston, 1995; Seiders, Voss, Grewal, & Godfrey, 2005). Apart from these consumption-associated cues, consumers' negative emotions also affect their repurchase intentions (Jones, Reynolds, Mothersbaugh, & Beatty, 2007; Nyer, 2000).

2.8.2 Coping behaviours

Coping refers to individuals' cognitive as well as behavioural efforts expended to manage a situation that appears stressful to them (Folkman & Lazarus, 1988). Lazarus and Folkman (1984) defined coping as 'constantly changing cognitive and behavioural efforts to manage specific external and/or internal demands that are appraised as taxing or exceeding the resources of the person' (p. 141). Appraisal theorists assert that people use diverse coping strategies to reduce the extent of negative emotions such as anger, regret and frustration (Lazarus, 1991a). Psychologists have tried to develop several coping instruments/strategies such as the Ways of Coping Questionnaire (Folkman & Lazarus, 1988) and the COPE inventory (Carver, Scheier, & Weintraub, 1989) that may reduce the stress induced by specific events and the resultant emotions. In the consumer behaviour setting, Yi and Baumgartner (2004) developed a typology of coping based on these prior works of the psychologists. The typology developed by Yi and Baumgartner (2004) suggests about eight coping strategies corresponding to general purchase context. These are planful problem-solving, confrontative coping, seeking social support, mental disengagement, behavioural disengagement, positive reinterpretation, self-control, and acceptance. Duhachek (2005) have also explored the structure of coping strategies by proposing eight coping strategies.

Yi and Baumgartner (2004), when proposing the typology of coping, also investigated the effect of emotions on specific coping strategies. They found that among other emotions,

the angry individual employs confrontative coping, the regretful individual employs positive reinterpretation and acceptance coping strategies, while the worrying individual seeks social support as a coping strategy. Duhachek and Iacobucci (2005) in their study found that an active coping strategy is positively affected by anger; however, avoidance or expressive support-seeking coping is affected by fear. Their findings suggest that different emotions lead to different coping behaviours. In line with this, it is proposed that negative consumption experience triggers consumers to feel disappointment and/or regret and these emotions will drive them to engage in particular coping behaviours including confrontative and support seeking coping.

Yi and Baumgartner (2004) find that disappointment triggers confrontative coping, while regret triggers positive reinterpretation and acceptance coping. However, their study finding did not account for the multidimensional aspects of both disappointment and regret. They only mentioned outcome- and person-related disappointment but did not explicitly demonstrate the specific coping strategies that consumers use when they feel a specific type of disappointment. Therefore, opportunities exist to extend their research by accommodating these research gaps. This research presumes that if the consumption-associated cues such as attributions, expectations and information search trigger the dimensions of disappointment (e.g. outcome and person-related) and regret (e.g. outcome and process), then to reduce the extent of such emotions, consumers will employ confrontative and support-seeking coping strategies. Therefore, among the coping strategies suggested by Yi and Baumgartner (2004) and Duhachek (2005) this research focuses only on confrontative and support-seeking coping.

2.8.2.1 Confrontative coping

‘Consumers who engage in confrontative coping argue their case and try to get the other party (e.g. marketer) to change his or her mind, and in the process they may openly display feelings of displeasure’ (Yi & Baumgartner, 2004). This type of coping may also be considered as a blend of action coping and emotional venting coping as suggested by Duhachek (2005). Yi and Baumgartner (2011) in a later study that labelled confrontative coping as ‘blaming others’. Consumers who have retaliative intent toward the blameworthy organization often employ confrontative coping in a negative consumption experience (Bolton, Warlop, & Alba, 2003). In general, they engage in two types of retaliation due to the negative emotions: vindictive nWOM and vindictive complaining (Bougie et al., 2003; Grégoire & Fisher, 2008).

Vindictive nWOM is a form of unfavourable communication made with other customers often with the intention of denigrating a company (Richins, 1983) and/or advising others against using the company’s products/services (Bougie et al., 2003). *Vindictive complaining*, on the other hand, is a form of direct voiced retaliation where consumers aim to castigate an organization by abusing company employees (Grégoire & Fisher, 2008). According to Dunn and Dahl (2012), ‘in recent years, consumers have become increasingly vocal with companies not only by providing compliments and suggestions but also, and more often than not, by complaining, loudly and often’ (p. 670). Negative consumption experiences can prompt nWOM and complaining tremendously, especially when consumers share more than 600,000 pieces of content, upload 48 hours of video, text more than 100,000 messages, and create over 25,000 posts on social media every 60 seconds (Daugherty & Hoffman, 2013). Such communication adversely affects sales and customer loyalty (Fornell & Westbrook,

1984; Singh, 1988), overall brand equity and corporate image (Keller, 2003; Luo & Bhattacharya, 2006) which lead to long-term financial damage (Luo, 2009).

Although both vindictive nWOM and vindictive complaining are used as means of retaliation, the operation of these two strategies is different. Vindictive nWOM is more of a private action where the company does not get a chance to give feedback and by the time they become aware of the inconvenience experienced by the customers, it has already been circulated to the masses. Vindictive complaining is more of a direct action requiring customer-employee/company interaction (Grégoire, Laufer, & Tripp, 2010; Wangenheim, 2005).

2.8.2.2 Support-seeking coping

Support-seeking coping is a form of coping strategy where people tend to use their own and social resources to combat a stressful situation such as a negative consumption experience (Albrecht & Adelman, 1984; Duhachek, 2005). Prior research finds that social support is an important tool for an individual's physical and mental well-being (Schaefer, Coyne, & Lazarus, 1981). Gelbrich (2010) mentions two types of support-seeking coping strategy that are typically used by consumers after a bad outcome: support-seeking nWOM (Yi & Baumgartner, 2004) and problem-solving complaining (Grégoire & Fisher, 2008).

Support-seeking nWOM is a non-aggressive coping strategy where consumers talk to others in their surroundings about the negative consumption experience and seek their emotional support and understanding for this situation (Stephens & Gwinner, 1998; Yi & Baumgartner, 2004). This form of coping is primarily aimed at releasing emotional distress through sharing thus to seek empathy and understanding from others after a negative outcome (Singh, 1988). Duhachek (2005) marked this type of coping as emotional support-seeking.

Problem-solving complaining, on the other hand, is a constructive form of interaction between consumer and company to resolve the problem in a rational way in order to alter the negative situation (Duhachek, 2005; Folkes et al., 1987; Grégoire & Fisher, 2008). Consumers employ this form of complaining in the hope that the difficulty can be resolved if they and the company work together.

Both support-seeking nWOM and problem-solving complaining are directed to external entities, although the entities differ. Support-seeking nWOM is directed toward others such as friends or neighbours, while problem-solving complaining is directed toward the provider or manufacturer.

2.9 Conclusion

This chapter presented a detailed review of the literature that serves as the basis for the conceptual models of this research. This review was intended to show how various consumption-associated cues, in particular causal attributions, expectations and information search, induce consumer emotions, in particular, disappointment and regret in a negative consumption experience. The review was also intended to show how these emotions influence consumers' post-consumption behavioural intentions, in particular, repurchase intentions and coping behaviours. The next chapter presents the research design adopted in this research followed by the first conceptual model and the related hypotheses.

CHAPTER 3 : RESEARCH DESIGN

3.1 Introduction

This chapter details the research design employed in this research to test the proposed conceptual models. More specifically, it outlines the research approach and research method adopted in this research. This chapter also briefly discusses the statistical analysis techniques used to analyse the data collected from the three experimental studies conducted in this research.

3.2 Research approach

The research approach is a framework, a blueprint or a master plan that provides the researcher with a guide to the approach to take when embarking on the research project (Hair, Lukas, Miller, Bush, & Ortinau, 2012; Iacobucci & Churchill, 2010). The choice of a research approach primarily is determined by the nature of the research (Aaker, Kumar, Leone, & Day, 2013). All research approaches are generally classified according to three major types: exploratory, descriptive, and causal.

Exploratory research is conducted when the aim of the researcher is to seek insights and ideas into the general nature of a problem or an opportunity, the variables that are relevant and need to be considered, and the probable decision alternatives (Aaker et al., 2013; Iacobucci & Churchill, 2010). Exploratory research is usually conducted with minimal prior knowledge about the topic of interest. Therefore, this type of research has the characteristics of being flexible (i.e. the method of data collection at times decides the direction of the research); unstructured (i.e. the procedures and details of the way to go are not structured); and qualitative (i.e. qualitative methods such as judgments, ideas, and opinions are used as

typical data collection method) (Aaker et al., 2013). In general, exploratory research is considered as the foundation for a good study (Iacobucci & Churchill, 2010). Literature search, in-depth interview and focus group are three of the primary means of carrying out exploratory research (Aaker et al., 2013; Hair et al., 2012).

Descriptive research is that research type where the aim of the research is not to seek insights but rather to describe something, which in the case of marketing could be the characteristics of a target population. Unlike exploratory research, descriptive research is conducted with some prior knowledge about the research idea at hand. Descriptive research often includes clear-cut statements regarding the research problems, hypotheses, and detailed information needs (Malhotra, 2010). Meanwhile, the hypotheses are rather tentative and speculative in this type of research (Aaker et al., 2013). In spite of this, the researchers have a better opportunity to engage with the research questions. Thus, this type of research may still have utility in prediction (Aaker et al., 2013). The primary characteristic of this type of research is that it merely describes rather establishes the cause and effect relationship between variables. This type of research is generally presumed to be restricted to answering the ‘why’ questions (Hair et al., 2012). Among the research methods available, survey research is the one most preferred by the researcher.

Causal research is a research approach that demonstrates the causation of one variable by another variable. Descriptive research also exhibits the relationship of two variables but it merely shows the relationship between or association of two variables. This is useful to the researcher but not sufficient to establish a cause-and-effect relationship. They cannot obtain such evidence by conducting descriptive research. Researchers use causal research to understand the functional relationship between the causal factors and the predicted variable under investigation (Hair et al., 2012). Through causal research, they achieve a reasonable

proof that one variable preceded the other variable and no other variable accounted for the effect of the variables under investigation (Aaker et al., 2013). In causal research, the requirements of proof are very demanding; therefore, the research questions and the hypotheses in general are very specific. Researchers conducting causal research generally use experimentation as the most preferred approach (Aaker et al., 2013; Hair et al., 2012).

Taking into account the previous discussions of the various research approaches, the present research has adopted the causal research. This is because this research investigates the effect of various triggers (i.e. causal attributions, expectation, information search opportunities) on consumers' feelings of disappointment and regret along with their dimensions. Moreover, it explores the influence of disappointment and regret on consumers' repurchase intention and coping behaviours. As the intention of this research is primarily to find out the causal chain between these relationships, the causal research approach seems to be the most appropriate.

3.3 Research method

As indicated in the preceding paragraph, the primary objective of this research is to investigate the effects of causal attribution, expectations and information search on disappointment, regret and post-consumption behaviours, specifically repurchase and coping. Considering the nature of this investigation, it was necessary to adopt a technique that would increase the internal validity of the investigation as much as possible. With the ability to control for the measurement errors through the random allocation of respondents to various experimental conditions, experimental research appeared as the ideal means of investigation. An experiment is therefore the most suitable method for testing the stated cause-and-effect relationships (Aaker et al., 2013; Oppewal, 2010b).

Experimental research is advantageous over non-experimental research (i.e. exploratory and descriptive research) due to its ability to find out the cause-and-effect relationships between the variables under investigation (Iacobucci & Churchill, 2010). Experiments are described as studies in which researchers control the conditions so that they can manipulate the independent variables to see their effects on the dependent variable (Aaker et al., 2013). In doing so, they also control the effect of other extraneous variables (Oppewal, 2010b). So, experiments are the sort of investigations where the implementation involves an active intervention by the observer beyond that which is needed for measurement (Aaker et al., 2013). Before going into the details of the experimental methodology used in this research, the following sections offer a detailed explanation of the common features of experiments and the terminologies regularly used in experimental studies.

3.3.1 Independent vs. dependent variable and empirical realization

When the researcher identifies the research questions and formulates the conceptual framework of the research, then one or more testable propositions need to be derived which are called hypotheses. A hypothesis is generally perceived as an unproven statement in a testable format (Hair et al., 2012). In other words, it is a statement that offers a tentative explanation about the effect of an independent variable on a dependent variable (Gravetter & Forzano, 2012; Neuman, 2012). An independent variable, also commonly known as a treatment or causal variable, is the variable that can be manipulated (i.e. researchers changes their levels), changed or altered by the experimenter, independently of any other variable (Aaker et al., 2013). As the researcher adjusts (i.e. manipulates, changes, controls) this variable for measurement purposes and to observe its effect on the other variable, it is known as the ‘independent’ variable. A dependent variable, which is synonymous with effect or outcome, is a variable that measures the effect of the independent variable (Hair et al., 2012;

Neuman, 2012). As the value of the dependent variable relies on the experimenter's manipulation of the independent variable, it is known as the 'dependent' variable (Aaker et al., 2013).

After formulating the research questions and hypotheses, researchers then need to think about the ways in which they can transform predicted effects to a set of experimental procedures. At this stage, researchers have to translate the constructs of the conceptual model, which are contained in the hypotheses. This translation involves specifying an 'operational definition' of the variable so that other researchers when conducting similar experiments can follow the same operations as specified in this experiment. The experimental terminology of this is 'empirical realisation' or 'operationalization' (Martin, 2008). Different empirical realisations of a concept ideally should produce similar kinds of results so that the operationalization of the original construct is not perceived to be too general or too broad, thereby requiring the separation of a number of less general variables (Aronson, Ellsworth, Merrill, & Gonzales, 1990).

3.3.2 Extraneous variables and randomization

An extraneous variable is any variable that is present within a study but is not being investigated (Gravetter & Forzano, 2012). In other words, these are any variables other than the manipulated variable that affect the results of the experimental research (Aaker et al., 2013). Therefore, in reality it is nearly impossible to design any experiment that has only independent and dependent variables (Aronson et al., 1990). Extraneous variables do interfere with changes in the dependent variables and confound the results of the experiment, and are therefore also known as 'confounding variables' (Zikmund & Babin, 2013). As extraneous variables cannot be directly controlled by the researcher, their presence in the experiment results in two types of error: systematic error and random error. Systematic error theoretically

is synonymous with constant error as it affects the measurement in a systematic way (Iacobucci & Churchill, 2010). This error affects the scores of the outcome variable in one condition in the same direction; however, the scores of the outcome variable in other conditions are affected in a different direction (Aronson et al., 1990). Random error, however, is a measurement error due to any change in the measurement situation or in the respondent (Aaker et al., 2013). This type of error affects the outcome variable in the same direction across all conditions. Therefore, it is apparent that systematic error has a more damaging impact than random error in an experiment.

The effects of extraneous variables on the dependent variable need to be controlled and one important means of doing this is by random assignment, also known as randomization, which involves the use of a random process to assign participants to treatment conditions (Gravetter & Forzano, 2012). It ensures that every subject has a non-zero probability of being assigned to one of the conditions (Mitchell & Jolley, 2010). Randomization is an important device to equally distribute the effect of extraneous variables across all conditions, thereby controlling the effects although this cannot entirely eliminate the nuisance variable (Zikmund & Babin, 2013). Randomization helps to achieve internal validity of the experiment as the researcher can infer that the mean difference of the dependent variable in different conditions is actually caused by the independent variable rather than mere sampling error (Oppewal, 2010a; Sani & Todman, 2006; Zikmund & Babin, 2013).

3.3.3 Experimental validity

The ‘validity’ of an experimental research indicates the degree to which the experimental study accurately answers the question it was intended to answer (Gravetter & Forzano, 2012). In other words, whether the differences indicated by the dependent variable are actually caused by the real differences in the independent variable. As a researcher, one

needs to be concerned about four issues in order to consider the findings of the experiment as a valid test of the hypothesized relationships. These are: statistical conclusion validity, internal validity, external validity, and construct validity. An experimental study is found to have *statistical conclusion validity* when the conclusions of the research are grounded on an adequate analysis of the data. This generally means that besides its capacity to logically offer an answer to the research question, the applied statistical method accurately reflects the small-sample behaviour using proper randomization (García-Pérez, 2012; Oppewal, 2010b).

Internal validity is a type of validity that produces a single, unambiguous explanation for the relationship of the variables as posited in the experimental study (Gravetter & Forzano, 2012). This also refers to the extent to which the experiment avoids the competing explanations of the posited relationships of the research (Aaker et al., 2013). The internal validity of the experimental study is likely to be increased if the researcher can control the effect of extraneous variables as well as reduce the sources of random error (Aronson et al., 1990; Zikmund & Babin, 2013).

External validity refers to the degree to which the causal inference drawn from the experiments can be transferred or leveraged from the experimental environment to the environment of the decision-maker or to the mass environment (Aaker et al., 2013; Neuman, 2012). A number of strategies including increasing the heterogeneity of the sample and experimental conditions, conducting a greater number of studies to further refine the empirical realization of the conceptual variables or using multiple measures, may enhance the external validity of an experiment (Hair et al., 2012). Internal validity is found to be of greater importance in a culture that trusts well-conducted laboratory studies (Mitchell, 2012). In addition, due to its contribution to showing causal relationships, internal validity is presumed

to have greater importance compared to the later consideration of the generalizability of the causal relationship (external validity) (Campbell, 1957).

Construct validity, on the other hand, refers to the extent to which the investigating variables are completely and accurately identified before assuming any functional relationships between the variables (Hair et al., 2012). The validation of the construct involves, among other thing, accurately identifying the relationships between variables, and properly executing the experimental manipulation, design and setting (Hair et al., 2012; Oppewal, 2010b).

3.3.4 Laboratory and field experiments

Experimental research can broadly be divided into two main categories: laboratory experiments and field experiments. The amount of control in these two main types of experiments varies on a continuum (Neuman, 2012). At one end, we have a highly controlled laboratory experiment. As its name suggests, the experimental treatment is offered in an artificial or laboratory setting (Aaker et al., 2013). The variance of all or nearly all the probable independent variables not obvious to the problem of investigation is kept to a minimum level in laboratory experiments. This is possible as the manipulations of one or more of the independent variables are conducted under rigorously specified, operationalized, and controlled conditions.

Meanwhile, at the opposite end of the control continuum are the field experiments (Neuman, 2012). In a field experiment, the research is conducted in a realistic situation or in a natural environment. One or more independent variables are manipulated in this setting by the experimenter with the amount of control being that permitted by the situation (Aaker et al., 2013). Subjects in field experiments are generally unaware that they are participating in an

experiment so the chance of reacting naturally is much higher in this medium of experiments (Neuman, 2012). In terms of validity, laboratory experiments have higher internal validity than field experiments as the experimenter does have greater control over the experimental setting. In contrast, field experiments are presumed to have greater external validity than laboratory experiments due to the experimenter having less control over the extraneous variables (Aaker et al., 2013; Hair et al., 2012).

3.3.5 Randomized and quasi-experiments

As an experimenter, a researcher can control the applications of different levels of independent variables to determine the effects of these variables on the dependent variables (Yaremko, Harari, Harrison, & Lynn, 1986). Thus, the control of the treatment levels appears to be under the purview of the experimenter and common to all experiments (Shadish, Cook, & Campbell, 2002). The field of experimental research has a history and with the evolution of time and the needs of different disciplines, new types of experimental research have evolved (Winston & Blais, 1996).

Two of the most common new types of experimental research are randomized experiments and quasi-experiments. Randomized experiments are those experiments where the units are assigned to treatment levels, or treatments are assigned to units on a random basis to avoid the systematic relationships between variables (Gravetter & Forzano, 2012). For example, the use of toss of a coin or a table of random numbers is used to assign units to treatment levels or vice versa. This procedure produces two or more groups of units that are similar to each other on average; thus, the differences observed in the outcome if there are any, are exclusively produced by the treatments, not by the pre-existing differences between groups (Shadish et al., 2002).

A quasi-experiment, on the other hand, is an experimental strategy that tries to limit the threats to internal validity and produce cause-and-effect relationships; however, it lacks one of the critical components- either manipulation or control (Gravetter & Forzano, 2012) of true experimentation. In quasi-experiments, units are not assigned to the treatment levels or vice versa through randomization, but through selection. The selection could be done by the researcher or by the subjects. It is typical in quasi-experiments that groups or conditions that are defined previously are compared with a non-manipulated variable. Therefore, the causal conclusions drawn by quasi-experiments are less compelling unless they are backed up by plausible alternative explanations by the researcher. In addition, the research should show the plausibility of the logic, design and measurements which truly assess the variations in the dependent variable caused by the independent variable (Shadish et al., 2002).

An experimental design that is relevant in these experiments is factorial design. It is a type of experimental design where two or more experimental variables are considered simultaneously. This is done by using each combination of the treatment levels with randomly selected groups (Aaker et al., 2013). In factorial design, each combination of the levels is referred to as an 'interaction effect'. This also represents a separate condition. More importantly, an interaction occurs in factorial design if the effect of one independent variable relies on the value of the other (Aronson et al., 1990). From another angle, it seems that one variable moderates the effect of the other as the variable modifies the direction or strength of the relation between the predictor and the outcome (Baron & Kenny, 1986). Factorial design is presumed to be more elegant than basic experimental design due to its ability to investigate the interaction of two or more independent variables (Zikmund & Babin, 2013).

3.3.6 Scenario-based and real behaviour experiments

The present marketing research literature categorizes experimental design from another point of view: scenario-based experiments and real-behaviour experiments. In a scenario-based experiment, the subjects are told to imagine themselves in a hypothetical situation that resonates with one of the experimental conditions manipulated by the researcher. This is done to see the effect of the manipulated condition on a subject's reactions. Afterwards, through a questionnaire, the subject's responses under the simulated conditions are collected. Scenario-based experiments have been used in the field of consumer behaviour for a long time and are still the most popular for this stream of research (Bolton & Alba, 2012; Burroughs & Mick, 2004; Dabholkar & Spaid, 2012; Folkes, 1988; Harris, Grewal, Mohr, & Bernhardt, 2006; Mattila & Ro, 2008; Oppewal & Koelemeijer, 2005).

The main advantage of this type of experimental design is the convenience and the efficiency of implementation in terms of cost and time. Conversely, the main disadvantage is that it is difficult for some consumers to relate to and imagine themselves in the given conditions and situations. This may elicit responses that do not truly represent a realistic situation as wished by the researcher, thereby compromising the external validity of the study.

In a real-behaviour experiment, the experimenter exposes the study subjects to a real marketing stimulus in a real-life setting. Their reactions specific to the condition are observed or a questionnaire is used to measure their perception of that condition. Some consumer behaviour researchers frequently use this type of experimental design in their research (Bressoud, 2013; Carmon, Wertenbroch, & Zeelenberg, 2003; Kruger, Risen, Gilovich, & Savitsky, 2009; Mishra, Mishra, & Nayakankuppam, 2010). The main advantage of this type of experimental design over the scenario-based experiment is that it can generate realistic results due to the study subjects' exposure to the real experimental condition. This ensures the

external validity of the experimental study. Overall, the fundamental differences between these two types of experimental design are the setting of the experiment and the subject matter under investigation.

3.4 Scenario-based experiment: The primary method of investigation

For the purpose of this research and given the issues being investigated (i.e. triggers of disappointment and regret, their effect on repurchase intention and coping behaviours) conducting real-life experiments would be very difficult. Thus, a scenario-based experiment is adopted as the primary method to test the hypothesized relationships relating to the conceptual models of this research. The experiment that is conducted to test conceptual model 1 includes the manipulation of the variables: responsibility attribution, stability attribution and expectation; the experiment conducted to test conceptual model 2 involves the manipulation of the variables: responsibility attribution, expectation and information search; to test conceptual model 3 through experiment, these variables are manipulated: external responsibility, attribution and expectation. Study 1 tests conceptual model 1, Study 2 tests conceptual model 2 and Study 3 tests conceptual model 3. In all the respective experiments, the variables are manipulated across all conditions by using hypothetical scenarios and at times changing the wording of the scenarios. After the respondents have read the scenario, they are asked to answer the questions intended to measure the dependent variables, namely, disappointment and regret along with the dimensions of repurchase intention and coping behaviours. The following sub-section very briefly describes the primary effects that are being investigated through the scenario-based experiments to test conceptual model 1, conceptual model 2, and conceptual model 3.

3.4.1 Scenario-based experiment: Conceptual model 1 & tested in Study 1

Conceptual model 1 examines the effect of causal attributions and expectations on triggering the feeling of disappointment and types of regret and how these emotions impacts on consumers' repurchase intentions and coping behaviours. Causal attributions and expectations are expected to trigger the feelings of disappointment and regret after a negative consumption experience. It is also expected that the induced emotions sequentially mediate the effect of causal attributions and expectations on consumers' repurchase intentions and coping behaviours. Conceptual model 1 is tested through Study 1 where a scenario-based experiment is employed. Study 1 deals with a hypothetical scenario that depicts a negative consumption experience. The respondents in this study assume an observer perspective and play the role of an observer as offered by the experimenter. Chapter 4 details conceptual model 1, which is tested through Study 1.

3.4.2 Scenario-based experiment: Conceptual model 2 & tested in Study 2

Study 2 tests conceptual model 2 that investigates the effect of responsibility attributions, expectations, and information search on inducing the feeling of disappointment and types of regret. It also investigates the impact of these triggered emotions on consumers' repurchase intentions and coping behaviours. It is presumed in study 2 that the stated consumption-associated cues induce disappointment and regret which in turn sequentially mediate between these cues and consumers' repurchase intentions and coping behaviours. To test conceptual model 2, Study 2 used a scenario-based hypothetical negative consumption experience and recorded consumers' responses for the mentioned effects. The respondents in this study assume an active decision-maker perspective and play the role of an active decision-maker as offered by the experimenter. The details of Study 2 that tests conceptual model 2 are provided in Chapter 5.

3.4.3 Scenario-based experiment: Conceptual model 3 & tested in Study 3

Conceptual model 3 is tested by conducting Study 3. This study examines the effect of external responsibility attributions and stated vs. unstated expectations on triggering disappointment and regret types and their effects on consumers' repurchase intentions and coping behaviours. In Study 3, it is expected that external responsibility attributions and stated vs. unstated expectations induce different types of disappointment and regret. These emotions in turn are presumed to sequentially affect consumers' repurchase intentions and coping behaviours. Chapter 6 provides the details of conceptual model 3 that is tested through Study 3.

3.5 Pre-testing the questionnaire

The core purpose of pre-tests is to make sure that the questionnaire meets the researchers' expectations in terms of the information demanded (Aaker et al., 2013). It gives the experimenter the opportunity to revise, modify the questionnaire and scales used, and correct measurement errors, thereby increasing the reliability and validity of the questionnaire (Cooper & Schindler, 2003). The questionnaires for each study conducted in this research underwent several rounds of pre-tests before the final data collection for that study. The details of the pre-testing of each questionnaire of each study are provided in specific chapters (i.e. Chapter 4, Chapter 5, and Chapter 6).

3.6 Human ethics approval

The research questionnaire for Study 1, which is related to conceptual model 1, was submitted to Monash University Human Ethics Committee (MUHREC) before collecting data for the pre-tests. It is a requirement that all types of research that involve human subjects irrespective of the source of funding must be checked and cleared by MUHREC. The present

research project received the approval from MUHREC as per the guidelines and legislative framework laid down in the 'National Statement on Ethical Conduct in Human Research'. The application lodged for ethics approval contained detailed description of the research objectives, sampling population and criteria for recruiting sampling units, instruments to be used in the research, the recruitment process, and issues relating to the anonymity of the respondents. More importantly, the highlight of the application in regards to data collection was that an international online panel company would be employed to recruit and pay the respondents. The recruited respondents would be given an explanatory statement that clearly specified the purpose of the study, the promise to ensure the anonymity of the respondents and their right to exit the survey at any time and stage if desired.

3.7 Measures of testing the validity and reliability: Exploratory factor analysis

For some of the conceptual constructs adopted in this research in particular, outcome and process regret, exploratory factors analysis was used to confirm the validity and reliability of the constructs (Hair et al., 2012). Although Lee and Cotte (2009) already validated these two constructs when they proposed the post-purchase consumer regret scale, this research wanted to check the validity and reliability of these constructs in the present research contexts. The basic premise of using EFA in any research is to obtain an understanding of the underlying structure of the questions, variables or objects and to combine them into new variables or groups (Aaker et al., 2013). Thus, this is a data reduction technique where information is condensed from the original variables and presents a new smaller set of usable variables or constructs. The new smaller set of variables is called the 'factors'. When using exploratory factor analysis, the following criteria are used to obtain and interpret the results.

3.7.1 Sample size

The sample size required in order to conduct exploratory factor analysis ideally should be at least 50 observations and preferably 100 or more (Aaker et al., 2013; Hair et al., 2012). Meanwhile, as a rule of thumb it is suggested that the ratio of 5 cases for each variable is acceptable and 10 cases for each variable is ideal (Hair et al., 2012).

3.7.2 Measures of intercorrelation

Measures of intercorrelation are used to assess whether the variables have sufficient correlations between each other to produce the representative factors. The method that is first used for this purpose is the visual inspection of the 'correlation matrix'. If a substantial number of correlations fall below .30, then it is generally presumed that factor analysis is not an appropriate method for this. The second method that researchers use is the 'Bartlett test of sphericity'. The entire correlation matrix is tested through this method and a statistical significance level is provided to see whether the correlation matrix have significant correlations among at least some of the variables. The third method to determine the appropriateness of factor analysis is the 'Kaiser-Meyer-Olkin (KMO) measure of sampling adequacy'. 0 to 1 is used as the index of this measure where approaching towards 1 means each variable is perfectly predicted without error by the other variables. A value of .80 or above is regarded as excellent; a value of .70 or above but below .80 is considered as satisfactory; a value of .60 or above is mediocre; a value of .50 or above is poor and a value below .50 is considered as unacceptable (Kaiser, 1974).

3.7.3 Factor extraction method

This is a method used for defining (i.e. extracting) the factors that show the structure of the variables in the analysis (Hair et al., 2012). There are two factor extractions methods:

common factor analysis and principal component analysis. When the researcher's objective is to summarize or condense the information of a larger set of variables into a few factors, then principal component analysis is used. Whereas, common factor analysis is used when the researcher attempts to uncover the underlying dimensions that surround the original variables. Principle component analysis is based on the total information in each variable while common factor analysis deals with only the variance among all the variables (Aaker et al., 2013). Meanwhile, principal component analysis is found to be the default method in most statistical software (Aaker et al., 2013; Hair et al., 2012). The current research also uses principal component analysis to test the reliability and validity of the constructs.

3.7.4 Number of factors to extract

The purpose of conducting factor analysis is to extract the few factors that represent a substantial proportion of the total variance across all the variables (Hair et al., 2012). In order to decide the number of factors to extract, the present research uses the following criteria (Aaker et al., 2013; Goursuch, 1983; Zwick & Velicer, 1986): (1) Latent root criterion: each variable contributes a value of 1 to the total eigenvalues in the principal component analysis. Meanwhile to assess the number of factors to extract by principal component analysis, only those factors with eigenvalues greater than 1 are considered as significant. (2) A priori criterion: this is used when the researcher before conducting the analysis knows how many factors to extract and terminates the analysis once the prior decided number of factors has been extracted. This approach is commonly used when the researcher is testing a theory or hypothesis relating to the number of factors to be extracted. This approach is also used when the researcher is replicating other research to extract the number of factors that were extracted by the earlier research. (3) Percentage of variance criterion: this approach ensures that the number of factors to be extracted describes a certain cumulative percentage of total variance

across all the variables. In general, the solution that accounts for 60% of the total variance in the data has been tagged as satisfactory.

3.7.5 Rotation methods

The objective of rotating the factor matrix is to achieve a simple and theoretically more meaningful factor pattern by distributing the variance from earlier to later factors (Hair et al., 2012). Two procedures are generally used for rotating the factors: orthogonal rotation and oblique rotation. The orthogonal rotation assumes that the theoretically underlying factors are independent while the oblique rotation assumes them to be correlated. The purpose of using orthogonal method is to reduce the data to a set of uncorrelated measures for use in later analysis. In contrast, oblique rotation is used to obtain the theoretically meaningful constructs because in the real world very few constructs are found to be uncorrelated (Aaker et al., 2013; Hair et al., 2012; Tabachnick & Fidell, 2007b). There are three main orthogonal approaches: Quartimax, Varimax, and Equimax. Of these, Varimax is found to be the most successful and acceptable to researchers in obtaining invariant orthogonal factor solutions (Hair et al., 2012; Kaiser, 1974). Oblique methods on the other hand vary among different statistical programs and include: Oblimin, Promax, Orthoblique, Dquart, Doblmin (Hair et al., 2012). This research adopts the Varimax orthogonal method for the purpose of its investigations.

3.7.6 Interpreting factor loadings and communalities

Factor loadings are the correlation between each variable and its factor where higher loadings indicate the variables' better representation by the factors. The squared loadings thus represent the amount of the variables' total variance explained by the factor. For a large sample size, factor loadings in the range of .30 and .40 are considered as the minimum acceptable level while a loading of .50 or above and the loading of .70 or above are

considered as significant and ideal. From the statistical point of view, a large sample usually requires a smaller factor loading (Hair et al., 2012). Communalities indicate the amount of variance explained by the solution provided by the factor for each variable. A communality value of less than .50 indicates that the variable does not have sufficient explanation (Hair et al., 2012).

3.7.7 Creating summated scales

A summated scale is used to identify the appropriate variables for subsequent data analysis and is also known as a composite measure. It is obtained by averaging all the variables loading highly on a factor and later uses the new variable to replace the existing variable (Hair et al., 2012). When constructing the composite measures, two issues are considered: reliability and validity.

Reliability assesses the degree of consistency between multiple measurements of a variable. Internal consistency is a commonly-used measure of reliability. High internal consistency indicates that the items on a scale measure the same scale and are highly intercorrelated (Churchill, 1979). To assess the internal consistency a number of diagnostic measures are available. The first two measures are related to each separate item and these include item-total correlations and inter-item correlations. It is advised that the former be above .50 and the latter be above .30 for each variable (Robinson, Shaver, & Wrightsman, 1991). Another measure of internal consistency is a reliability coefficient that assesses the internal consistency of the entire scale using Cronbach's alpha (Cronbach, 1951; Peter, 1979, 1981). In general, the acceptable limit for Cronbach's alpha is .70 or above (Peterson, 1994). For the purpose of this research, we primarily considered Cronbach's alpha value to assess the reliability of the scale. However, the scales comprised of more than 5 items were analysed further by using Exploratory Factor Analysis.

Validity assesses the extent to which a scale or a set of scales adequately and accurately represents the measured concept (Hair et al., 2012). To measure validity, there are two methods that are widely used: Convergent validity and Discriminant validity (Campbell & Fiske, 1959). To assess the correlation of two measures of the same concept, researchers use convergent validity. If high correlations exist among the measures of the concept, this indicates a high level of convergent validity. Discriminant validity, on the other hand, assesses the degree of distinctiveness of two concepts. The measure of conceptually similar measures and low correlations between a summated scale represents a high level of discriminant validity.

3.8 Data analysis

The primarily statistical procedure used to test the hypotheses relating to conceptual model 1, conceptual model 2 and conceptual model 3 was Analysis of Variance (ANOVA) (Tabachnick & Fidell, 2007a, 2007b). The ANOVA tests reveal whether there are significant mean differences among the different groups of scores. The different group means represent different levels of a single independent variable (IV) or different combinations of the levels of two or more IVs. When researchers want to find out the single variable's different levels mean score differences, they use one-way ANOVA. If the researchers are after the mean score differences of the different combinations of the levels of two or more IVs, they use factorial ANOVA. A between-subjects ANOVA is applied when the groups of scores come from different cases, whereas a repeated-measure of ANOVA is used when the groups of scores come from the same cases. By using ANOVA as the analysis technique, questions regarding the main effects of the IVs, the effects of interaction among IV's, parameter estimates, and specific planned or post hoc comparisons, can be answered. Thus, broadly, to find out the effect of different triggers in inducing the feelings of disappointment and regret in negative

consumption experiences, this research primarily used ANOVA. This is to find out the mean score differences in the feeling of disappointment and regret caused by different levels of the various triggers considered in this research. Chapter 4, Chapter 5 and Chapter 6 provide the details of the study's specific ANOVA test results regarding the predicted effects.

One of the core aims of this research is to investigate the mediating effects of disappointment and regret on the triggers (i.e. causal attributions, expectations, information search opportunities) of these emotions and consumers' behavioural responses (i.e. repurchase, coping intentions). In particular, in order to test the sequential mediating effects of disappointment and regret, this research used the bias-corrected and accelerated bootstrapping approach as suggested by Preacher and Hayes (2008). Kim et al. (2013) in testing the multiple mediator model by using bootstrapping (Preacher & Hayes, 2008), found that this approach had advantages over the traditional causal steps approach (i.e., Baron & Kenny, 1986). This is due to its ability to: 1. identify a single model with all mediators instead of separate models for each, 2. compare the mediating capability of each variable while controlling others, 3. ease up the assumptions of normality, 4. includes covariates rather than splitting the data into subsamples, and 5. produce more reliable results even if the sample size is small. The present research uses Hayes PROCESS Macro, in particular model 6 (Hayes, 2013), that tests whether the mediators sequentially mediate the posited relationships. A specified direction of causal flow is expected in the present research and the sequential mediation model presumes the causal link that links the mediations (Hayes, 2013). So, the use of model 6 (i.e. sequential mediation) for the purpose of this research is appropriate.

3.9 Conclusion

This chapter detailed the research design adopted in this research. It includes an outline of the research methods applied to test the research hypotheses proposed in the conceptual models. More importantly, this chapter explained the type of the scenario-based experiments as well as the methods used to analyse the data. As indicated earlier, this research conducted three experimental studies to test the conceptual models. Each study is described in more detail as a separate chapter. The next chapter details Study 1 followed by Study 2 and Study 3 respectively.

CHAPTER 4 : STUDY 1

4.1 Introduction

This chapter presents the first experimental study which focuses on testing the first conceptual model. In particular, this experiment aims to (1) investigate whether different types of causal attributions and expectations induce the feelings of disappointment and regret differently, and (2) examine how these two negative emotions impact on consumer behavioural intentions. This chapter offers a detailed explanation of the first conceptual model along with the proposed hypotheses. It also provides an in-depth explanation of the experimental design, method and procedure, as well as data analysis of this first study.

4.2 Conceptual model 1: Hypotheses

Conceptual model 1 exposes the effects of causal attributions and expectations in triggering the feelings of disappointment and various types of regret as well as the mediating role played by these emotions. For conceptual model 1, two sets of hypotheses are proposed in the following sub-sections (Figure 4.1).

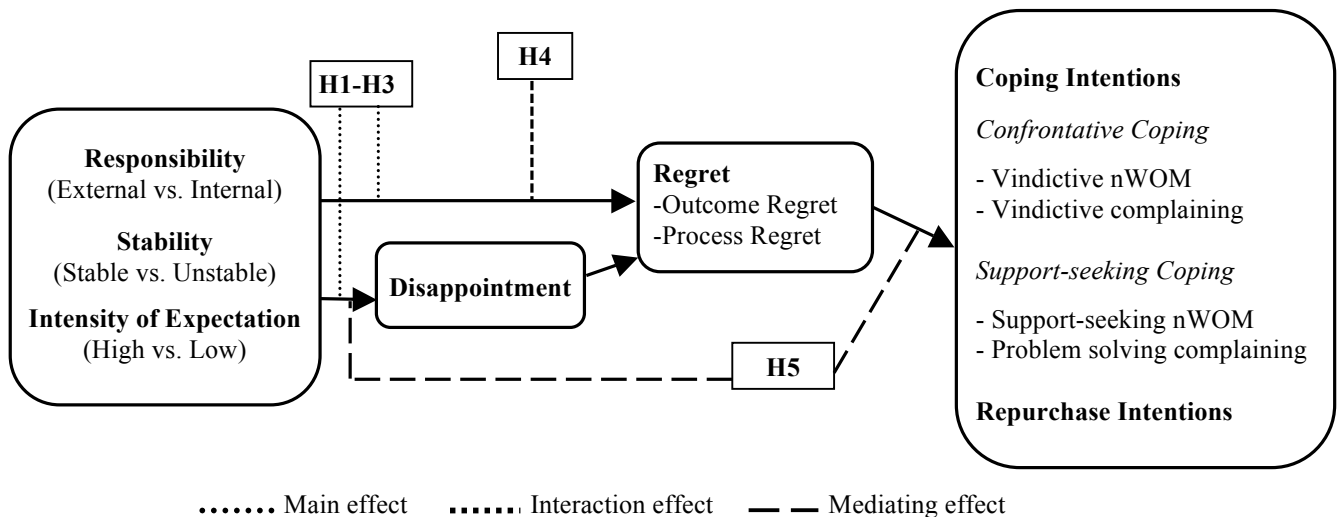


Figure 4.1: Conceptual model 1

The first set of hypotheses intends to address research question 1 by proposing that causal attributions and expectations induce the feeling of disappointment and various types of regret differently after a negative consumption experience. The second set of hypotheses is intended to address research question 4 by predicting that the induced disappointment and the types of regret will sequentially direct consumers' repurchase intentions and coping behaviours. In the following, the first set of hypotheses is presented followed by the second set of hypotheses.

4.2.1 The effect of causal attributions on disappointment and regret

Prior research finds that for an individual an external agent other than the self causes disappointment situations (Frijda et al., 1989; Zeelenberg & Pieters, 2004; Zeelenberg, van Dijk, Manstead, et al., 1998). Due to its being independent of the decision agent (e.g. consumer in a consumption situation), disappointment is felt more when there is external rather than internal attribution of responsibility in case of a negative outcome (Zeelenberg, van Dijk, Manstead, et al., 1998). Therefore, it is likely that a consumer attributing the responsibility of a negative consumption experience to an external rather than an internal entity will feel greater disappointment.

The attribution of responsibility after a negative consumption experience also induces consumer feelings of regret. Some prior studies find that the internal attribution of responsibility is an essential trigger to feelings of regret (Contractor & Kumar, 2012; Frijda et al., 1989; Zeelenberg, van Dijk, Manstead, et al., 1998). However, other studies find that it is not essential for consumers to have internal attribution of responsibility in order to feel regret (Connolly et al., 1997; Simonson, 1992). The present research does not discard either of the claims; rather, it proposes that both internal and external attribution of responsibility can trigger regret, however, different dimensions of it in particular, outcome and process regret.

Due to variations in responsibility attributions, consumers may feel different intensities of outcome and process regret.

When consumers attribute the responsibility of a bad outcome to an external entity, the thought of the entity (e.g. company) having greater responsibility for the bad outcome leads them to think more about the hypothetical superiority of the forgone alternatives in comparison with their selected one. They may also counterfactually think about the utility that they have lost from the time of purchase to the time after purchase due to the bad outcome. In other words, they experience greater outcome regret (Lee & Cotte, 2009). Thus, some prior research that considers regret as a single dimensional construct has found that consumers can feel regret when it is unrelated to them and their decision process (Connolly et al., 1997; Taylor, 1985).

In contrast, when consumers attribute the responsibility of a bad outcome to the internal entity, the thought of them having greater responsibility leads to think more about their own effort prior to making the final decision. Looking back at their own effort, they assess whether they expended too little effort (i.e. under consideration) or too much effort (i.e. over consideration) on making their decision (Lee & Cotte, 2009). A bad outcome is an illustration of a bad decision outcome for consumers when they are responsible for it. Therefore, the perceived low quality of the decision process due to bad outcome is likely to lead them to feel that an alternative decision process was a better means of achieving the outcome. In other words, they feel greater process regret. Relatedly, some prior studies that consider regret as a single dimensional construct only, find that reason-based or acceptable decision processes reduce regret, while low-quality decision processes increase regret independent of the decision outcome (Inman & Zeelenberg, 2002; Pieters & Zeelenberg, 2005). Hence, this research predicts that:

H1: When consumers attribute the responsibility of the negative consumption experience externally, compared to when they attribute the responsibility internally, they will experience (a) greater disappointment (b) greater outcome regret and (c) lower process regret.

Prior research suggests that disappointment stems from disconfirmed expectations and when the responsibility for such disconfirmation lies with an external entity (Bell, 1985; Zeelenberg, van Dijk, & Manstead, 1998). This implies that expectation and responsibility are important contributors to feelings of disappointment. Meanwhile, stability attribution relates to consumers' cognitive assessment about the nature of the cause that is responsible for the bad outcome, and in particular, whether it occurs frequently or infrequently. It appears that stability attribution does not accompany any expectation- or responsibility-related component. Therefore, it is less likely to trigger the feeling of disappointment differently.

Meanwhile, regret is likely to be varied due to stability attribution. Prior studies have found that the higher the intensity of the service failure, the greater the consumers' perceived loss (Weun, Beatty, & Jones, 2004). For consumers, losses loom larger than gains (Kahneman & Tversky, 1979; Thaler, 1980), value function is steeper for losses than gains (Choong, 2001), and losses are typically weighted more heavily than gains (Oliver, 1996). Therefore, it is tenable that consumers assume greater loss in stable than unstable attribution due to the recurring or permanent nature of such attribution. Prior research finds that the likelihood of experiencing future negative outcomes is smaller in unstable than stable attribution (Varela-Neira, Va'zquez-Casielles, & Iglesias, 2010). In addition, unstable attribution does not contribute to expectancy shifts of consumers (Lanzetta & Hannah, 1969; Leventhal & Michaels, 1971; Weiner & Kukla, 1970).

Consumers who attribute the cause of a bad outcome as stable rather than unstable are likely to produce a greater amount of counterfactual thoughts. They are likely to produce higher counterfactuals about the superiority of forgone alternatives as well as the utility that they have lost from time of purchase to time after purchase. Furthermore, a negative outcome indicates the low quality of the decision process, so counterfactual thoughts about the hypothetical superiority of alternative decision process are also likely to occur. These thoughts are more likely to occur if the attribution is stable or recurrent rather than unstable or non-recurrent. Hence, this research predicts:

H2: When consumers attribute the negative consumption experience to a stable external factor, they will experience (a) equal levels disappointment (b) greater outcome regret and (c) greater process regret, than when they attribute the experience to an unstable factor.

4.2.2 The effect of expectations on disappointment and regret

Consumers tend to have expectation prior to a consumption experience, which they later use as reference point when comparing the actual consumption experience (Bridges, 1993). Their feeling of disappointment is in direct proportion to the difference between the expected experience and the actual experience (Zeelenberg et al., 2000). Thus, the lowering of expectations is one means of reducing disappointment (van Dijk et al., 2003). Based on these arguments, it is predicted that the higher the consumer expectation, the greater will be the disappointment after a negative consumption experience. This is due to the greater mismatch between the actual and the expected consumption experience. Due to less of a mismatch between the actual and the expected consumption experience, consumers are likely to feel less disappointment in a low expectation situation.

The violation of consumer expectations can also induce regret. Prior research in the investment context has found that decision-makers feel greater regret due to the counterfactual comparison process when the outcome falls below expectations (Huang & Zeelenberg, 2012). Similarly, in a consumption context, if the consumption outcome falls below expectations, this can lead to feelings of regret. However, the extent of this shortfall or mismatch is likely to determine the intensity of such feelings. If consumers face a bad outcome with a company from which they have high expectations, then they are likely to feel greater regret due to a greater mismatch between expectation and performance. Conversely, if they face a bad outcome with a company from which they have low expectations, they will also feel regret due to a mismatch between expectations and performance. However, in this instance, because the mismatch between expectation and performance is less, they are likely to feel less regret.

The violations of high or low expectations can also trigger specific dimensions of regret, outcome regret in particular. This is because outcome regret emerges from counterfactual thoughts about the hypothetical superiority of forgone alternatives as well as the lost utility from time of purchase to time after purchase. When expectations are not met, consumers' counterfactual thinking in terms of the forgone alternatives are therefore likely to be similar in these instances. Meanwhile, when making their initial selection, if consumers chose the superior alternative and rejected an apparently inferior alternative, then it is likely that they would produce fewer counterfactual thoughts if their expectations are not met. This is because the forgone alternatives were not superior to the one they selected; thus, selecting the forgone alternative would not have altered their current aversive situation. In addition, the feeling of lost utility would not appear significant in such instances because the chosen alternative was superior. In combination, this is likely to result in feeling lower outcome

regret. Conversely, choosing an inferior option while forgoing a superior option is likely to trigger higher amounts of counterfactuals due to the superiority of the forgone alternatives as well as the loss of higher utility from time of purchase to time after purchase. This would likely induce higher outcome regret. The violation of different expectations is less likely to affect the feeling of process regret. This is because expectation does not contribute much to this type of regret that essentially emerges from the low quality of consumers' own decision-making process (Pieters & Zeelenberg, 2005). Therefore, this research predicts:

H3: After encountering a negative consumption experience, consumers with higher expectations compared to those with lower expectations, will experience (a) higher disappointment (b) lower outcome regret and (c) equal levels of process regret.

4.2.3 The interaction effects

Tsiros et al. (2004), in a distributor evaluation context, find that disconfirmation has a higher negative effect on satisfaction when the responsibility for such disconfirmation is with the company and attributed as stable rather than unstable. Company or external responsibility for an outcome affects the equity of transactions in case of stable rather than unstable attribution (Seider & Berry, 1998). Thus, Tsiros et al. (2004) suggest that an attribution-related, two-way interaction model may only be appropriate when the attribution dimensions (e.g. responsibility, stability) are part of the valence component that reflects the extent to which people feel positively or negatively about an outcome. Drawing on these prior findings and suggestions, this research expects that responsibility and stability attributions may interact when inducing consumers' disappointment and regret.

It was predicted earlier that external responsibility attribution (e.g. provider) triggers greater disappointment and outcome regret but lower process regret than internal responsibility attribution (e.g. consumer) (H1). It is also predicted that stable rather than unstable attribution triggers an equal level of disappointment and higher outcome and process regret (H2). It is predicted that stability attribution does not produce a difference in consumers' feeling of disappointment; therefore, the interaction of responsibility and stability is less likely to trigger disappointment. In addition, the dimensions of responsibility and stability attribution are predicted to trigger outcome regret similarly, so the interactions of these attribution dimensions are less likely to trigger outcome regret differently. Meanwhile, consumers' feeling of process regret is predicted to trigger differently by the dimensions of responsibility and stability. Therefore, it is likely that responsibility and stability attribution interact when triggering process regret.

When consumers attribute the responsibility of a bad or low quality decision process internally and feel process regret for it (Pieters & Zeelenberg, 2005), a further consideration of stability attributions in such instance is likely to make little difference to such feelings of regret. This is because the variation of recurrence frequency (i.e. stable vs. unstable) of a negative outcome cannot alter the status of consumers' low quality decision process. Furthermore, prior research proposed that attribution towards an unstable cause heightens the specialness of the situation in a consumers' own failed achievement context (Faure & Mick, 1993). Therefore, stable and unstable attribution is less likely to create a difference in consumers' feeling of process regret when they are responsible for a negative consumption experience. Meanwhile, stable rather than unstable attribution indicates a greater likelihood of future occurrence; therefore, consumers shift their expectations of the future performance of the company (Weiner, 1985a). Stable attribution also signifies permanent loss for consumers,

which results in the reduced likelihood of their engaging in transactions with the company in future. This leads to feeling greater process regret in company or external responsible stable rather than unstable attribution. This research does not expect any interaction between responsibility attribution and expectation and between stability and expectation when affecting process regret. This is because it is predicted in H3c that process regret does not vary due to variations in expectations. Hence, this research predicts:

H4: Consumers feel greater process regret in externally stable rather than in unstable attribution conditions while their feeling of process regret is unaffected by the internal stability of the attribution conditions.

4.2.4 The mediating effects

Prior research finds that cognition influences emotions, which in turn affect people's behavioural responses (Coke, Batson, & McDavis, 1978; Roseman, 1978). Emotions play a key mediating role between attributions and behavioural responses (Chebat, Davidow, & Codjovi, 2005; Weiner, 1985a). Therefore, in this research context, it is likely that consumers' repurchase and coping intentions would be affected by disappointment and regret, which are induced by responsibility attributions and violation of expectations. To express these causal chains of responsibility attribution-emotion-behaviours and expectation-emotion-behaviours, this research finds the cognitive appraisal theory to be relevant theoretical underpinning.

According to cognitive appraisal theory (Lazarus & Folkman, 1984), consumers appraise consumer-environment interactions (e.g. a negative consumption experience) using primary and secondary appraisals. In primary appraisals, consumers evaluate the relevancy and desirability (e.g. expectation) of the consumption outcome for them, while in secondary appraisals, they evaluate the attribution of responsibility (e.g. blame, control) as well as the

available coping potential for the outcome (Folkman & Lazarus, 1988; Siemer, Mauss, & Gross, 2007; Zalewski, Lengua, Wilson, Trancik, & Bazinet, 2011). Prior research finds that particular combinations of these appraisals determine the significance and intensity of emotions in a situation (Lazarus & Smith, 1988; Schmidt, Tinti, Levine, & Testa, 2010). Such assessments in the current context, as indicated in the previous hypotheses, will influence consumers' feelings of disappointment and regret, which later guide them in deciding their behavioural intentions. Hence, this model indirectly assumes that as one of the outcomes of the cognitive appraisal process, the emotions felt by consumers will eventually determine their behavioural actions (Dennis, Cole, Wiggins, Cohen, & Zalewski, 2009; Duhachek, 2005; Duhachek & Oakley, 2007; Nyer, 1997).

Furthermore, prior research suggests that disappointment and regret can occur in a sequence where one may precede the other (Zeelenberg, van Dijk, Manstead, et al., 1998). This research argues that following a bad outcome, consumers would first experience disappointment followed by regret. These emotions later would sequentially affect their repurchase and coping intention behaviours. This argument relies on the nature of the cognitive appraisal process where consumers at first appraise the extent of undesirability of the consumption due to a bad outcome. In this situation, it is reasonable to presume that consumers would first compare their actual experience with their initial expectations. This comparison is likely to lead to feelings of disappointment. The consumers can then probe into the details of the outcome by means of counterfactual thoughts about alternative products or decision process. This is likely to lead to feelings of regret. Meanwhile, the feeling of disappointment is not predicted to be differently affected by stability attributions (H2). Therefore, the posited sequential mediations by disappointment and regret are unlikely to

affect the stability attribution on repurchase and coping intention behaviours. This research therefore advances the following hypothesis:

H5a: Disappointment precedes regret and the two emotions in sequence mediate the effect of (1) responsibility attributions and (2) expectations on repurchase intentions and coping behaviours.

Prior appraisal literature suggests that an emotion can influence or impair the subsequent appraisal and emotion (Lazarus, 1991a, 1991b). According to Lazarus (1991b) ‘the moment an emotion occurs it becomes food, so to speak, for the next appraisal and emotion’ (p. 393). Drawing on this prediction of Lazarus (1991b), this research predicts that when disappointment precedes regret, the negative effects of regret on consumers’ repurchase intention and coping behaviours decreases. Prior research shows that the realism of counterfactual thinking can determine the intensity of people’s affective reactions to decision outcomes (Sevdalis & Kokkinaki, 2006). In addition, Summerville and Roese (2008) suggests that fact-based judgments are bounded by reality, while simulation-based/counterfactual judgments are less constrained. The presence of more realistic comparison/fact-based judgments (e.g. disappointment) before the relatively less realistic comparison/simulation-based judgments (e.g. regret) are likely to reduce the negative effect of the less realistic comparisons in terms of repurchase and coping behaviours. So, this research predicts:

H5b: The presence of disappointment prior to the feeling of regret reduces the negative effect of regret on repurchase intentions and coping behaviours.

4.3 Testing conceptual model 1 & the hypotheses: Scenario-based experiment

It is noted briefly in Chapter 3 that a scenario-based experiment was used to test conceptual model 1 and the relevant hypotheses. The hypotheses as proposed in the previous section were used to test the conceptual model 1. Overall, the hypotheses predicted that causal attributions and expectations will induce disappointment and regret differently which in turn will sequentially affect consumers' repurchase intentions and coping behaviours. The following sub-sections will provide a detailed explanation about the independent variables, type of experimental design used, and the questionnaire used to collect the data in Study 1.

4.3.1 Independent variables

There are three independent variables in conceptual model 1:

1. *Responsibility attributions*: who/what was at fault for the negative consumption experience that has two treatment levels: external (e.g. company) and internal (e.g. consumers);
2. *Stability attributions*: refer to the extent to which the cause of the negative consumption experience is temporary or permanent. It has two treatment levels: stable (e.g. frequently happen) and unstable (e.g. infrequently happen); and
3. *Expectations*: are the consumers' anticipations about the performance of a company; this has two treatment levels: high (e.g. highly recommended, award-winning, charge high price) and low (e.g. new, recommendation status not available, charge low price).

4.3.2 Type of experimental design

The experimental research, which was designed to test conceptual model 1, accommodates three independent variables with two treatment levels for each. All combinations of all levels of all independent variables were considered for the study. This

implies a 2 (responsibility attributions: external vs. internal) by 2 (stability attributions: stable vs. unstable) by 2 (expectations: high vs. low) between-subjects full factorial design (Tabachnick & Fidell, 2007a). This results in 8 experimental conditions, which are presented in Table 4.1.

Table 4.1: Experimental design for conceptual model 1

Condition	Responsibility of Failure	Stability of Failure	Expectation
1	External (e.g. Company)	Stable	High
2			Low
3		Unstable	High
4			Low
5	Internal (e.g. Consumer)	Stable	High
6			Low
7		Unstable	High
8			Low

4.3.3 Study subjects and sampling procedure

A US-based online research panel was used to collect data to test the conceptual model 1. The sampling criteria for recruiting sampling units were: first, the respondents should live in the United States of America; and second, they should be over 18 years old. These criteria were established to ensure that the survey respondents were appropriate, given the issues investigated in this research.

The general rule of thumb for experiments is that, to obtain sufficient statistical power, for every experimental condition, at least 25 sampling units are desired. There were 8 experimental conditions whose differences needed to be tested to test conceptual model 1. Therefore, the number of required respondents for this study had to be at least $8 * 25 = 200$.

The respondents were randomly allocated to one of the eight conditions to increase the internal validity of the experiment. The ‘Qualtrics’ survey research tool was used for the randomization task in this experiment.

4.3.4 Research questionnaire of Study 1

The following sub-sections present the details of the different sections of the research questionnaire designed to collect data for Study 1. The order of the sub-sections as shown below is the same as that presented to the respondents during the experiment.

4.3.4.1 Section A: Justifying the need to purchase and consumption

The respondents first read the explanatory statement that accompanied a very brief description of the survey. The respondents then read a hypothetical scenario involving a couple. They were asked to imagine themselves in the couple’s situation. Table 4.2 presents the story.

Table 4.2: Opening of scenario with the justification of purchase

The following story is about a couple where they are purchasing a weekend away holiday.
<p><u>A COUPLE NEEDS A BREAK!!</u></p> <p>The last couple of months were very exhausting for the couple due to overwhelming workload. They did not have any time out together, even on weekends.</p> <p>They have decided to go for a weekend holiday to have a relaxing weekend together. They are now about to purchase this holiday online.</p>

4.3.4.2 Section B: Scenario related to holiday booking

In this section, the couple’s holiday booking story is presented. The expectation about the holiday purchase is manipulated in this section of the scenario.

Table 4.3: Manipulation of expectations

<p><u>BOOKING THE HOLIDAY</u></p> <p>After briefly browsing several online travel providers, they select two sites that offer some attractive weekend holidays: Dreamholiday.com and Holidayheaven.com.</p> <p>Dreamholiday.com is a highly recommended award-winning provider and seems good on quality. Holidayheaven.com is a new provider, hasn't proved itself yet, but looks good on price.</p>
High Expectation Condition
<i>One destination and its attractions at Dreamholiday.com (the award-winning provider) draw the couple's attention.</i>
Low Expectation Condition
<i>One destination and its attractions at Holidayheaven.com (the new provider) draw the couple's attention.</i>
The couple book this destination and make payment.

4.3.4.2.1 Manipulation of expectation

The manipulation of expectation was planted within the holiday booking scenario (Table 4.3). This manipulation is not borrowed from prior studies; rather, it was exclusively developed for the purpose of this experiment. As part of the expectation manipulations, the respondents were randomly assigned to one of the conditions. As evident in Table 4.3, the condition depicts the couple's selection of the holiday and the holiday provider.

4.3.4.2.2 Manipulation checks of expectation

Right after the choice of the holiday and its provider with the booking and payment, the manipulation check questions were given to the respondents (Table 4.4). These items were developed for the purpose of this study. The bipolar scaled question directly asked the respondents about their expectations regarding their choice. In addition to this question, an

open-ended question was also asked to find out the reasons for their level of expectations. The open-ended question itself served as a check of the attentiveness of the respondents. This also ensured that the expectations would be formed exclusively from the information provided in the scenario.

Table 4.4: Manipulation check questions of expectation

Expectation:
<ol style="list-style-type: none"> 1. What would be the couple's level of expectation regarding their choice? ^a 2. What are the reasons for your answer to the previous questions? ^b

^a measured on a 5-point bipolar scale 1 = Low, 5 = High

^b open-ended questions

4.3.4.3 Section C: The consumption experience

This section continues with the story by presenting the respondents with a description of how the actual holiday experience was for the couple (Table 4.5).

Table 4.5: The holiday experience

<p><u>THE HOLIDAY EXPERIENCE</u></p> <p>The couple arrives at their holiday destination. Later, they discover that the attractions of the destination are not lively.</p> <p>They return from the holiday without feeling refreshed and relaxed.</p>

4.3.4.3.1 Measures of dependent variable: Disappointment

When the respondents finished reading how the holiday experience was for the couple, they were invited to respond to the questions regarding the feeling of disappointment by imagining how the couple would feel in the above situation. This research borrowed two items from Zeelenberg and Pieters (2004) to measure disappointment (Table 4.6).

Table 4.6: Measures of disappointment

Disappointment: (Zeelenberg & Pieters, 2004)
<ol style="list-style-type: none"> 1. To what extent is the purchase worse than the couple's expectation? ^a 2. What would be the couple's level of disappointment regarding their choice? ^b

^a measured on a 5-point bipolar scale 1 = not at all worse, 5 = Much more worse

^b measured on a 5-point bipolar scale 1 = Low, 5 = High

4.3.4.3.2 Manipulation of responsibility and stability attributions

After the respondents finished answering the questions about the feeling of disappointment, they were then presented with the manipulation of responsibility and stability attributions. This research created these manipulations solely for this investigation (Table 4.7) by taking insights from prior literature (Hess et al., 2003; Russell, 1982).

Table 4.7: Responsibility and stability manipulations

<u>REFLECTING ON THE HOLIDAY EXPERIENCE</u>
Provider Responsible Stable Condition
<p><i>The couple searches for more information online and finds that recent media reports indicate travel providers often make misleading claims.</i></p> <p><i>The fact that travel providers repeatedly make misleading claims is also revealed in a recently released independent fact-finding committee report.</i></p>
Consumer Responsible Stable Condition
<p><i>Upon reflection, the couple realizes that they do have a habit of not carefully reading all the product details when making the purchase.</i></p> <p><i>Their friends have also pointed out this tendency about them.</i></p>

Provider Responsible Unstable Condition
<i>The couple searches for more information online and finds that recent media reports indicate that it is very uncommon for travel providers to make misleading claims.</i>
Consumer Responsible Unstable Condition
<i>Upon reflection, the couple realizes that they did not carefully read all the product details when making the purchase, which is uncharacteristic for them.</i>

4.3.4.4 Section D: Regret and repurchase intention as the dependent variables

This research measured the respondents' feelings of overall regret after the negative consumption experience as presented by borrowing and adapting 2 items from Zeelenberg and Pieters (2004). The measure of repurchase intention was developed for the purpose of this study (Table 4.8).

Table 4.8: Measures of regret and repurchase intention

Regret ^a: (Zeelenberg & Pieters, 2004)
<i>Imagining how the couple feel in the above scenario, please answer the following questions by checking the option that best represents your answer</i>
1. How much regret do the couple feel over their choice? ^a 2. How bad do the couple judge their decision to choose this travel provider? ^b
Re-patronage intentions ^c: (Newly developed)
1. What is the couple's likelihood of purchasing from this travel provider?

^a Measured on a 5-point scale labelled as 1 = None, 5 = Very much

^b Measured on a 5-point scale labelled as 1 = Not at all bad, 5 = Very bad

^c Measured on a 5-point scale labelled as 1 = Very unlikely, 5 = Very likely

4.3.4.5 Section E: Manipulation checks of responsibility and stability attributions

Then, respondents were asked to complete the manipulation check items regarding responsibility and stability attributions (Table 4.9). These items of measurement were adapted from Russell (1982) and Hess et al. (2003). Two items measured the attribution of responsibility. One item was reverse-coded in order to obtain the average of the items/an index and use it as a manipulation check measure for responsibility attribution. This research also asked respondents an open-ended question inviting them to write the reasons for their rating of the responsibility-related manipulation check questions. This on the one hand checks respondents' attentiveness to the survey, and on the other hand ensures that the respondents answer the questions based on the information provided to them in the hypothetical holiday scenario. One item measured the attribution of stability in this study. Similar to responsibility-related manipulation check measures, an open-ended question followed the stability manipulation check measure that asked the respondents to write the reasons for their response.

Table 4.9: Manipulation check measures of responsibility and stability attributions

Responsibility attribution ^a: (Newly developed)
<i>The following statements and questions concern the causes of the couple's holiday experience. Please think about the holiday experience of the couple and select the option that most closely corresponds to how you feel about the failure(s).</i>
<ol style="list-style-type: none"> 1. The travel provider's responsibility for the bad holiday experience is: 2. The couple's responsibility for the bad holiday experience is: (reverse coded) 3. What are the reasons for your answer to the previous questions? ^c

Stability attribution ^b:
(Newly developed)

1. How frequently would you expect this kind of failure to happen in future?
2. What are the reasons for your answer to the previous question? ^c

^a Measured on a 5-point scale labelled as 1 = Low, 5 = High

^b Measured on a 5-point scale labelled as 1 = Infrequently, 5 = Frequently

^c Open ended questions

4.3.4.6 Section F: Outcome & process regret as the dependent variables

In this section, the respondents rated the items about outcome and process regret due to the negative consumption experienced by the couple in the scenario. This research adapted 8 items from Lee and Cotte (2009) to measure the respondents' feeling of outcome regret in relation to the couple's negative consumption experience. Another 8 items, also adapted from Lee and Cotte (2009) are used to measure the respondents' feeling of process regret. Four out of 8 process regret measurement items were reverse-coded. These 4 items (i.e. regret due to over-consideration) measured just the opposite of what the other 4 items (i.e. regret due to under-consideration) measured. Therefore, to obtain the index and to measure process regret, the reverse-coding was done for those 4 items. Table 4.10 outlines the outcome and process regret measurement items.

Table 4.10: Measures of outcome and process regret

<p>Outcome regret ^a: (Lee & Cotte, 2009)</p>
<p><i>Now, please rate your agreement with the following items, considering the couple's holiday experience/experience with vacuum cleaner as exhibited in the above scenario.</i></p>
<p><u>Regret due to forgone alternatives</u></p> <ol style="list-style-type: none"> 1. They should have chosen another travel provider than the one from which they have purchased. 2. They regret the choice of travel provider that they made. 3. They now realize how much better their choice of other travel providers were. 4. If they were to go back in time, they would choose a different travel provider/online company to purchase their holiday. <p><u>Regret due to change in significance</u></p> <ol style="list-style-type: none"> 1. They regret purchasing from this travel provider because the holiday did not serve them the way they thought it would. 2. They wish they hadn't bought from this travel provider because the holiday has been useless to them. 3. They regret their purchase from this travel provider because the holiday did not serve its purpose. 4. They regret their purchase from this travel provider because they did not need this type of bad holiday.
<p>Process regret ^a: (Lee & Cotte, 2009)</p>
<p><u>Regret due to under consideration</u></p> <ol style="list-style-type: none"> 1. With more information, they feel that they could have made a better decision 2. They feel that they did not put enough consideration into buying their holiday 3. With more efforts, they feel that they could have made a better decision 4. They regret not putting enough thought into their decision <p><u>Regret due to over consideration ^b</u></p> <ol style="list-style-type: none"> 1. They expended too much effort in making their decision 2. They wasted too much time in making their decision 3. They think they put too much thought in the buying process 4. They feel that too much time was invested in the purchase

^a Measured on a 5-point Likert scales 1 = Strongly agree, 5 = Strongly disagree

^b Reverse coded

4.3.4.7 Section G: Coping intentions as the dependent variable

In this section, the respondents were presented with the items relating to coping behaviours. They were asked to give their ratings to these coping intention measurement items by imagining themselves in the shoes of the couple that had the negative consumption experience. In this study, four types of coping intentions are measured: vindictive nWOM, vindictive complaining, support-seeking nWOM, and problem-solving complaining. To measure vindictive nWOM and vindictive complaining, this research borrowed three items each from Gelbrich (2010). To measure support-seeking nWOM and problem-solving complaining, this research adapted 4 and 3 items respectively again from Gelbrich (2010). Table 4.11 presents these items.

Table 4.11: Measures of coping intentions

Coping behaviours ^a: (Gelbrich, 2010)
<i>Please answer the following questions by checking the option that best represents your answer</i>
<u>Vindictive nWOM:</u> What is the couple's likelihood of <ol style="list-style-type: none">1. spreading negative word-of-mouth about the travel provider2. defame the travel provider to others3. warning others not to purchase holiday from this travel provider
<u>Vindictive complaining:</u> What is the couple's likelihood of complaining to the travel provider to <ol style="list-style-type: none">1. give them a hard time2. be unpleasant with them3. pay for its poor holiday quality

Support-seeking nWOM:

What is the couple's likelihood of talking to other people about their negative experience in order to

1. get some comfort
2. reduce negative feelings
3. feel better
4. share feelings with others

Problem-solving complaining:

What is the couple's likelihood of complaining to the travel provider to

1. discuss the problem constructively
2. find an acceptable solution for both parties
3. work with the travel provider to solve the problem

^a Measured on a 5-point scale labelled as 1 = Very unlikely, 5 = Very likely

4.3.4.8 Section H: Task Checks

The respondents' experimental task-related perceptions were evaluated before their usage familiarity and demographics-related information was collected. More importantly, their perception of the extent to which they felt the scenario was realistic, and the degree of difficulty they faced in relating to the scenario, are evaluated. These task check questions were developed for the purpose of the current investigation (Table 4.12).

Table 4.12: Items measuring the experimental tasks

Scenario Realism ^a:
(Newly developed)

The following questions relate to the appropriateness of the described scenario. Please answer the questions by checking the option that best represents your answer

1. How realistic is the situation as described in the scenario? ^a
2. How easy is it for anyone to relate to the scenario? ^b

^a Measured on a 5-point scale labelled as 1 = Highly unrealistic, 5 = Highly realistic

^b Measured on a 5-point scale labelled as 1 = Very difficult, 5 = Very easy

4.3.4.9 Section I: Usage familiarity & demographics

At the end, this research asked respondents several questions regarding their usage familiarity with making purchases online. This included questions related to their frequency of purchasing online. Afterwards, the participants' demographic data was collected. This included questions related to the participants' gender, age, and English language status. The details of all the items of the research questionnaire employed for study 1 are presented in Appendix 1.

4.4 Conceptual model 1: Data analysis and findings

This section presents the data analysis and findings of Study 1. Meanwhile, before presenting the analysis and findings, first the data collection procedures including sample characteristics, factor analysis results for testing the reliability and validity of some of the measurement scales, and results of manipulation checks are presented.

4.4.1.1 Pre-testing the questionnaire

The final draft of the questionnaire of Study 1 underwent two stages of pre-tests before the main data collection was carried out.

First, this research conducted a comprehension and flow analysis to increase the face and content validity of the questionnaire. People from two different groups, namely non-academic and academic people are involved for these pre-tests. Non-academic people are involved as they are more likely to be representative of the sampling framework of the main study, while academic people are involved due their expertise in conducting such research. A paper-based questionnaire was given to the participants for completion and afterwards they were invited to comment on the comprehensibility, flow, and the timing of the questionnaire. Some minor changes including questionnaire content, grammatical correction, and rephrasing

of questions were suggested by the participants. The participants took an average of 15 minutes to complete the survey, which they considered to be reasonable and not lengthy.

In the second phase of the pre-testing procedure, an online survey was conducted to test for the timing, reliability, and validity of the constructs, and other possible issues that emerged. For the pre-test, a sample of 80 respondents from a commercial online panel was used for data collection by employing online research tool 'Qualtrics'. The average completion time was around 9 minutes. Following this pre-test, the respondents suggested several minor changes to the questionnaire content and the rephrasing of some of the questions.

4.4.1.2 Data collection, data cleaning, and sample characteristics

For Study 1, 280 panel members were recruited. Thirty respondents did not complete the survey, giving a completion rate of 89 percent, leaving 250 completed survey questionnaires. The average completion time for study 1 was 9 minutes, which was similar to the results of the pre-tests. This research employed several strategies to clean the data including the subjects with too many repetitions in their ratings on different measures, taking too little (e.g. 2 minutes or less) or too much (e.g. 30 minutes or more) time to complete the survey, or too many missing values in the responses. Subsequently, these respondents were excluded from the main data analysis. This resulted in removing a further 9 participants (around 4 percent) resulting in 241 respondents (45% males and 55% females) for the main data analysis. The respondents' distribution across the 8 experimental conditions for this study is demonstrated in Table 4.13. In addition, Table 4.14 presents the sample demographics and respondents' familiarity with online shopping in Study 1.

Table 4.13: Distribution of respondents among conditions

Responsibility of Failure	Stability of Failure	Expectation	n
External (i.e. Provider)	Stable	High	33
		Low	28
		Total	61
	Unstable	High	32
		Low	34
		Total	66
Internal (i.e. Consumer)	Stable	High	27
		Low	28
		Total	55
	Unstable	High	32
		Low	27
		Total	59

Table 4.14: Sample demographics and familiarity with online shopping

Sample Demographics	Categories	Percentage (N=241)
Gender	Male	45
	Female	55
Age	18-25	35
	26-35	32
	36-45	17
	46-55	12
	56-65	4
	66 and above	0
English language status	Native	96
	Non-native	4
Online Shopping	Categories	Percentage (N=241)
Frequency of online shopping	More than once a month	46
	Once a month	26
	Once every 3-6 months	20
	Once a year	4
	Never	4

4.4.1.3 Testing the reliability and validity of the measurement items

This research primarily used Cronbach Alpha (Cronbach, 1951) for testing the reliability of the items measuring the dependent variables in Study 1. However, to reconfirm the dimensionality of outcome and process regret this research used Exploratory Factor Analysis (EFA).

This research first assesses the correlation matrix accompanying the outcome and process regret measures in the EFA. The correlations among the items measuring the respective factor were found significant and above .30. This indicates adequate correlations among the variables to produce the representative factors (Hair et al., 2012). This research used Principal Component Analysis and Varimax as the extraction and rotation methods when conducting the EFA. The KMO measure of sampling adequacy was .83 (Kaiser, 1974); Bartlett's test of sphericity was also significant ($p < .001$) (Bartlett, 1954). Thus, the appropriateness of data was ensured prior to factor analysis. Four factors were extracted with eigenvalues greater than one. These factors explained 68 percent of the variance in the data (Goursuch, 1983; Zwick & Velicer, 1986). The rotated component matrix with factor loadings of above .40 is shown in Table 4.15. Almost all factor loadings were over .60; almost all communalities were greater than .50, which indicates the validity of the outcome and process regret measures for this research.

Table 4.15: Factors loadings for outcome and process regret measures

Factor	Outcome regret due to forgone alternatives ($\alpha = .78$)	Outcome regret due to change in the significance ($\alpha = .72$)	Process regret due to under- consideration ($\alpha = .84$)	Process regret due to over- consideration ($\alpha = .90$)
*OR_FA 4	.80			
OR_FA 3	.79			
OR_FA 1	.77			
OR_FA 2	.66			
**OR_SC 2		.80		
OR_SC 3		.78		
OR_SC 1		.67		
OR_SC 4		.64		
***PR_UC 3			.88	
PR_UC 4			.83	
PR_UC 2			.83	
PR_UC 1			.63	
****PR_OC 3				.89
PR_OC 1				.88
PR_OC 2				.86
PR_OC 4				.83

*OR_FA = Outcome regret due to forgone alternatives

**OR_SC = Outcome regret due to change in significance

***PR_UC = Process regret due to under-consideration

****PR_OC = Process regret due to over-consideration

The EFA as presented demonstrates that the dimensions measuring outcome and process regret are reliable and valid. Next, the reliability of these regret dimensions were assessed again when assessing the reliability of the measures of the other dependent variables of this study by using Cronbach Alpha. In Study 1, the Cronbach Alpha level of .70 and above is an acceptable scale for measuring the respective dependent variables. Therefore, if the scales measuring these variables surpassed the Cronbach Alpha value of .70 or above, then they are considered as acceptable measurement scales. Meanwhile, as mentioned previously, three items were adapted from Gelbrich (2010) to measure vindictive complaining intentions of respondents. However, the third item of this measure was found to have very low correlations with the other items. Deleting this item increased the reliability value (Cronbach Alpha) substantially; therefore, it was deleted and the other two items were retained to

measure respondents' vindictive complaining tendency. As shown in Table 4.16, the measurement scales used for Study 1 were acceptable.

Table 4.16: Reliability of the measurement scales

Name of the summated scale	Study 1 (α)
Outcome regret	.78
Process regret	.86
Vindictive nWOM	.91
Vindictive complaining	.90
Support-seeking nWOM	.79
Problem-solving complaining	.86

4.4.1.4 Manipulation checks

4.4.1.4.1 Manipulation check of responsibility attribution

The mean responsibility attribution index for external and internal responsibility attribution conditions is presented in Figure 4.2.

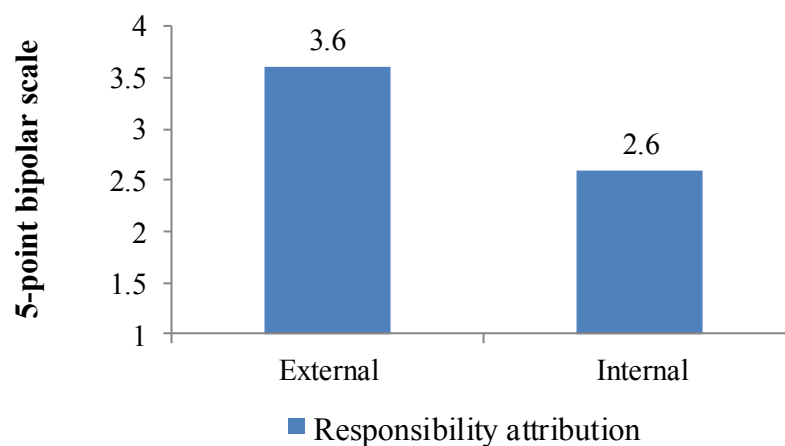


Figure 4.2: Manipulation check for responsibility attribution

The respondents perceived the experimental treatment conditions reflecting different responsibility attributions as intended. The Analysis of Variance (ANOVA) test shows that the attribution of responsibility differentiates between external and internal responsibility attribution ($M_{External} = 3.6$, $M_{Internal} = 2.6$); $F(1, 239) = 98.63$, $p < .001$) (Figure 4.2). The manipulation relating to responsibility attributions for Study 1 was therefore confirmed. Furthermore, respondents mostly mentioned the service providers' responsibility and the couple's responsibility for the bad outcome in external and internal responsibility attribution conditions respectively when they gave reasons for their rating of responsibility attributions.

4.4.1.4.2 Manipulation check of stability attribution

The one-way ANOVA test results revealed that respondents successfully differentiated between stable and unstable attribution ($M_{Stable} = 3.5$, $M_{Unstable} = 2.6$); $F(1, 239) = 55.34$, $p < .001$) (Figure 4.3). This confirms the manipulation of stability attributions. In addition, respondents typically specified the occurrence of this bad outcome as frequent and infrequent in stable and unstable attribution conditions respectively when they gave the reasons for their rating of stability attributions.

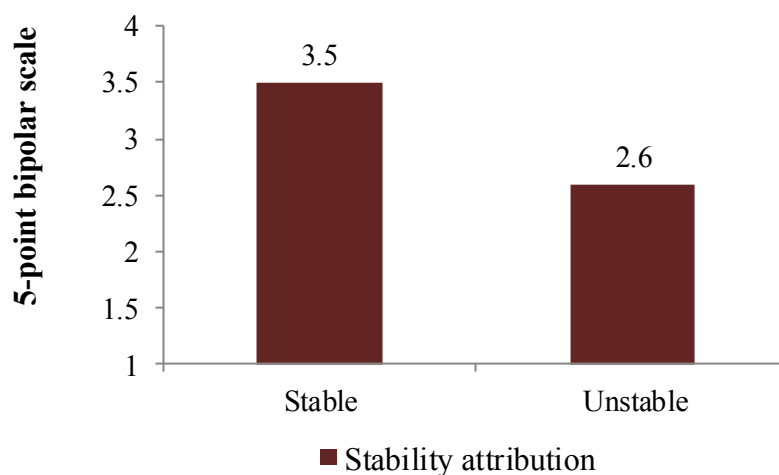


Figure 4.3: Manipulation check for stability attribution

4.4.1.4.3 Manipulation check of expectations

Figure 4.4 presents the results of the expectations manipulation test for Study 1.

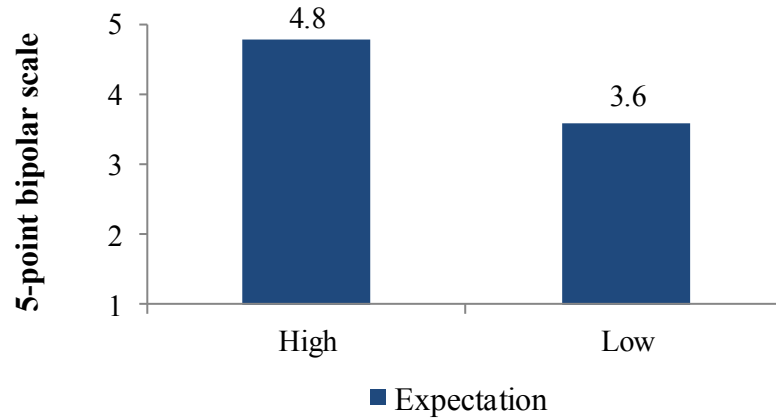


Figure 4.4: Manipulation check for expectations

The ANOVA results show that subjects in the high expectation condition have higher expectations than those subjects in the low expectation condition ($M_{High\ expectation} = 4.8$, $M_{Low\ expectation} = 3.6$); $F(1, 239) = 149.08$, $p < .001$) (Figure 4.4), thus confirming the manipulation of expectations. Moreover, respondents primarily specified the provider as highly recommended, award-winning and new, quality status not available in high and low expectation conditions respectively when they gave the reasons for their expectations about the provider.

4.4.1.5 Task checks

This research conducted one-sample t-tests for testing the appropriateness of Study 1 tasks. The test results with a test value of 3 indicated the appropriateness of the tasks in this study. More specifically, the respondents found the scenario to be highly realistic ($M=4.22$, $t=81.36$, $df=240$, $p<.001$) and easily relatable to their own lives ($M=4.32$, $t=82.05$, $df=240$, $p<.001$).

4.4.1.6 Testing the hypotheses

4.4.1.6.1 Effects of responsibility attributions

The mean disappointment, outcome and process regret index induced by responsibility attributions for Study 1 is presented in Figure 4.5.

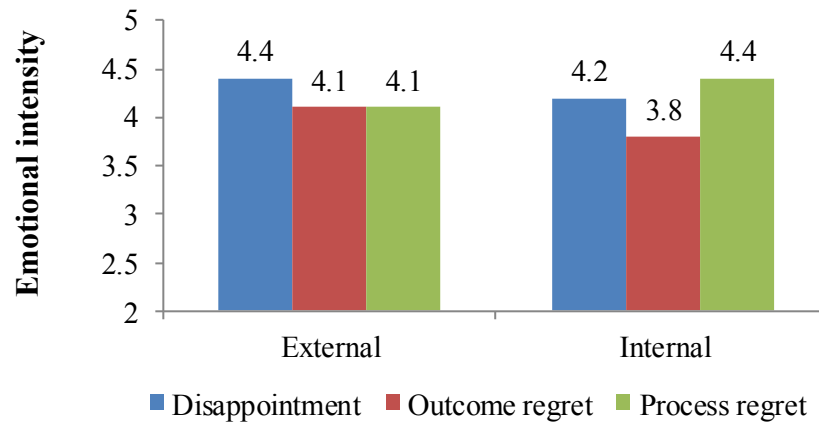


Figure 4.5: Effect of responsibility attributions on disappointment, outcome, and process regret

Hypothesis 1 is related to the effect of responsibility attributions on disappointment and the two dimensions of regret. A one-way ANOVA of the effect of responsibility attributions on disappointment shows that, as expected (H1a), disappointment is significantly higher in the external responsibility attribution condition than in the internal responsibility attribution condition ($M_{External} = 4.4$, $M_{Internal} = 4.2$; $F(1, 239) = 4.67$, $p < .05$). Another one-way ANOVA of the effect of responsibility attribution on outcome regret shows that, also as expected (H1b), outcome regret is significantly higher in the external responsibility attribution condition than in the internal responsibility attribution condition ($M_{External} = 4.1$, $M_{Internal} = 3.8$; $F(1, 239) = 19.02$, $p < .001$). Finally, a one-way ANOVA of the effect of responsibility attribution on process regret shows that process regret is significantly lower in the external

responsibility attribution condition than in the internal responsibility attribution condition ($M_{External} = 4.1$, $M_{Internal} = 4.4$; $F(1, 239) = 12.31$, $p < .01$), which is again as expected (H1c). Hence, H1 is supported.

4.4.1.6.2 Effects of stability attributions

Figure 4.6 presents the mean disappointment, outcome and process regret index induced by stability attributions for Study 1. The effects of stability attributions on disappointment and on the types of regret are predicted in hypothesis 2. A one-way ANOVA of the effect of stability attributions on disappointment shows that, as expected (H2a), there is no difference in disappointment between the stable and unstable attribution conditions ($M_{Stable} = 4.3$, $M_{Unstable} = 4.3$; $F(1, 239) = .08$, $p > .8$). Another one-way ANOVA of the effect of stability attributions on outcome regret shows that, also as expected (H2b), outcome regret is significantly higher in the stable attribution condition than in the unstable attribution condition ($M_{stable} = 4.0$, $M_{unstable} = 3.9$; $F(1, 239) = 3.58$, $p < .06$). Finally, a one-way ANOVA

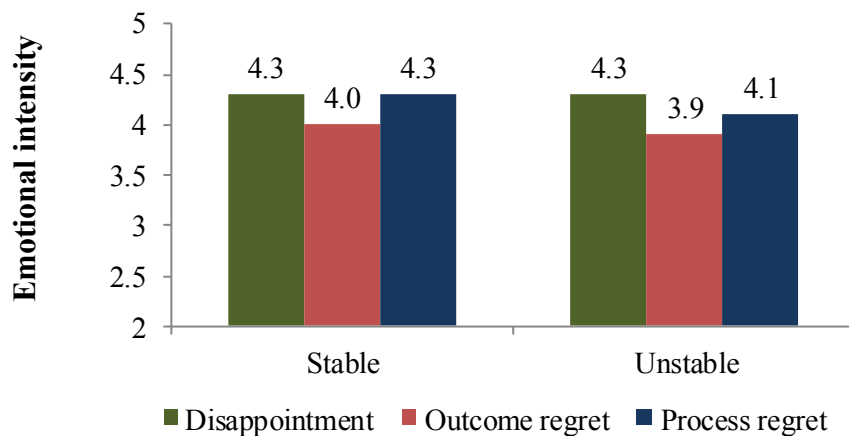


Figure 4.6: Effect of stability attributions on disappointment, outcome, and process regret

of the effect of stability attributions on process regret shows that process regret is significantly higher in the stable attribution condition than in the unstable attribution condition ($M_{Stable} =$

4.3, $M_{Unstable} = 4.1$; $F(1, 239) = 4.01$, $p < .05$), which is again as expected (2c) (Figure 4.6).

Hence, hypothesis 2 is supported.

4.4.1.6.3 Effects of expectations

Figure 4.7 presents the mean disappointment, outcome and process regret index induced by expectations. The effect of expectations on disappointment and types of regret is predicted in H3. As expected (H3a), a one-way ANOVA of the effect of expectations on disappointment shows that disappointment is significantly higher in the high expectation condition than in the low expectation condition ($M_{High\ expectation} = 4.4$, $M_{Low\ expectation} = 4.2$; $F(1, 239) = 6.07$, $p < .05$). In addition, a one-way ANOVA of the effect of expectations on outcome regret shows that outcome regret is significantly lower in the high expectation condition than in the low expectation condition ($M_{High\ expectation} = 3.8$, $M_{Low\ expectation} = 4.1$; $F(1, 239) = 10.89$, $p < .01$), which supports H3b. Another one-way ANOVA of the effect of process regret shows that, as expected, (H3c) there is no difference in process regret between high and low expectation conditions ($M_{High\ expectation} = 4.2$, $M_{Low\ expectation} = 4.2$; $F(1, 239) = .36$, $p > .5$). Thus, hypothesis 3 is supported.

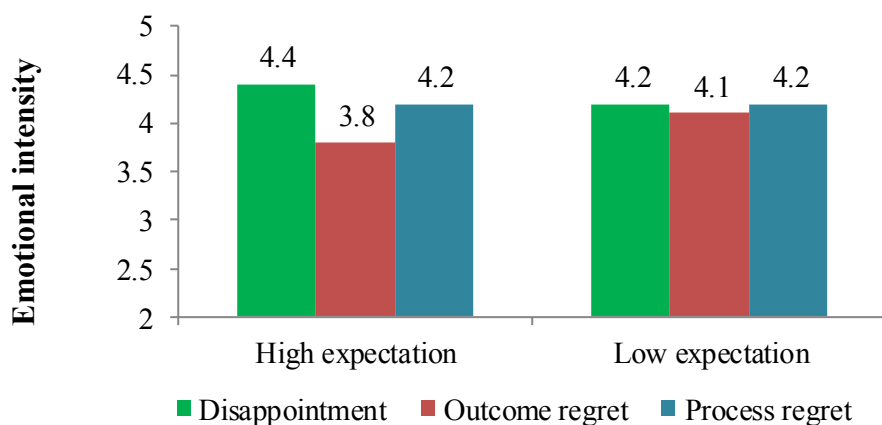


Figure 4.7: Effect of expectations on disappointment, outcome, and process regret

4.4.1.7 Testing the interaction

For testing interaction effects as predicted in H4, two-way ANOVA is used. Table 4.17 show the results of the ANOVA model estimated for process regret and this research found that there are significant main effects of responsibility attribution ($F(1, 237) = 12.06, p < .01$). It also found marginally significant main effect of stability attribution ($F(1, 237) = 3.79, p < .055$). However, the predicted interaction effects between responsibility and stability attributions are also found to be significant ($F(1, 237) = 3.87, p = .05$).

Table 4.17: Process regret: ANOVA

Source	Type III Sum of Squares	df	Mean Square	F	Sig.	Partial Eta Squared
Corrected Model	7.332 ^a	3	2.444	6.910	.000	.080
Intercept	4337.422	1	4337.422	12263.781	.000	.981
Responsibility_Group	4.268	1	4.268	12.067	.001	.048
Stability_Group	1.342	1	1.342	3.795	.053	.016
Responsibility_Group * Stability_Group	1.369	1	1.369	3.871	.050	.016
Error	83.822	237	.354			
Total	4426.172	241				
Corrected Total	91.153	240				

a. R Squared = .080 (Adjusted R Squared = .069)

This research predicted that responsibility and stability attribution interacts with and affects process regret as hypothesised H4. More specifically, it was predicted that consumers would feel greater process regret when they have external (e.g. company) responsibility attribution and perceive the negative outcome as stable rather than unstable. In addition, it was predicted that consumers would not have differentiated between feeling process regret due to internal (e.g. consumer) responsibility attribution and stability attributions. Figure 4.8 show that when consumers had external responsibility attribution, and perceived a bad outcome as stable rather than unstable, they experienced greater process regret. Meanwhile,

they did not feel a difference in process regret due to their own responsibility and perception of stability attributions (Figure 4.8). Thus, hypothesis 4 is supported.

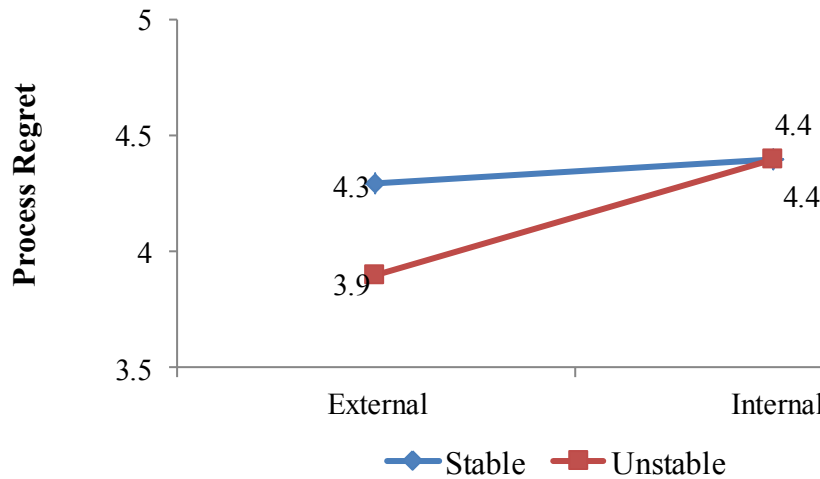


Figure 4.8: Effect of responsibility and stability attributions on process regret

4.4.1.8 Testing the mediating effects

It is predicted in hypothesis 5a that disappointment and regret sequentially mediate; in order to measure this sequential mediation, model 6 of Hayes PROCESS Macro (Hayes, 2013) was used to ascertain whether there are causal links between the variables. This approach is preferred to the causal steps approach as suggested by Baron and Kenny (1986) (Kim et al., 2013). By using sequential mediation, this research expects a specified direction of causal flow. In particular, it is expected that the feeling of regret follows the feeling of disappointment after a negative consumption experience; thus, we focus on the indirect effects relating to sequential mediation. It is also predicted in H5b that the presence of disappointment before regret will reduce the effect of regret on repurchase intentions and coping behaviours. The following section presents the results of the mediation analysis.

4.4.1.8.1 The mediating effects of disappointment and regret

In hypothesis 4a, this research predicts the presence of conditional indirect effects. Specifically, it investigates through H5a the effect of (1) responsibility attributions and (2) expectations on repurchase and coping intentions while accommodating the sequential mediating effect of disappointment and regret. In all these instances, the presence of disappointment before regret will reduce the effect of regret on these behavioural intentions, which is predicted in H5b. In order to test the sequential mediation, we focus on the indirect effects relating to sequential mediation. Thus, the testing of H5a requires an examination of the specific indirect effect of both disappointment and regret. The confidence intervals of these specific indirect effects need to be taken into account. If the confidence intervals of the specific indirect effects do not contain zero, then it can be concluded that the mediators sequentially mediate the effect of (1) responsibility attributions and (2) expectations on repurchase and coping intention behaviours. Table 4.18, Table 4.19 and Table 4.20 show the results. However, given the voluminous nature of the results this research only present the results those are relevant to our hypotheses.

An analysis of the results presented in Table 4.18 indicates that for the effects of responsibility attributions on repurchase intention, the bootstrap confidence interval for the specific indirect effects of disappointment and outcome regret does not contain zero. This specific indirect effect is the product of $a_1=0.24$, $a_3 = 0.21$, and $b_2 = -0.58$, or -0.03 , with a 95% bootstrap confidence interval of -0.07 to -0.00 . This means that as consumers attribute responsibility more externally (to the provider) than internally (to themselves as a consumer), they feel more disappointment (a_1 is positive), which further drives their feeling of outcome regret (a_3 is positive). This consequently reduces their repurchase intentions.

For the effects of expectations on repurchase intentions, the bootstrap confidence interval for the specific indirect effects of disappointment and outcome regret also does not contain zero. This specific indirect effect is -0.03 [the product of $a_1=0.27$, $a_3 = 0.21$, and $b_2 = -0.58$, 95% bootstrap confidence interval -0.07 to -0.00]. This means that as consumers have higher expectations, they feel more disappointment (a_1 is positive), which in turn results in a greater feeling of outcome regret (a_3 is positive). This then reduces their repurchase intentions.

Table 4.18: The mediating effect on repurchase intentions

IV	M1	M2 (Regret)	DV	a1	b1	a2	b2	a3	c'	a1*b1	a2*b2	a1*a3*b2	95% CI	
													Lower	Upper
Responsibility	Disappointment	Outcome	Repurchase	.24*			-.58****	.21****	-.34***			-.03	-.07	-.00
Responsibility		Outcome	Repurchase			.29***	-.58****					-.17	-.28	-.08
Responsibility	Disappointment	Process	Repurchase	.24*			-.04	.11*	-.52****			-.00	-.01	.00
Responsibility		Process	Repurchase			-.30***	-.04				.01		-.03	.07
Expectation	Disappointment	Outcome	Repurchase	.27*			-.58****	.21****	.23**			-.03	-.07	-.00
Expectation		Outcome	Repurchase			.32****	-.58****					.18	.10	.30
Expectation	Disappointment	Process	Repurchase	.27*			-.04	.10*	.41****			-.00	-.01	.00
Expectation		Process	Repurchase			-.08	-.04				.00		-.00	.04

IV: Independent variable
DV: Dependent variable
M1: Mediating variable 1
M2: Mediating variable 2
Bootstrap sample: 5000
Coding= external responsibility="0"; internal responsibility="1"
Coding= high expectation="0"; low expectation="1"

a1: effect of IV on M1
b1: direct effect of M1 on DV
a2: effect of IV on M2
b2: direct effect of M2 on DV
a3: effect of M1 on M2
c': direct effect of IV on DV

****significant at $p < .0001$
*** significant at $p < .001$
** significant at $p < .01$
* significant at $p < .05$

Meanwhile, the bootstrap confidence intervals for the specific indirect effects of disappointment and process regret flowing from responsibility to repurchase and from expectation to repurchase do contain zero. This is understandable as process regret primarily originates from the low quality of consumers' own decision-making process. Therefore, it is

less aligned with the feeling of disappointment that is triggered more in external responsibility attribution. Furthermore, past studies found that the outcome regret is more aligned with future buying decisions (Hetts et al., 2000; Pieters & Zeelenberg, 2005), while process regret is more aligned with justifying prior and future decision processes (Pieters & Zeelenberg, 2005; Simonson, 1992). Expectation is also less relevant to process regret due to its relevance to comparisons of product or service performance, not the decision processes. Hence, it is found that disappointment and regret sequentially mediate the effect of responsibility attributions and expectations on consumers' repurchase intentions.

Table 4.19 shows the results of the effects of responsibility attributions on coping intentions. For the specific indirect effects of responsibility attributions on the coping intentions, this research finds that, except for problem-solving complaining, the bootstrap confidence interval for the specific indirect effects of disappointment and outcome regret does not contain zero. These results indicate that consumers feel greater disappointment (a_1 is positive) in external compared to internal responsibility attribution which later drives their feeling of outcome regret (a_3 is positive). This eventually leads to a greater tendency to spread vindictive nWOM, vindictive complaining, and support-seeking nWOM. Meanwhile, considering the size of the coefficients of these specific indirect effects, it seems that the sequential occurrence of these two emotions drives more vindictive nWOM followed by vindictive complaining and support-seeking nWOM intent.

For the effects of expectations on coping intentions, except for problem-solving complaining, the bootstrap confidence interval for the specific indirect effects of disappointment and outcome regret does not contain zero (Table 4.20). This means that consumers feel greater disappointment when they have higher expectations rather than lower expectations (a_1 is positive). This disappointment later drives their feeling of outcome regret

Table 4.19: The mediating effect between responsibility and coping intentions

IV	M1	M2 (Regret)	DV	a1	b1	a2	b2	a3	c'	a1*b1	a2*b2	a1*a3*b2	95% CI	
													Lower	Upper
Responsibility	Disappointment	Outcome	Vindictive nWOM	.24*			.81****	.21****	.41***			.04	.01	.09
Responsibility		Outcome	Vindictive nWOM			.29***	.81****					.23	.11	.37
Responsibility	Disappointment	Outcome	Vindictive complaining	.24*			.41***	.21****	.27*			.02	.00	.05
Responsibility		Outcome	Vindictive complaining			.29***	.41***					.12	.05	.26
Responsibility	Disappointment	Outcome	Support-seeking nWOM	.24*			.24**	.21****	-.11			.01	.00	.04
Responsibility		Outcome	Support-seeking nWOM			.29***	.24**					.07	.02	.16
Responsibility	Disappointment	Outcome	Problem-solving complaining	.24*			.28	.21****	.20			.01	-.00	.04
Responsibility		Outcome	Problem-solving complaining			.29***	.28					.06	-.01	.17
Responsibility	Disappointment	Process	Vindictive nWOM	.24*			-.01	.11*	.64****			-.00	-.00	.00
Responsibility		Process	Vindictive nWOM			-.30***	-.01					.00	-.05	.06
Responsibility	Disappointment	Process	Vindictive complaining	.24*			.01	.11*	.40**			.00	-.01	.01
Responsibility		Process	Vindictive complaining			-.30***	.01					-.00	-.07	.06
Responsibility	Disappointment	Process	Support-seeking nWOM	.24*			.15	.11****	.00			.00	.00	.02
Responsibility		Process	Support-seeking nWOM			-.30***	.15					-.05	-.11	-.00
Responsibility	Disappointment	Process	Problem-solving complaining	.30**			1.0****	.10	.00			.03	-.01	.10
Responsibility		Process Regret	Problem-solving complaining			.24	1.00****					.07	-.01	.50

IV: Independent variable
 DV: Dependent variable
 M1: Mediating variable 1
 M2: Mediating variable 2
 Bootstrap sample: 5000
 Coding= external responsibility="0"; internal responsibility="1"

****significant at $p < .0001$
 *** significant at $p < .001$
 ** significant at $p < .01$
 * significant at $p < .05$
 c': direct effect of IV on DV

(a3 is positive), which leads to a greater tendency to spread vindictive nWOM, vindictive complaining and support-seeking nWOM. An analysis of the size of the coefficients of these specific indirect effects further reveals that the sequential occurrence of these two emotions

drives the intention to spread more vindictive nWOM followed by vindictive complaining and support-seeking nWOM.

Meanwhile, the bootstrap confidence intervals for the specific indirect effects of disappointment and outcome regret flowing from responsibility attribution to problem-solving complaining and from expectation to problem-solving complaining do contain zero (Table 4.19 and Table 4.20). This is understandable as prior research finds that people in general are not inclined to complain to the company (Andreasson, 1985; Richins, 1983), especially with the intention of finding a constructive solution. Rather, they do complain in order to vent their emotions, which prior research has found to be the primary motivators of behaviour (Abelson, Kinder, Peters, & Fiske, 1982; Izard, 1977; Tomkins, 1970). This research also finds that the bootstrap confidence intervals for the specific indirect effects of disappointment and process regret flowing from responsibility to coping intentions and from expectation to coping intentions do contain zero except for support-seeking nWOM (Table 4.19 and Table 4.20). This is reasonable because process regret emerges from the low quality of consumers' own decision-making process, so consumers are less likely to engage in coping intentions that involve spreading nWOM and complaining about external entities. However, consumers need to relieve their stress due to the negative outcome, so they engage in support-seeking nWOM in order to seek empathy and understanding from their immediate environment. This occurs even if they feel disappointment and process regret sequentially. Taking into account the preceding discussion of results, this research can reasonably conclude that H5a is supported since disappointment and regret mediate sequentially.

A further analysis of the demonstrated sequential mediation results shows that the presence of disappointment prior to regret reduces the estimate of the mediating effect on repurchase and coping intentions. This research compares the specific indirect effects that

accompany disappointment and regret as sequential mediators with specific indirect effects that only accompany regret as the mediator. Results show that for the effects of responsibility attributions on repurchase and coping intention behaviours, the coefficients of the total specific indirect effect that include disappointment and regret as sequential mediators are lower in magnitude than those of the total specific indirect effect that include only regret as a mediator (Table 4.18 and Table 4.19). This shows that for responsibility attributions, the occurrence of disappointment prior to regret reduces the negative effect of regret on repurchase and coping intention behaviours. The negative effect of regret is found to be less for vindictive nWOM followed by vindictive complaining and support-seeking nWOM.

For the effects of expectations on repurchase and coping intentions, the coefficients of the former are also lower in magnitude than the coefficients of the latter. However, the coefficients of the former are negative and the coefficients of the latter are positive (Table 4.18 and Table 4.20). This is understandable because in the later total specific indirect effects, higher expectation compared with lower expectation induces lower outcome regret (a_2 is negative) which later increases consumers' repurchase intentions and decrease their coping intentions. Meanwhile, as indicated earlier in the former total specific indirect effects, greater expectation triggers greater disappointment which later drives consumers' feeling of greater outcome regret and reduces their repurchase intentions and increase coping intentions. This shows that for expectations the occurrence of disappointment prior to regret increases the negative effect of regret on repurchase and coping intention behaviors. The negative effect of regret increases more for vindictive nWOM followed by vindictive complaining and support-seeking nWOM. Meanwhile, for responsibility attribution, since the occurrence of disappointment prior to regret reduces the negative effect of regret on repurchase and coping intention behaviors, hypothesis 5b is supported.

Table 4.20: The mediating effect between expectations and coping intentions

IV	M1	M2 (Regret)	DV	a1	b1	a2	b2	a3	c'	a1*b1	a2*b2	a1*a3*b2	95% CI	
													Lower	Upper
Expectation	Disappointment	Outcome	Vindictive nWOM	.27*			.81****	.21****	.04			.05	.01	.10
Expectation		Outcome	Vindictive nWOM			-.32****	.81****					-.26	-.40	-.14
Expectation	Disappointment	Outcome	Vindictive complaining	.27*			.41***	.21****	-.09			.02	.01	.06
Expectation		Outcome	Vindictive complaining			-.32****	.41***					-.13	-.23	-.06
Expectation	Disappointment	Outcome	Support-seeking nWOM	.27*			.24**	.21****	.11			.01	.00	.04
Expectation		Outcome	Support-seeking nWOM			-.32****	.24**					-.08	-.16	-.02
Expectation	Disappointment	Outcome	Problem-solving complaining	.27*			.21	.21****	.09			.01	-.00	.04
Expectation		Outcome	Problem-solving complaining			-.32****	.21					-.07	-.17	.01
Expectation	Disappointment	Process	Vindictive nWOM	.27			-.00	.11*	-.22			-.00	-.01	.01
Expectation		Process	Vindictive nWOM				-.08	-.00				.00	-.02	.03
Expectation	Disappointment	Process	Vindictive complaining	.27*			.01	.11*	-.22			.00	-.01	.01
Expectation		Process	Vindictive complaining				-.08	.01				-.00	-.03	.02
Expectation	Disappointment	Process	Support-seeking nWOM	.27*			.15	.11*	.05			.01	.00	.02
Expectation		Process	Support-seeking nWOM				-.08	.15				-.01	-.05	-.01
Expectation	Disappointment	Process	Problem-solving complaining	.28**			1.00****	.09	.00			.03	-.01	.09
Expectation		Process	Problem-solving complaining				.01	1.00****				.01	-.25	.29

IV: Independent variable
 DV: Dependent variable
 M1: Mediating variable 1
 M2: Mediating variable 2
 Bootstrap sample: 5000
 Coding= high expectation="0"; low expectation="1"

a1: effect of IV on M1
 b1: direct effect of M1 on DV
 a2: effect of IV on M2
 b2: direct effect of M2 on DV
 a3: effect of M1 on M2

****significant at $p < .0001$
 *** significant at $p < .001$
 ** significant at $p < .01$
 * significant at $p < .05$
 c': direct effect of IV on DV

It is worth mentioning several issues relating to the mediation analysis. First, when testing the sequential mediation, this study also tested alternative models such as regret preceding

disappointment. However, those competing models were not significant. Second, the total specific indirect effects flowing from responsibility attribution and from expectation to repurchase and coping intention behaviours through disappointment, were not reported in the sequential mediation analysis tables. This is because those specific indirect effects were not significant.

4.5 Conclusion

In this chapter, the hypotheses, a detailed description of the research design, the data analysis, and findings relating to conceptual model 1 are presented. First, the research hypotheses indicating the cause and effect relationships identified in conceptual model 1 are presented. Conceptual model 1 exposes the effects of causal attributions and expectations in inducing the feeling of disappointment and the types of regret, which in turn influence consumers' repurchase and coping intention behaviours. Conceptual model 1 addresses these relationships in a context where consumers encounter a negative consumption experience. For justifying the posited relationships as proposed in conceptual model 1, this research reviewed and provided the research conducted in similar contexts. The theories primarily driving the development of the hypotheses to test conceptual model 1 include causal attributions, expectations, disappointment, and regret in conjunction with the literature on cognitive appraisals, repurchase and coping intentions.

After presenting the research hypotheses on conceptual model 1, the details of the research design of the study are provided. More importantly, this includes a description of the scenario-based experiment used as well as the methods applied to analyse the data. When explaining the experimental study, an elaboration of the definition of independent variables, the type of experimental design, study subjects and sampling procedures, the details of research questionnaire as well as the data analysis, techniques are provided. In doing so, it

provides the details of the experimental study. This research also presented the details of the questionnaire used in collecting the data for this study. This questionnaire was designed to test H1-H5.

In the last section of this chapter, the results of hypotheses testing are presented. For testing the main and interaction effects, ANOVA is used. Hayes' PROCESS Macro, in particular model 6, was used to run the sequential mediation analysis (Hayes, 2013). These test results find support for all the hypotheses. In particular, Study 1 established that external and internal attribution of responsibility for a bad outcome triggers the feeling of disappointment differently. This study also established that responsibility attributions trigger different types of regret. Furthermore, Study 1 established that higher and lower expectations about a consumption experience differently trigger disappointment and types of regret. In regards to the effects of disappointment and regret on consumers' behavioural intentions, Study 1 established that disappointment and regret mediate sequentially and direct consumers' repurchase and coping intention behaviours. It also established that the occurrence of disappointment before regret reduces the negative effect of regret on repurchase and coping intention behaviours.

However, in Study 1, the respondents took the observer perspective and the study context was non-decision making in nature. Therefore, they may not be actively involved in the study and indicated their emotional and behavioural reactions as studied in Study 1. Furthermore, the choice situation as depicted in Study 1 was too simplistic and does not resemble a real choice made by a consumer. Study 2 therefore intended to extend the findings of Study 1 by giving the respondents a decision-making role where they made a purchase decision for themselves. In this setting, Study 2 was intended to test conceptual model 2 which is presented in the following chapter.

CHAPTER 5 : STUDY 2

5.1 Introduction

This chapter presents the second experimental study, which focuses on testing the second conceptual model. This experiment was intended to (1) investigate whether responsibility attribution, expectations, and information search trigger disappointment and regret differently, and (2) examine how they affect consumer behavioural intentions. The chapter provides a detailed explanation of the second conceptual model as well as the proposed hypotheses. In addition, it provides an elaboration of the experimental design, method and procedure, and the data analysis of this second study.

5.2 Conceptual model 2: Hypotheses

Conceptual model 2 demonstrates the effects of responsibility attribution, expectations, and perceived information search in inducing the feeling of disappointment and the types of regret. It also shows the mediating role that these emotions plays between the stated consumption associated cues and behavioural intentions. Study 2 tests conceptual model 2. Study 2 is different from Study 1 in particular, in Study 2 the respondent plays the role of an active decision maker as opposed to a passive decision maker and goes through a typical decision making process. The tasks involved the selection of one of the two potential service providers. The latter part of this chapter provides the details of Study 2, which further identifies the differences of Study 2 from Study 1. Meanwhile Study 2 tests two sets of hypotheses that are proposed through conceptual model 2 (Figure 5.1).

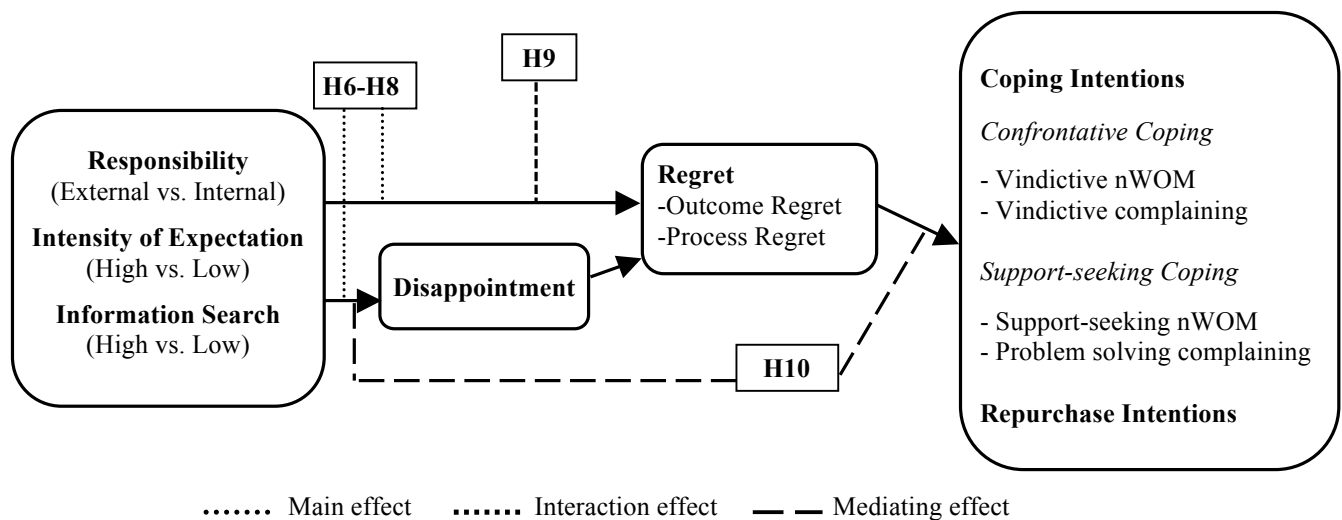


Figure 5.1: Conceptual model 2

The first set of hypotheses intends to address research question 1 by proposing that consumers' responsibility attribution, expectations and information search trigger their feeling of disappointment and types of regret differently. The second set of hypotheses aims to address research question 4 by predicting that the triggered disappointment and types of regret will sequentially affect consumers' repurchase intentions and coping behaviours. In the following, this research presents the first set of hypotheses and then the second set.

5.2.1 The effect of attribution of responsibility on disappointment and regret

Prior studies show that people experience greater disappointment when the responsibility for a bad outcome is attributed externally instead of internally (Frijda et al., 1989; Zeelenberg, van Dijk, Manstead, et al., 1998). They also show that individuals typically appraise a situation as less controllable when responsibility lies externally rather than internally (van Dijk & Zeelenberg, 2002b). However, these findings including the finding of Study 1 of this thesis, are from studies conducted in contexts that did not require study participants to go through a typical decision-making process, as participants were only asked

to recall and describe a situation in which they felt intense emotions including disappointment (Frijda et al., 1989; van Dijk & Zeelenberg, 2002a, 2002b). In personal consumption contexts, people generally make a final purchase decision after evaluating several alternatives. Because they make decisions for themselves, consumers will tend to feel responsible for the bad outcome, even if its main cause is external (van Dijk & Zeelenberg, 2002b). Consequently, they will be equally as disappointed with a bad outcome that they attribute to an external cause as with one that they attribute to an internal cause.

Regret is also likely to vary with the attribution of responsibility to different causes. Prior research finds that when consumers search for who is responsible for an undesirable outcome, they can engage in counterfactual thinking, which in turn may result in feelings of regret (Contractor & Kumar, 2012). When they attribute the responsibility of a bad outcome to an external entity, instead of thinking about their decision-making effort, they are more likely to think counterfactually about the superiority of the forgone alternatives. In addition, they are likely to think about expected versus actually achieved utility, and therefore to think more about the lost utility. In other words, they experience greater outcome regret than when they attribute the responsibility to themselves (Lee & Cotte, 2009).

Regret is also typically associated with self-blame (Zeelenberg & Pieters, 2004; Zeelenberg et al., 2000). When consumers' self-made decisions go wrong and they acknowledge their responsibility for the bad outcome, they look back at their own efforts and think about how they arrived at their final decision. They may review whether, when making their decision, they spent too little effort (i.e. engaged in under consideration) or too much effort (i.e. engaged in over consideration) (Lee & Cotte, 2009). As a bad outcome results from a bad decision, the perceived low quality of the decision process is likely to lead consumers to feel that an alternative decision-making process would have been a better means of achieving

the outcome (Inman & Zeelenberg, 2002; Pieters & Zeelenberg, 2005). In other words, they experience stronger process regret than when they attribute the responsibility to an external cause. Therefore, this research proposes that:

H6: When consumers attribute the responsibility of the negative consumption experience externally, compared to when they attribute the responsibility internally, they will experience (a) equal levels of disappointment, (b) greater outcome regret, and (c) lower process regret.

5.2.2 The effect of expectations on disappointment and regret

When an outcome turns out worse than expected, people feel disappointed (Zeelenberg & Pieters, 2004; Zeelenberg, van Dijk, van der Pligt, et al., 1998). Prior study suggests that disappointment is generated in direct proportion to the difference between the initial expectation and actual experience (Zeelenberg, van den Bos, van Dijk, & Pieters, 2002). It thus can be inferred that the greater the mismatch between the initial expectation and the actual performance, the greater the disappointment. van Dijk et al. (2003) provide support for this assumption by demonstrating that one way to reduce disappointment is by lowering expectations. This research therefore argues that higher expectations will generate stronger feelings of disappointment after a negative consumption experience.

Worse than expected outcomes can also generate counterfactuals about the superiority of alternative possibilities which in turn results in feelings of regret (Huang & Tseng, 2007). Thus, the extent of the shortfall can determine the level of regret, where having higher expectations results in greater regret owing to a larger mismatch between expected and actual outcomes. In contrast, lower expectations result in lower feelings of regret owing to a smaller mismatch between expected and actual outcomes.

Regardless of whether higher or lower expectations are not met, consumers may feel outcome regret, because in both instances consumers will generate counterfactuals, which are realizations that the forgone alternatives could have provided a better outcome (Kahneman & Miller, 1986). They can also engage in generating counterfactuals about the loss of expected utility from the purchase versus the actually obtained utility (Lee & Cotte, 2009). These counterfactuals can trigger outcome regret in both mismatch instances. In making an actual decision, consumers often have to choose between alternatives of equal quality. In such instances, if they purchase from high quality alternatives, they will produce more counterfactual thoughts when expectations are not met, because the forgone alternatives would be considered superior compared to the alternative they selected, and thus selecting a forgone alternative could have altered their present aversive situation. Furthermore, the feeling of lost utility would be significant because of the perceived superiority of the forgone alternatives, which results in consumers' feeling of greater outcome regret. In contrast, choosing from low quality alternatives and the subsequent negative outcome are likely to generate fewer counterfactuals about forgone alternatives and lost utility because of the low quality of, and thus low expectations for, the forgone alternatives. Such an instance would likely lead to lower outcome regret.

Consumers' feeling of process regret is triggered by their counterfactuals about an alternative decision process as a means of achieving a better outcome than the one they have pursued (Lee & Cotte, 2009; Pieters & Zeelenberg, 2005). The process regret emerges from the comparisons of alternative decision processes, not from the mismatch of expectations and the resultant counterfactuals about alternative products. Therefore, expectations will be less relevant when consumers assess the quality of their decision-making process after a bad outcome. This research therefore predicts:

H7: After encountering a negative consumption experience, consumers with higher expectations compared to those with lower expectations, will experience (a) greater disappointment, (b) greater outcome regret, and (c) equal levels of process regret.

5.2.3 The effect of information search on disappointment and regret

A consumer who has a better opportunity to access and assess more information about consumption alternatives is likely to be better equipped to evaluate the various alternatives and select the one that is most desirable (Bell, 1982; Keaveney, Huber, & Herrmann, 2007; Shergill & Chen, 2005; Simonson, 1992). However, if the selected alternative produces a bad outcome, they are likely to feel greater disappointment. This is because in the higher pre-purchase information search situation, consumers perceive that they have established realistic expectations about the consumption alternatives. The violation of these expectations, indicated by the bad outcome, thus results in greater disappointment. Furthermore, consumers' failure to uncover the internal discrepancy of the consumption item which is considered as a contributor to disappointment (Tsiros and Mittal, 2000) even with higher pre-decision information search, also results in greater disappointment in this instance. Prior research has found that a greater pre-decision efforts and information search produce greater disappointment in a negative outcome situation (Sparks et al., 2012; van Dijk, van der Pligt, et al., 1999).

The extent of information search or invested effort also triggers regret (Sparks et al., 2012; van Dijk, van der Pligt, et al., 1999). In general, in a consumption setting consumers who search for more pre-decisional information are perceived to be more committed and involved with the consumption. If these consumers cannot achieve the desired experience due to a bad outcome, they are more likely to produce more counterfactuals about the superiority of forgone alternatives and loss of utility from time of purchase to time after purchase. Their

stronger commitment to the purchase in the form of a more comprehensive pre-purchase information search is likely to produce more counterfactuals about forgone alternatives and lost utility of purchase. Furthermore, prior research has shown that both known and unknown outcomes can contribute to regret (Byrne & McEleney, 2000; Tsiros & Mittal, 2000). Although consumers, due to their more thorough pre-purchase information search, may be able to assess and predict the likely outcome and utility of some of the alternatives, it is unlikely that they would know the likely outcome and utility of other available alternatives. This would also result in producing a greater number of counterfactuals about forgone alternatives and lost utility of purchase in a higher rather than lower information search situation.

Prior research has found that people may feel regret depending on the evaluation of the quality of a decision (Sugden, 1985). In particular, the decision process that is of lower quality leads to greater regret while a higher quality decision process leads to less regret (Connolly & Zeelenberg, 2002; Zeelenberg & Pieters, 2006a). The extent of the pre-purchase information search is considered as one of the determinants of the quality of a decision process where a better information search is more likely to produce a better decision, and vice versa. Therefore, it is likely that consumers who engage in a more thorough pre-purchase information search will produce fewer counterfactuals about the quality of their decision-making process in the event of a bad outcome. However, in reality it is not possible for consumers to assess all the available information when they make a purchase decision due to the abundance of the information available. They in fact selectively focus on certain information from a variety of available information (Simon, 1957, 1979). Therefore, irrespective of the extensiveness of the information search, when making an assessment and a purchase decision, consumers will always ignore some information. Upon a negative outcome,

the ignored information would appear to be more valuable and informative, which in turn would trigger their counterfactuals about under-consideration of resources. This would result in greater process regret in both the information search situations. Hence, this research predicts:

H8: After encountering a negative consumption experience, consumers with perceived higher information search compared to those with lower perceived information search, will experience (a) higher disappointment, (b) higher outcome regret, and (c) equal levels of process regret.

5.2.3 The interaction effects

Prior research shows that people are optimistic in their personal prediction, albeit with different intensities, and have a positive orientation towards the world (McCracken, 1988; Taylor & Shepperd, 1998). Therefore, in a consumption setting, when consumers choose to have a consumption experience with a provider they are generally optimistic about a positive outcome. However, choosing a low-reputation provider may reduce such optimism due to the low level of performance expected from the provider. Searching less information about such provider would further reduce the level of expected performance. Conversely, consumers will have higher expectations of providers' performance if they choose a provider with a good reputation. In this instance, even if they search less information about the provider, they still would be highly optimistic about a positive outcome due to their higher expectations of the provider. Thus, upon facing a bad outcome, consumers' initial higher expectations will induce higher counterfactuals about the low quality of the decision-making process if they search less information about the provider.

Meanwhile, an opposite effect on process regret is expected when consumers with a better information search encounter a bad outcome with a low reputation provider. Prior research has shown that a better pre-decisional information search by consumers makes it easier for them to justify their decisions in the post-consumption stage (Das & Kerr, 2010; Park, 2011; Zeelenberg & Pieters, 2007). It is easier to justify the purchase from a provider that has a higher rather than lower reputation along with the better pre-decisional information search. Thus, facing a negative outcome with a provider that has lower reputation would trigger higher counterfactuals about the low quality of the decision process. This would lead to feeling greater process regret.

Among the situations as described, having conducted less instead of more information search would likely trigger more process regret due to variations in expectations. This is because a setback with the high expectation provider will induce more counterfactual thinking about the decision process than a setback with a low expectation provider, especially in a poorer pre-purchase information search situation. Hence, the following hypothesis is proposed:

H9: After encountering a negative consumption experience, consumers who have conducted a poorer information search but have higher expectations will feel more process regret than consumers who conducted a more comprehensive information search and had lower expectations.

5.2.4 The mediating effects

As indicated earlier, consumers' attributions of responsibility and perceptions of not meeting expectations can trigger disappointment and regret (Huang & Zeelenberg, 2012; Zeelenberg & Pieters, 2004) which in turn can direct their repurchase (Choi & Mattila, 2008; Kaltcheva et al., 2013) and coping intention (Folkman & Lazarus, 1986; Grégoire & Fisher,

2008) behaviours. These causal links are tenable since emotions mediate between cognitions and behavioural actions (Chebat et al., 2005). Cognitive appraisal theory provides a theoretical basis for these causal chains.

According to the cognitive appraisal theory, consumers appraise a negative consumption experience (i.e. consumer environment interaction) using primary and secondary appraisals. As specified earlier, primary appraisals reflect consumers' evaluations of the consumption situation's relevancy for them as well as the desirability of the consumption outcome (Siemer et al., 2007). Secondary appraisals involve the generation and evaluation of responsibility attributions (i.e., blame, control) for the outcome (Zalewski et al., 2011). Prior research finds that particular combinations of primary and secondary appraisals determine the emotional significance and intensity of any encounter (Lazarus & Smith, 1988). Thus consumers' assessments about the extent to which their expectation were met, as well as their evaluation of who is responsible for the bad outcome, trigger the feeling of disappointment and regret, as indicated in earlier hypotheses. These emotions later guide in deciding their behavioural actions such as repurchase and coping intentions. Thus the implicit assumption is that emotions felt by consumers, as one of the outcomes of the cognitive appraisal process, will eventually determine their behaviours (Dennis et al., 2009; Nyer, 1997).

Furthermore, Zeelenberg, van Dijk, Manstead, et al. (1998) opine that disappointment and regret are related to each other in a hierarchical manner. This research argues that after a bad outcome, consumers first experience disappointment, which is followed by regret, and that these emotions affect consumers' repurchase intentions and coping behaviours. This argument is based on the nature of the cognitive appraisal process in that consumers assess a consumer-environment interaction by using first the primary appraisal and then the secondary appraisal. Therefore, after a bad outcome consumers first appraise the extent of the

undesirability of the bad outcome. A reasonable assumption is that consumers first compare their actual experience with their initial expectations, and that such comparisons are likely to lead to feelings of disappointment. Consumers next consider details of the outcome by engaging in counterfactual thinking about alternative products or decision-making processes, which is likely to lead to feelings of regret. Meanwhile, such sequential mediation by disappointment and regret is less likely to occur in case of information search because according to cognitive appraisal theory, it is not part of either primary or secondary appraisals. Hence, this research advances the following hypothesis:

H10a: Disappointment precedes regret and the two emotions in sequence mediate the effect of (1) responsibility attribution, and (2) expectations on repurchase intentions and coping behaviours.

Lazarus (1991b) states that an emotion can influence subsequent emotions and its associated appraisals such that it may weaken or impair the subsequent emotions. Therefore, this research predicted that the occurrence of disappointment prior to regret is likely to decrease the negative effect of regret on consumers' repurchase intentions and coping behaviours. This prediction is made because of the sequential presence of fact-based and simulation-based judgments. In terms of their limitations, a fact-based judgment is more realistic as it imposes specific constraints that are rooted in what has been observed and is believed to be true. In contrast, a simulation-based judgment is less realistic as the imagination may range over far and wide possibilities (Summerville & Roese, 2008). So, this research predicts that the presence of realistic comparisons, in this case disappointment, is likely to reduce the negative effect of less realistic comparisons, in this case regret, on the repurchase and coping intention behaviours. This research therefore predicts:

H10b: The presence of disappointment prior to the feeling of regret reduces the negative effect of regret on repurchase intentions and coping behaviours.

5.3 Testing conceptual model 2 & the hypotheses: Scenario-based experiment

As stated earlier, a scenario-based experiment is used to test conceptual model 2 and the relevant hypotheses. The previous section of this chapter detailed the hypotheses that are used to test conceptual model 2. These hypotheses posited that different responsibility attributions, expectations, and information search will differently trigger disappointment and the types of regret, and these emotions eventually will sequentially determine consumers' repurchase intentions and coping behaviours. The following sub-sections offer a detailed overview of Study 2, in particular the independent variables, the experimental design, and the questionnaire used to collect the data.

5.3.1 Independent variables

There are three independent variables in conceptual model 2, the first two of which are exactly the same as those in Study 1. Therefore, conceptual model 2 includes:

1. *Responsibility attributions*: who/what was responsible for the negative consumption outcome; this has two treatment levels: external (e.g. company) and internal (e.g. consumer)
2. *Expectations*: indicates consumers' anticipation about the performance of a company; this has two treatment levels: high (e.g. highly recommended, award-winning, expensive) and low (e.g. new, recommendation status not available, charge low price).
3. *Information search*: indicates the extent to which consumers search for further information about the company; this has two treatment levels: high (e.g. search for more information about the company) and low (e.g. does not search for more information about the company).

5.3.2 Type of experimental design

This research used three independent variables with two treatment levels each in study 2. A 2 (responsibility attributions: external vs. internal) by 2 (expectations: high vs. low) by 2 (information search: high vs. low) between-subjects full factorial design is used for this experiment. This experimental design produced 8 experimental conditions. Each respondent was randomly allocated to one of the eight experimental conditions. Table 5.1 presents these 8 experimental conditions.

Table 5.1: Experimental design for conceptual model 2

Condition	Responsibility	Expectation	Search
1	External (e.g. Provider)	High	High
2			Low
3		Low	High
4			Low
5	Internal (e.g. Consumer)	High	High
6			Low
7		Low	High
8			Low

5.3.3 Study subjects and sampling procedure

The sampling subjects and the procedure used to recruit respondents for Study 2 is similar to those in Study 1. A US-based online research panel was used to collect data for this study. The sampling criteria for recruiting the sampling units were similar to those for Study 1. For every experimental condition, this study set out to recruit at least 25 sampling units; therefore, for 8 experimental conditions, it needed a minimum of $8 \times 25 = 200$ sampling units. To increase the internal validity of the experiment, the questionnaires were distributed

randomly among respondents. This study also used the ‘Qualtrics’ survey research tool to perform the randomization task.

5.3.4 Research questionnaire of Study 2

The following sub-sections present different sections of the research questionnaire designed to collect data for Study 2. Meanwhile, the questionnaire and scenario used in Study 2 are different from those in Study 1. In particular, the scenario presents a decision-making task to the respondents where they (a) are an active decision maker; (b) choose their own holiday and its provider; (c) browse further information about the holiday provider where applicable. Furthermore, Study 2 depicted a different type of holiday-related negative consumption experience with different manipulations of responsibility attributions. The different sections of the questionnaire which is presented below illustrate the differences between Study 2 and Study 1. The order in which the sub-sections are presented below is the same as the order presented to the respondents participating in the experiment.

5.3.4.1 Section A: Opening information and warm-up questions

The respondents first read the explanatory statement that accompanied a very brief description about the survey. This was followed by a set of information relating to the experimental task and some questions relating to respondents' past holiday purchases.

5.3.4.2 Section B: Opening vignette

In this section, the respondents were informed that they would be taking part in a purchasing exercise with a background story. They were advised to read carefully the background story and related information to enable them to actively participate in the purchasing exercise. Then they were given the hypothetical scenario presented in Table 5.2.

Table 5.2: Scenario that justifies the purchase of a holiday

Imagine that you and your partner are in the following situation.
YOU NEED A BREAK!! The last couple of months were very exhausting for you and your partner due to an overwhelming workload. You did not have any time out together, even on weekends. So, both of you have decided to go for a weekend-away holiday to have a relaxing weekend together.

When the respondents finished reading the opening story, they were asked to select their preferred type of holiday from three types of holiday options (e.g. beach holiday, nature holiday, outdoor holiday with exercise). After selecting the holiday, the respondents were informed that they needed to find the holiday package. They conducted an online search and found two travel providers offering the type of holiday package they are seeking. Afterwards, they were given information about the travel providers.

5.3.4.3 Section C: Scenario related to travel providers information

The information about the travel providers was provided in this section of the scenario. This study manipulated expectations and information search in this section of the scenario.

5.3.4.3.1 Manipulation of expectations

By varying the travel providers and related information, the expectations of the participants were manipulated. The respondents were informed that the information relating to travel providers was extracted from their website and presented to the respondents through a mock-up website (Table 5.3 and Table 5.4). Participants, depending on their random allocation to the experimental conditions, received two travel provider alternatives. More specifically, in the *high expectation condition*, they were presented with two travel providers of equally high quality characterized as highly recommended, award winning, having a high quality rating and charging high prices.

Table 5.3: Manipulation of high expectations

It may take a while for you to view the information of the travel provider depending on your internet connection

Home | About | Package | Pricing | Contact Us | FAQ

	VIBRANTHOLIDAY.COM
Reputation status	Award-winning
Recommendation status	Highly recommended
Quality rating	High
Price	High

Important Links:
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[Pricing](#)
[FAQ](#)
[Site Map](#)

***Free welcome drinks are included within each package.

VIBRANTHOLIDAY.COM
You will feel every minute here

Home | About | Package | Pricing | Contact Us | FAQ

FANTASYTOUR.COM
Real fantasy begins here

FANTASYTOUR.COM	
Reputation status	Award-winning
Recommendation status	Highly recommended
Quality rating	High
Price	High

Important Links:
[Login](#)
[Sign Up](#)
[Package](#)
[Pricing](#)
[FAQ](#)

On the other hand, in the *low expectation condition*, participants were presented with two providers of equally low quality described as new, recommendations and quality status are not yet available and charging low prices.

Table 5.4: Manipulation of low expectations

It may take a while to view the information of the travel provider depending on your internet connection

FANTASYHOLIDAY.COM Home | About | Package | Pricing | Contact Us | FAQ
Feel it all the way

FANTASYHOLIDAY.COM	
Reputation status	New
Recommendation status	Not yet available
Quality rating	Not yet available
Price	Low

***Free welcome drinks are included within each package.

Important Links:
[Login](#)
[Sign Up](#)
[Package](#)
[Pricing](#)
[FAQ](#)
[Site Map](#)



To create a difference in product offerings between the two travel providers in each condition, one travel provider was described as offering free welcome drinks while the other had no such offer. The main reason for presenting two equally high or low quality travel providers in each condition was that this research wanted to make it difficult for the respondents to choose between the options and make them feel they had made a real choice. This manipulation was developed only for Study 2.

5.3.4.3.2 Manipulation of information search

As indicated earlier, this section also manipulates information search. When the respondents finished reading about the travel providers as presented in the mock-up websites and were on the point of selecting one travel provider, the manipulation of information search was provided. In particular, by manipulating the opportunity/no opportunity to search for more information in addition to the basic providers' information, this study executed the manipulation of information search. This manipulation was primarily developed for the current investigation. Table 5.5 presents the manipulation of information search.

Table 5.5: Manipulation of information search

High information search condition
<p>Before booking and payment do you want to know more about Fantasytour.com/ Vibrantholiday.com/Fantasyholiday.com/Heaventour.com? If so please click 'Yes' or else click 'No'.</p> <p>Upon clicking ‘Yes’ the respondents obtain the following information and upon clicking ‘No’ they are directed to finalize their choice of provider.</p>
<p>You have decided to search more information about Fantasytour.com/ Vibrantholiday.com/ Fantasyholiday.com/Heaventour.com. Which of the following information you want to search? (You can search only one combination of information from the following)</p> <ul style="list-style-type: none"> a. Company perspectives and company history b. Milestones and memberships c. Company values and work values <p>When they have finished reading the information then they receive the following information.</p> <p>You have browsed the information about Vibrantholiday.com/Fantasyholiday.com/ Heaventour.com/ Fantasytour.com.</p>
Low information search condition
<p>Respondents do not get any additional information about the provider other than the information provided in the mock-up website.</p>

In the *high information search condition* the respondents were asked whether they wanted to search for more information about the provider. Upon clicking ‘yes’, they were provided with several pieces of information from which they selected the information they wanted to browse. It was expected that all respondents in this condition would click ‘Yes’ to search for more information about the selected provider. In the *low information search condition*, the respondents were not invited to browse more information about their selected provider.

5.3.4.4 Section D: Scenario related to buying the holiday

At this stage of the scenario, the respondents were asked to finalize their choice of provider. In particular, they were provided with the following information as presented in Table 5.6. When the respondents had selected the provider by clicking ‘yes’ they were informed that they had booked a weekend-away holiday package including 4**** accommodation with Vibrantholiday.com/Fantasyholiday.com/Heaventour.com/ Fantasytour.com, and made payment.

Table 5.6: Selecting the provider

Finalize the choice of provider
Now if you want to continue booking with Fantasytour.com/ Vibrantholiday.com/ Fantasyholiday.com/ Heaventour.com and make payment, please choose 'Yes'. If you want to change your decision and select the other travel provider, please select 'No'.

5.3.4.4.1 Manipulation checks of expectation

After the respondents had selected the travel provider with the booking and payment, they were provided with the manipulation check questions about expectations. The items measuring the manipulation check of expectations were developed for the purpose of this research and were used in study 1 (Table 5.7). The bipolar scaled question directly asked the respondents about their expectations regarding the holiday purchased from this travel provider. This was followed by an open-ended statement asking respondents to write the reasons for their rating of the expectation manipulation check question.

Table 5.7: Manipulation check questions of expectation

Expectation:
<ol style="list-style-type: none"> 1. What would be your level of expectation regarding the holiday you have just booked with this travel provider? ^a 2. Please write down the reasons for your level of expectation regarding the holiday you have just booked with this travel provider. ^b

^a measured on a 5-point bipolar scale 1 = Low, 5 = High

^b open ended statement

5.3.4.4.2 Manipulation checks of information search

In order to measure the manipulation of information search, the respondents were not asked any question as the manipulation was imbedded within the scenario. In particular, the presence/absence of the opportunity to search for more information about the travel provider provided the manipulation checks for information search.

5.3.4.5 Section E: *The holiday experience*

In this section of the scenario, the respondents were presented with a description of the holiday experience itself. Table 5.8 describes the holiday as experienced hypothetically by the respondents.

Table 5.8: The holiday experience

<p><u>THE HOLIDAY EXPERIENCE</u></p> <p>You arrive at the holiday destination. Later you discover that the hotel is not like the 4**** hotel where you have stayed before. This hotel barely meets 3*** criteria.</p> <p>You return from the holiday without feeling refreshed and relaxed.</p>
--

5.3.4.5.1 Measures of dependent variable: Disappointment

This study asked respondents to rate their level of disappointment due to the negative holiday outcome when they had finished reading the scenario about their holiday experience. Two measures from Zeelenberg and Pieters (2004) were adapted to measure the respondents' feeling of disappointment (Table 5.9).

Table 5.9: Measures of disappointment

Disappointment: (Zeelenberg & Pieters, 2004)
<ol style="list-style-type: none"> 1. To what extent is the purchase worse than your expectation? ^a 2. What would be your level of disappointment regarding the holiday purchase from this travel provider? ^b

^a measured on a 5-point bipolar scale 1 = not at all worse, 5 = Much more worse

^b measured on a 5-point bipolar scale 1 = Low, 5 = High

5.3.4.5.2 Manipulation of responsibility attributions

The respondents received the manipulation of responsibility attributions when they had finished answering the questions intended to measure their feeling of disappointment. These manipulations were developed primarily for this research. Table 5.10 presents the responsibility attribution manipulations.

Table 5.10: Responsibility attribution manipulations

Your reflection on the holiday experience.....
Provider Responsible Condition
<i>You search for more information online and find that the pictures of the hotel do not match the pictures posted in the travel provider's website.</i>
<i>You also come across a recent media report that indicates online travel providers often make misleading claims.</i>

Consumer Responsible Condition
<i>Upon reflection, you realize that you forgot to check the details of the hotel before making your final booking with the travel provider.</i>
<i>You also come across a recent media report that indicates consumers' failure to invest adequate time often results in online purchase failure.</i>

5.3.4.6 Section F: Regret and repurchase intention as the dependent variables

This section measures the respondents' overall regret and repurchase intention. Similar to Study 1, this study did not formulate any hypothesis about the effect of responsibility attributions, expectations and information search on respondents' feelings of overall regret. This is because of its focus on seeing the effects only on the types of regret. Although this study did not formulate any hypothesis about overall regret, it still measured overall regret by adapting two items from Zeelenberg and Pieters (2004) (Table 5.11). This study measured repurchase intention by developing an item (Table 5.11).

Table 5.11: Measures of regret and repurchase intention

Overall regret ^a: (Zeelenberg & Pieters, 2004)
Please answer the following questions by checking the option that best represents your answer.
1. How much regret do you feel over your choice? ^a
2. How bad do you judge your decision to choose this travel provider? ^b
Repurchase intentions ^c: (Newly developed)
1. What is your likelihood of purchasing from this travel provider again?

^a Measured on a 5-point scale labelled as 1 = None, 5 = Very much

^b Measured on a 5-point scale labelled as 1 = Not at all bad, 5 = Very bad

^c Measured on a 5-point scale labelled as 1 = Very unlikely, 5 = Very likely

5.3.4.7 Section G: Manipulation checks of responsibility attribution

The manipulation check questions about responsibility attributions were presented to the respondents after they had answered one of the dependent variables (i.e. repurchase intention). This study used manipulation check measures for responsibility attribution similar to those used in Study 1 (Table 5.12). The responsibility attribution is measured through two items. This study had to reverse-code one item so that an index could be established and used as a manipulation check measure. This study also provided the respondents with an open-ended statement inviting them to give the reasons for their rating in response to the responsibility manipulation check questions.

Table 5.12: Manipulation check measures of responsibility attribution

Responsibility attribution ^a: (Newly developed)
<i>The following statements and questions concern the <u>cause(s) of your bad holiday experience</u>. Please think about your holiday experience and select the option that most closely corresponds to how you feel about it.</i>
<ol style="list-style-type: none"> 1. The travel provider's responsibility for the bad holiday experience is: 2. Your responsibility for the bad holiday experience is: (reverse coded) 3. Please write down the reasons behind your answers to the previous questions ^b

^a Measured on a 5-point scale labelled as 1 = Low, 5 = High

^b Open ended statement

5.3.4.8 Section H: Outcome & process regret as the dependent variables

In this section, respondents' feelings of outcome and process regret were measured. Similar to Study 1, 8 items each were adapted from Lee and Cotte (2009) to measure outcome and process regret (Table 5.13). To establish the process regret index, this study had to

reverse-code 4 out of 8 process regret measures because these 4 items measured just the opposite of what the other 4 items measured.

Table 5.13: Measures of outcome and process regret

Outcome regret ^a:
Now, please rate your agreement with the following items, considering the holiday purchase and consumption experience as exhibited above
<p><i>Regret due to forgone alternatives</i></p> <ol style="list-style-type: none"> 1. I should have chosen another travel provider than the one from which I have purchased. 2. I regret the choice of travel provider that I made. 3. I now realize how much better my choice of other travel providers were. 4. If I were to go back in time, I would choose a different travel provider to purchase my holiday. <p><i>Regret due to change in significance</i></p> <ol style="list-style-type: none"> 1. I regret purchasing from this travel provider because the holiday did not serve me the way I thought it would. 2. I wish I hadn't bought from this travel provider because the holiday has been useless to me. 3. I regret my purchase from this travel provider because the holiday did not serve its purpose. 4. I regret my purchase from this travel provider because I did not need this type of bad holiday.
Process regret ^a:
<p><i>Regret due to under consideration</i></p> <ol style="list-style-type: none"> 1. With more information, I feel that I could have made a better decision. 2. I feel that I did not put enough consideration into buying the holiday. 3. With more efforts, I feel that I could have made a better decision. 4. I regret not putting enough thought into my decision. <p><i>Regret due to over consideration ^b</i></p> <ol style="list-style-type: none"> 1. I expended too much effort in making my decision. 2. I wasted too much time in making my decision. 3. I think I put too much thought in the buying process. 4. I feel that too much time was invested in the purchase.

^a Measured on a 5-point Likert scales 1 = Strongly agree, 5 = Strongly disagree

^b Reverse coded

5.3.4.9 Section I: Coping intentions as the dependent variable

When the respondents finished rating the outcome and process regret items, they were provided with the measures of coping intentions. This study used the same items as Study 1 to measure respondents' coping intentions (Table 5.14).

Table 5.14: Measures of coping intentions

Coping behaviours ^a: (Gelbrich, 2010)
Please answer the following questions by checking the option that best represents your answer
<u>Vindictive nWOM:</u> What is your likelihood of <ol style="list-style-type: none">1. spreading negative word-of-mouth about the travel provider2. defame the travel provider to others3. warning others not to purchase holiday from this travel provider <u>Vindictive complaining:</u> What is your likelihood of complaining to the travel provider to <ol style="list-style-type: none">1. give them a hard time2. be unpleasant with them3. pay for its poor holiday quality <u>Support-seeking nWOM:</u> What is your likelihood of talking to other people about their negative experience in order to <ol style="list-style-type: none">1. get some comfort2. reduce negative feelings3. feel better4. share feelings with others <u>Problem-solving complaining:</u> What is your likelihood of complaining to the travel provider to <ol style="list-style-type: none">1. discuss the problem constructively2. find an acceptable solution for both parties3. work with the travel provider to solve the problem

^a Measured on a 5-point scale labelled as 1 = Very unlikely, 5 = Very likely

5.3.4.10 Section J: Task checks

The respondents' perception of the extent to which they felt the scenario to be realistic, and the degree of difficulty they faced when imagining the scenario, are evaluated in the task checks section. These task check questions were developed for the current investigation (Table 5.15).

Table 5.15: Items measuring the experimental tasks

Scenario Realism ^a: (Newly developed)
<i>The following questions relate to the appropriateness of the described scenario. Please answer the questions by checking the option that best represents your answer</i>
1. How realistic is the situation as described in the scenario? ^a
2. How easy is it for anyone to relate to the scenario? ^b

^a Measured on a 5-point scale labelled as 1 = Highly unrealistic, 5 = Highly realistic

^b Measured on a 5-point scale labelled as 1 = Very difficult, 5 = Very easy

5.3.4.11 Section K: Demographics

The respondents' demographic data was collected in this section. This included questions related to the participants' gender, age, English language status. The details of all the items of the research questionnaire employed for Study 2 are presented in Appendix 2.

5.4 Conceptual model 2: Data analysis and findings

This section presents the data analysis and findings of Study 2. However, before presenting the analysis and findings, first the data collection procedures including sample characteristics, factor analysis results for testing the reliability and validity of some of the measurement scales, and results of manipulation checks, are presented.

5.4.1.1 Pre-testing the questionnaire

Similar to Study 1, the final draft of the questionnaire of Study 2 underwent two stages of pre-testing before the main data collection.

A comprehension and flow analysis was conducted first. This was done to increase the face and content validity of the questionnaire. Like Study 1, this study included people from two different groups, namely non-academic and academic to record their responses to a paper-based questionnaire. Afterwards, they were asked to provide their comments about comprehensibility, flow, and the timing of the questionnaire. Some minor changes were suggested by the respondents. The respondents took an average of 20 minutes to complete the survey, and they did not consider it to be a lengthy survey.

In the second-phase of pre-testing, this research conducted an online survey to check the survey adequacy in terms of timing, reliability, and validity of the constructs, and other possible issues that could emerge. A sample of 80 respondents from a commercial online panel was used for data collection by employing the online research tool ‘Qualtrics’. Respondents took on average 14 minutes to complete the survey. The respondents involved in this pre-test also suggested several minor changes to the questionnaire content and the rephrasing of some of the questions.

5.4.1.2 Data collection, data cleaning, and sample characteristics

This research recruited 250 panel members from an online research panel. Sixteen respondents did not complete the survey, which resulted in a completion rate of 93 percent. This research received 234 completed survey questionnaires. Respondents on average took 13 minutes, which is similar to the results obtained in the pre-tests. Similar to Study 1, Study 2 used several data cleaning strategies to deal with subjects with too many repetitions in their

ratings on different measures, taking too short (e.g. 3 minutes or less) or too long (e.g. 40 minutes or more) a time to complete the survey, too many missing values in the responses. These questionnaires were discarded. This resulted in the removal of 11 participants (around 5 percent), resulting in 223 assessable responses (42% males; 58% females). The respondents' distribution across the 8 experimental conditions for Study 2 is presented in Table 5.16. Furthermore, Table 5.17 presents the sample demographics and respondents' familiarity with online shopping in Study 2.

Table 5.16: Distribution of respondents among conditions

Responsibility attribution	Expectation	Information Search	n
External (i.e. Provider)	High	High	40
		Low	22
		Total	62
	Low	High	34
		Low	25
		Total	59
Internal (i.e. Consumer)	High	High	34
		Low	14
		Total	48
	Low	High	30
		Low	22
		Total	52

Table 5.17: Sample demographics and familiarity with online shopping

Sample Demographics	Categories	Percentage (N=223)
Gender	Male	42
	Female	58
Age	18-25	29
	26-35	37
	36-45	15
	46-55	11
	56-65	7
	66 and above	1
English language status	Native	96
	Non-native	4
Online Shopping	Categories	Percentage (N=223)
Frequency of online shopping	More than once a month	51
	Once a month	28
	Once every 3-6 months	17
	Once a year	3
	Never	1

5.4.1.3 Testing the reliability and validity of the measurement items

Similar to Study 1, Study 2 primarily used Cronbach Alpha (Cronbach, 1951) to test the reliability of the items measuring the dependent variables. However, in order to reconfirm the dimensionality of outcome and process regret, Study 2 also used Exploratory Factor Analysis (EFA).

The correlation matrix accompanying the outcome and process regret measures was assessed first in the EFA. The correlations among the items measuring the respective factor were significant at above .30. Principal Component Analysis and Varimax were used as the extraction and rotation methods when conducting the EFA. The KMO measure of sampling adequacy was .83 (Kaiser, 1974); Bartlett's test of sphericity was also significant ($p < .0001$) (Bartlett, 1954). Thus, the data was appropriate for conducting further analysis. Four factors were extracted with eigenvalues greater than one. The factors explained 72 percent of the

variance in the data (Zwick & Velicer, 1986). The rotated component matrix with factor loadings of above .40 is shown in Table 5.18 for this study. Almost all factor loadings were found to be over .60; almost all communalities were greater than .50, which indicated that the measures of outcome and process regret were valid for Study 2.

Table 5.18: Factors loadings for outcome and process regret measures

Factor	Outcome regret due to forgone alternatives ($\alpha = .75$)	Outcome regret due to change in the significance ($\alpha = .88$)	Process regret due to under-consideration ($\alpha = .84$)	Process regret due to over-consideration ($\alpha = .90$)
*OR_FA 4	.839			
OR_FA 1	.689			
OR_FA 3	.674			
OR_FA 2	.644			
**OR_SC 3		.900		
OR_SC 2		.863		
OR_SC 4		.840		
OR_SC 1		.735		
***PR_UC 3			.912	
PR_UC 2			.887	
PR_UC 4			.865	
PR_UC 1			.569	
****PR_OC 4				.900
PR_OC 3				.884
PR_OC 2				.862
PR_OC 1				.838

*OR_FA = Outcome regret due to forgone alternatives

**OR_SC = Outcome regret due to change in significance

***PR_UC = Process regret due to under-consideration

****PR_OC = Process regret due to over-consideration

Next, the reliability of these regret dimensions were assessed again when assessing the reliability of the measures of the other dependent variables of Study 2 by using Cronbach Alpha. Similar to Study 1, Study 2 considered the Cronbach Alpha level of .70 and above as an acceptable scale measuring the respective dependent variables. Meanwhile, similar to Study 1, the third item -vindictive complaining measure- was found to have very low correlations with the other items. The deletion of this item increased the reliability value

(Cronbach Alpha) substantially, so Study 2 also deleted the third item. As presented in Table 5.19, all the measurement scales for Study 2 were acceptable.

Table 5.19: Reliability of the measurement scales

Name of the summated scale	Study 2 (α)
Outcome regret	.86
Process regret	.81
Vindictive nWOM	.88
Vindictive complaining	.85
Support-seeking nWOM	.87
Problem-solving complaining	.93

5.4.1.4 Manipulation checks

5.4.1.4.1 Manipulation check of responsibility attributions and expectations

Figure 5.2 presents the mean responsibility attribution index for external and internal responsibility attribution conditions and Figure 5.3 presents the results of the expectation manipulation test for Study 2.

This study performed several one-way ANOVA checks to determine whether the manipulation of responsibility attributions and expectations worked in the intended way. The test results showed that the mean responsibility attribution score was significantly higher for the external responsibility attribution condition than the internal responsibility attribution condition ($M_{External} = 3.7$, $M_{Internal} = 3.0$; $F(1, 221) = 54.98$, $p < .001$), confirming the successful manipulation of responsibility attribution. Furthermore, respondents indicated the travel provider's and their own responsibility for the bad holiday outcome in external and

internal responsibility attribution conditions respectively when they gave reasons for their rating of the responsibility attributions.

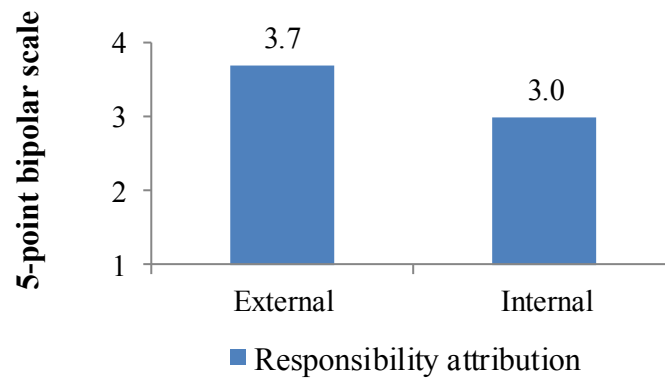


Figure 5.2: Manipulation check for responsibility attribution

Another one-way ANOVA test result showed that the mean of expectations in a high expectation condition was significantly higher than in a low expectation condition ($M_{High\ expectation} = 4.6$, $M_{Low\ expectation} = 3.4$; $F(1, 221) = 119.03$, $p < .001$). This result confirms the manipulation of expectation. In addition, respondents typically mentioned the characteristics of the travel provider being highly recommended, award-winning and new, and recommendation rating not available in high and low expectation conditions respectively when they gave reasons for their expectations about the provider.

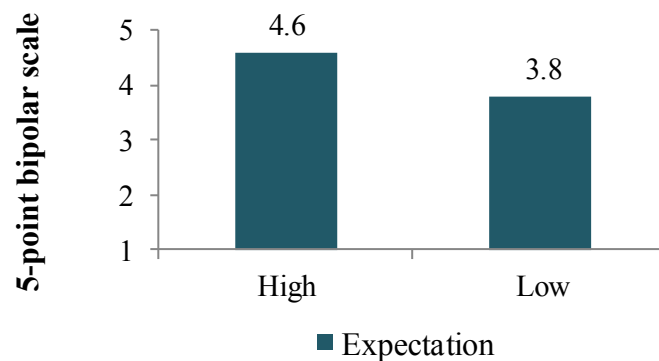


Figure 5.3: Manipulation check for expectation

5.4.1.5 Task checks

One-sample t-tests were conducted and the test results with a test value of 3 indicated that the respondents found the scenario to be highly realistic ($M=3.83$, $t=55.90$, $df=222$, $p<.001$) and very easy to relate to ($M=4.28$, $t=76.54$, $df=222$, $p<.001$) for study 2. Hence, the respondents found the tasks to be appropriate.

5.4.1.6 Testing the hypotheses

5.4.1.6.1 Effects of responsibility attributions

The mean disappointment, outcome, and process regret index triggered by responsibility attributions for Study 2 is presented in Figure 5.4.

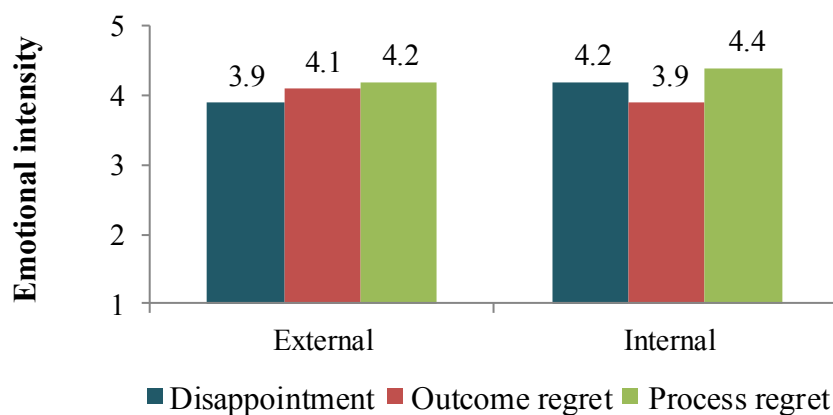


Figure 5.4: Effect of responsibility attributions on disappointment, outcome, and process regret

Hypothesis 6 is related to the effects of responsibility attributions on disappointment and two types of regret. A one-way ANOVA of the effect of responsibility attribution on disappointment shows that there is no difference in disappointment between internal and external responsibility attribution conditions ($M_{External} = 3.9$, $M_{Internal} = 4.2$; $F(1, 221) = 3.18$, $p > .05$) (Figure 5.5). Another one-way ANOVA of the effect of responsibility attribution on outcome regret shows that outcome regret is significantly greater in the external responsibility

attribution condition than in the internal responsibility attribution condition ($M_{External} = 4.1$, $M_{Internal} = 3.9$; $F(1, 221) = 4.83$, $p < .05$). Finally, a one-way ANOVA of the effect of responsibility attribution on process regret shows that process regret is significantly greater in the internal responsibility attribution condition than in external responsibility attribution condition ($M_{External} = 4.2$, $M_{Internal} = 4.4$; $F(1, 221) = 4.67$, $p < .05$) (Figure 5.5). Hence, hypothesis 6 is supported.

5.4.1.6.2 Effects of expectations

Figure 5.5 below shows the mean disappointment, outcome and process regret index produced by expectations in this study. This research predicted the effect of expectations on disappointment and types of regret in H7. As expected (H7a), a one-way ANOVA of the effect of expectation on disappointment shows that disappointment is significantly greater in the high expectation condition than in the low expectation condition ($M_{High\ expectation} = 4.3$, $M_{Low\ expectation} = 3.8$; $F(1, 221) = 10.60$, $p < .01$). In addition, a one-way ANOVA of the effect of expectations on outcome regret shows that outcome regret is significantly greater in the high expectation condition than in the low expectation condition ($M_{High\ expectation} = 4.2$, $M_{Low\ expectation} = 3.9$; $F(1, 221) = 14.80$, $p < .001$), which supports H7b.

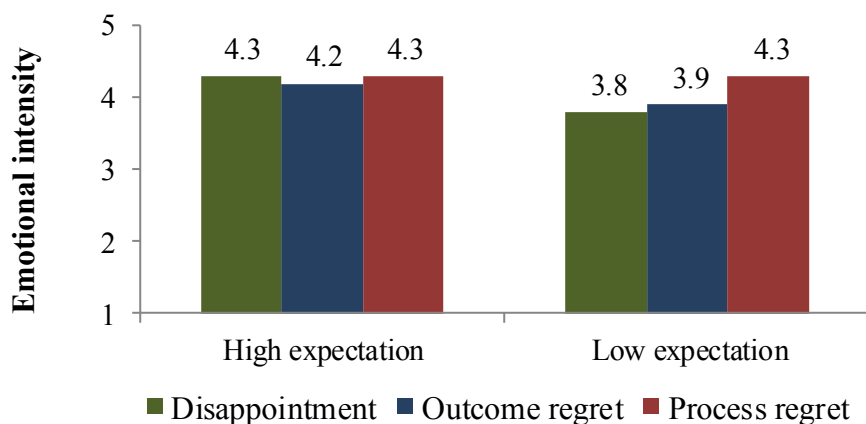


Figure 5.5: Effect of expectations on disappointment, outcome, and process regret

Another one-way ANOVA of the effect of expectations on process regret shows that, as expected (H7c), there is no difference in process regret between high and low expectation conditions ($M_{High\ expectation}=4.3$, $M_{Low\ expectation}=4.3$; $F(1, 221) = .014$, $p > .05$). Thus, hypothesis 7 is supported.

5.4.1.6.3 Effects of information search

Hypothesis 8 predicted the effect of information search on disappointment and types of regret. The mean disappointment, outcome, and process regret index induced by information search for Study 2 is presented in Figure 5.6.

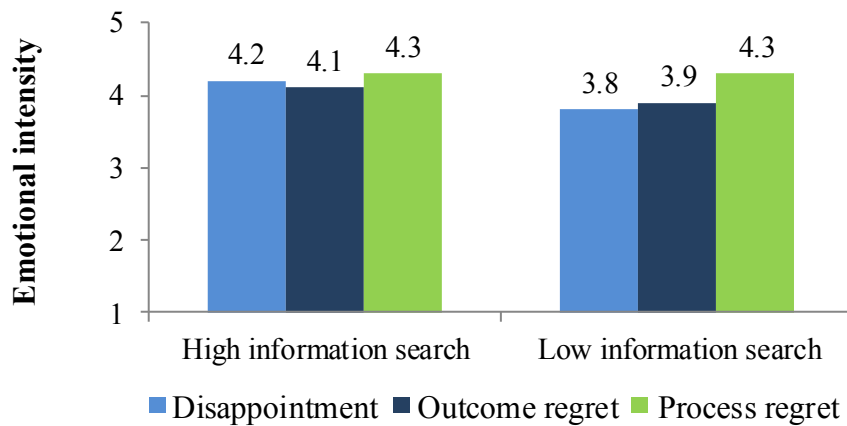


Figure 5.6: Effect of information search on disappointment, outcome, and process regret

A one-way ANOVA of the effect of information search on disappointment shows that disappointment is significantly higher in the high information search condition than in the low information search condition ($M_{HIS}=4.2$, $M_{LIS}=3.8$; $F(1, 221) = 9.69$, $p < .01$). In addition, a one-way ANOVA of the effect of information search on outcome regret shows that outcome regret is significantly greater in the high information search condition than in the low information search ($M_{HIS}=4.1$, $M_{LIS}=3.9$; $F(1, 221) = 7.19$, $p < .01$). Finally, another one-way ANOVA of the effect of information search on process regret shows that there is no

difference in process regret between high and low information search conditions ($M_{HIS} = 4.3$, $M_{LIS} = 4.3$; $F(1, 221) = 0.336$, $p > .05$). Hence, hypothesis 8 is supported.

5.4.1.7 Testing the interaction

Hypothesis 9 predicted an interaction between expectation and information search and consumers' feelings of process regret. In order to test this interaction effect, two-way ANOVA was used. Table 5.20 presents the results of the ANOVA model estimated for process regret and, as demonstrated in the table, the main effect of expectation is not significant ($F(1, 219) = 0.401$, $p > .05$). The effect of information search is not significant either ($F(1, 219) = 0.210$, $p > .05$). However, the predicted effect of the interaction between expectation and information search is found to be significant ($F(1, 219) = 4.88$, $p < .05$).

Table 5.20: Process regret: ANOVA

Source	Type III Sum of Squares	df	Mean Square	F	Sig.	Partial Eta Squared
Corrected Model	1.807 ^a	3	.602	1.743	.159	.023
Intercept	3834.211	1	3834.211	11094.061	.000	.981
Expectation_Group	.139	1	.139	.401	.527	.002
Search_Group	.073	1	.073	.210	.647	.001
Expectation_Group * Search_Group	1.688	1	1.688	4.884	.028	.022
Error	75.688	219	.346			
Total	4228.547	223				
Corrected Total	77.495	222				

a. R Squared = .023 (Adjusted R Squared = .010)

Figure 5.7 show that consumers feel greater process regret when they have higher expectations and lower rather than higher information search opportunity. In the low expectation situation, they feel greater process regret when they have had greater rather than less opportunity for information search. Meanwhile, consumers' feelings of process regret are

greater due to variations in expectations when they have had lower rather than higher information search opportunity. Thus, hypothesis 9 is supported.

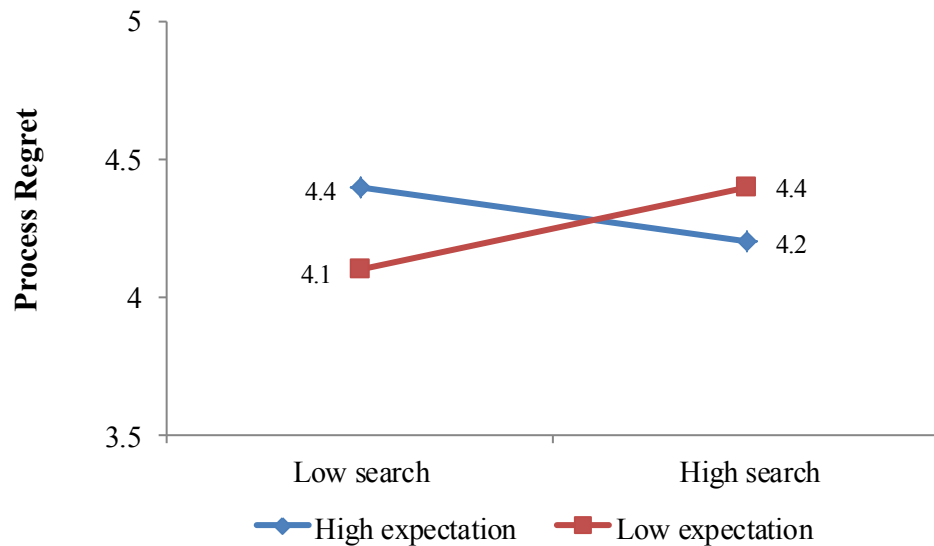


Figure 5.7: Effect of information search and expectations on process regret

5.4.1.8 Testing the mediating effects

It is predicted through hypothesis 10a in Study 2 that disappointment and regret sequentially mediate. Similar to Study 1, Study 2 used Hayes PROCESS Macro, in particular model 6, to explore the possibility of a sequential multiple mediator model (Hayes, 2013). In hypothesis 10b, it is predicted that the sequential presence of disappointment before regret will influence the effect of regret. In the following sub-section, the mediation test results are presented.

5.4.1.8.1 The mediating effects of disappointment and regret

In hypothesis 10a, this research investigates the presence of conditional indirect effects of responsibility attributions and expectations on repurchase intentions and coping behaviours. In these instances, the condition implies that disappointment and regret

sequentially mediate these stated relationships. Furthermore, the presence of disappointment prior to regret is likely to reduce the negative effect of regret on repurchase intentions and coping behaviours, as predicted in H10b.

In order to test the sequential mediation, the indirect effects of both disappointment and regret need to be examined. The confidence intervals of these specific indirect effects need to be examined to see whether or not they contain zero. If these do not contain zero, then it can be stated that sequential mediation exists in the posited relationships. Table 5.21, Table 5.22 and Table 5.23 present the results of the sequential mediation tests. These tables only show the results relevant to the hypotheses.

For the effects of responsibility attributions on repurchase intention, the bootstrap confidence interval for the specific indirect effects of disappointment and outcome regret does not contain zero (Table 5.21). This specific indirect effect is the product of $a_1 = -0.25$, $a_3 = 0.17$, and $b_2 = -0.49$, or 0.02, with a 95% bootstrap confidence interval of 0.00 to 0.06. In the context of the present study, this means that as consumers attribute the responsibility more externally (to the provider) than internally (to themselves) they feel less disappointment (a_1 is negative). This is tenable as prior findings of this study reveal that the feeling of disappointment is not driven more by external responsibility attribution. However, the reduced feeling of disappointment later drives consumers' feelings of outcome regret (a_3 is positive) and consequently increases their repurchase intention. For the effects of expectations on repurchase intention, the bootstrap confidence interval for the specific indirect effects of disappointment and outcome regret also does not contain zero (Table 5.21). This specific indirect effect is -0.04 [the product of $a_1 = 0.42$, $a_3 = 0.17$, and $b_2 = -0.49$, 95% bootstrap confidence interval of -0.09 to -0.01]. This means that as consumers have higher expectations

they feel more disappointment (a_1 is positive) which in turn results in feelings of greater outcome regret (a_3 is positive). This later reduces their repurchase intentions.

Table 5.21: The mediating effect on repurchase intentions

IV	M1	M2 (Regret)	DV	a1	b1	a2	b2	a3	c'	a1*b1	a2*b2	a1*a3*b2	95% CI	
													Lower	Upper
Responsibility	Disappointment	Outcome	Repurchase	-.25			-.49****	.17**	-.23*			.02	.00	.06
Responsibility		Outcome	Repurchase			.25**	-.49****					-.13	-.24	-.04
Responsibility	Disappointment	Process	Repurchase	-.25			-.19*	.04	-.38****			.00	-.00	.01
Responsibility		Process	Repurchase			-.16*	-.19*					.03	.00	.08
Expectation	Disappointment	Outcome	Repurchase	.42**			-.49****	.17*	-.02			-.04	-.09	-.01
Expectation		Outcome	Repurchase			.26**	-.49****					-.13	-.25	-.04
Expectation	Disappointment	Process	Repurchase	.42**			-.19*	.04	-.15			-.00	-.02	.00
Expectation		Process	Repurchase			-.01	-.19*					.00	-.03	.04

IV: Independent variable
DV: Dependent variable
M1: Mediating variable 1
M2: Mediating variable 2
Bootstrap sample: 5000
Coding= external responsibility="0"; internal responsibility="1"
Coding= high expectation="0"; low expectation="1"

a1: effect of IV on M1
b1: direct effect of M1 on DV
a2: effect of IV on M2
b2: direct effect of M2 on DV
a3: effect of M1 on M2
c': direct effect of IV on DV

****significant at $p < .0001$
*** significant at $p < .001$
** significant at $p < .01$
* significant at $p < .05$

Meanwhile, the bootstrap confidence intervals for the specific indirect effects of disappointment and process regret those flows from responsibility to repurchase and from expectation to repurchase contain zero. This is understandable as process regret is less relevant to consumers' future buying decisions (Pieters & Zeelenberg, 2005). In addition, expectation is related to a comparison of products or service performance, not the consumers' decision process. Therefore, Study 2 found that disappointment and regret sequentially

mediate the effects of responsibility attribution and expectations on consumers' repurchase intentions.

The results presented in Table 5.22 were assessed to explore the effects of responsibility attributions on coping intentions. For the specific indirect effects of responsibility attributions on vindictive nWOM and vindictive complaining, this study found that the bootstrap confidence interval for the indirect effect of disappointment and outcome regret does not contain zero. This indicates that consumers feel less disappointment (a_1 is negative) in external rather than internal attribution of responsibility. The lower feeling of disappointment later drives consumers' feeling of outcome regret (a_3 is positive) and consequently reduces their intent to spread vindictive nWOM and vindictive complaining. Meanwhile, a comparison of the size of the coefficients of these indirect effects reveals that consumers have a slightly higher inclination toward reducing their vindictive nWOM than vindictive complaining intent.

For the effects of expectations on vindictive nWOM and vindictive complaining, this study found that the bootstrap confidence interval for the indirect effect of disappointment and outcome regret does not contain zero (Table 5.23). This means that consumers feel greater disappointment (a_1 is positive) when they have higher rather than lower expectations of the company. This consequently drives the feeling of outcome regret (a_3 is positive) which later increases their vindictive nWOM and vindictive complaining intentions. Meanwhile, of the size of the coefficients of these indirect effects indicates that consumers show greater intention to spread vindictive nWOM rather than vindictive complaining.

However, the bootstrap confidence interval for the indirect effects of disappointment and outcome regret flowing from responsibility to support-seeking nWOM and problem-

Table 5.22: The mediating effect between responsibility attribution and coping intentions

IV	M1	M2 (Regret)	DV	a1	b1	a2	b2	a3	c'	a1*b1	a2*b2	a1*a3*b2	95% CI	
													Lower	Upper
Responsibility	Disappointment	Outcome	Vindictive nWOM	-.25			.68****	.17***	.45***			-.03	-.08	-.00
Responsibility		Outcome	Vindictive nWOM			.25**	.68****				.17		.06	.32
Responsibility	Disappointment	Outcome	Vindictive complaining	-.25			.45****	.17***	.34*			-.02	-.06	-.00
Responsibility		Outcome	Vindictive complaining			.25**	.45****				.12		.04	.24
Responsibility	Disappointment	Outcome	Support-seeking nWOM	-.25			.19	.17***	-.07			-.00	-.03	.00
Responsibility		Outcome	Support-seeking nWOM			.25**	.19				.05		-.00	.14
Responsibility	Disappointment	Outcome	Problem-solving complaining	-.25			.21	.17***	-.20			-.01	-.04	.00
Responsibility		Outcome	Problem-solving complaining			.25**	.21				.05		-.00	.16
Responsibility	Disappointment	Process	Vindictive nWOM	-.25			.24*	.04	.66****			-.00	-.02	.00
Responsibility		Process	Vindictive nWOM			-.16*	.24*				-.04		-.12	-.00
Responsibility	Disappointment	Process	Vindictive complaining	-.25			-.07	.04	.45**			.00	-.00	.01
Responsibility		Process	Vindictive complaining			-.16*	-.07				.01		-.03	.08
Responsibility	Disappointment	Process	Support-seeking nWOM	-.25			.04	.04	-.02			-.00	-.01	.00
Responsibility		Process	Support-seeking nWOM			-.16*	.04				-.01		-.06	.03
Responsibility	Disappointment	Process	Problem-solving complaining	-.25			.02	.04	.00			-.00	-.00	.01
Responsibility		Process	Problem-solving complaining			-.16*	.02				-.00		-.01	.04

IV: Independent variable

DV: Dependent variable

M1: Mediating variable 1

M2: Mediating variable 2

Bootstrap sample: 5000

Coding= external responsibility="0"; internal responsibility="1"

a1: effect of IV on M1

b1: direct effect of M1 on DV

a2: effect of IV on M2

b2: direct effect of M2 on DV

a3: effect of M1 on M2

****significant at $p < .0001$ *** significant at $p < .001$ ** significant at $p < .01$ * significant at $p < .05$

c': direct effect of IV on DV

solving complaining, and from expectation to support-seeking nWOM and problem-solving

complaining, do contain zero (Table 5.22 and Table 5.23). This is understandable as in the

current context consumers encounter negative outcomes even after being actively involved in

the decision-making process. Therefore, they would be more likely to employ a confrontational coping strategy than a support-seeking coping strategy. Their high compared to low expectation further fuels their hostile intention, which later leads them to employ confrontational rather than support-seeking coping strategies.

This study also found that the bootstrap confidence interval for the specific indirect effects of disappointment and process regret flowing from responsibility to coping intention and from expectation to coping intentions, contains zero (Table 5.22 and Table 5.23). This is reasonable because process regret originates from the low quality of consumers' decision-making process, so it is less likely to drive coping actions that require approaching external entities. Given the preceding results and the accompanying discussions, it is concluded that H10a is supported because disappointment and outcome regret mediate sequentially.

A further analysis of the sequential mediation results reveals that the occurrence of disappointment prior to regret reduces the estimate of the mediating effect on repurchase and coping intentions. This research compares the specific indirect effects that accompany disappointment and regret as sequential mediators with specific indirect effects that only accompany regret as the mediator. Results show that for the effects of responsibility attributions on repurchase intentions, the coefficient of the total specific indirect effect that accompanies disappointment and regret as sequential mediator is lower in magnitude than the one of the indirect effect that only accommodates regret as a mediator (Table 5.21). However, the coefficient of the former is positive and the coefficient of the latter is negative. This is understandable because in the later total specific indirect effects, external attribution compared to internal attribution induces higher outcome regret (a_2 is positive) which later decreases consumers' repurchase intentions. Meanwhile, as indicated earlier in the former total specific indirect effects, external attribution triggers lower disappointment which later

drives consumers' feelings of outcome regret and consequently increases their repurchase intentions. Therefore, for responsibility attributions, the occurrence of disappointment prior to regret reduces the negative effect of regret on repurchase intentions.

For the effects of responsibility attributions on coping intentions, the comparison of the indirect effects shows that the coefficients of the total specific indirect effect that accompanies disappointment and regret as a sequential mediator are also lower in magnitude than the one of the indirect effect that only accommodates regret as a mediator (Table 5.22). Meanwhile, the coefficient of the former is negative and the coefficient of the latter is positive. This is tenable because in the latter total specific indirect effects, external attribution compared to internal attribution induces higher outcome regret (a_2 is positive) which later increases consumers' vindictive nWOM and vindictive complaining intentions. Meanwhile, as indicated previously in the former total specific indirect effects, external attribution triggers lower disappointment which later drive consumers' feeling of outcome regret and consequently reduce their vindictive nWOM and vindictive complaining intentions. Therefore, for responsibility attributions, the occurrence of disappointment prior to regret reduces the negative effect of regret on coping intentions. The negative effect of regret decreases more for vindictive nWOM than for vindictive complaining in this instance (Table 5.22).

For the effects of expectations on repurchase intentions, the comparison of the indirect effects shows that the coefficients of the total specific indirect effect that accompanies disappointment and regret as a sequential mediator are smaller than the one of the indirect effect that only accompanies regret as a mediator (Table 5.21). This shows that consumer inclination to decrease their repurchase intent is lower in the former than in the latter total specific indirect effects. Furthermore, for the effects of expectations on coping intentions, the comparison of the indirect effects shows that the coefficients of the total specific indirect

Table 5.23: The mediating effect between expectation and coping intentions

IV	M1	M2 (Regret)	DV	a1	b1	a2	b2	a3	c'	a1*b1	a2*b2	a1*a3*b2	95% CI	
													Lower	Upper
Expectation	Disappointment	Outcome	Vindictive nWOM	.42**			.68****	.17***	.02			.05	.01	.12
Expectation		Outcome	Vindictive nWOM			.26**	.68****					.18	.06	.33
Expectation	Disappointment	Outcome	Vindictive complaining	.42**			.45****	.17***	.36*			.03	.01	.09
Expectation		Outcome	Vindictive complaining			.26**	.45****					.12	.04	.23
Expectation	Disappointment	Outcome	Support-seeking nWOM	.42**			.19	.17***	.45**			.01	-.00	.06
Expectation		Outcome	Support-seeking nWOM			.26**	.19					.05	-.00	.15
Expectation	Disappointment	Outcome	Problem-solving complaining	.42**			.22	.17***	.09			.02	.00	.06
Expectation		Outcome	Problem-solving complaining			.26**	.22					.06	-.00	.16
Expectation	Disappointment	Process	Vindictive nWOM	.42**			.24*	.04	.20			.00	-.00	.02
Expectation		Process	Vindictive nWOM			-.01	.24*					-.00	-.06	.04
Expectation	Disappointment	Process	Vindictive complaining	.42**			-.08	.04	.47**			-.00	-.02	.00
Expectation		Process	Vindictive complaining			-.01	-.08					.00	-.02	.03
Expectation	Disappointment	Process	Support-seeking nWOM	.42**			.04	.04	.49***			.00	-.00	.01
Expectation		Process	Support-seeking nWOM			-.01	.04					-.00	-.03	.02
Expectation	Disappointment	Process	Problem-solving complaining	.42**			.06	.04	.45**			.00	-.01	.04
Expectation		Process	Problem-solving complaining			-.01	.06					-.00	-.05	.02

IV: Independent variable

DV: Dependent variable

M1: Mediating variable 1

M2: Mediating variable 2

Bootstrap sample: 5000

Coding= high expectation="0"; low expectation="1"

a1: effect of IV on M1

b1: direct effect of M1 on DV

a2: effect of IV on M2

b2: direct effect of M2 on DV

a3: effect of M1 on M2

****significant at $p < .0001$ *** significant at $p < .001$ ** significant at $p < .01$ * significant at $p < .05$

c': direct effect of IV on DV

effect that accompanies disappointment and regret as sequential mediator are also smaller

than the one of the indirect effect that only accommodates regret as a mediator (Table 5.23).

This indicates that consumers intend to spread vindictive nWOM and vindictive complaining is lower in the former rather than in the latter total specific indirect effects. The negative effect of regret reduces more for vindictive nWOM than for vindictive complaining in this instance (Table 5.23). For expectations, therefore, the occurrence of disappointment prior to regret reduces the negative effect of regret on repurchase intentions and coping behaviours. The results presented in the preceding paragraphs reveal that the occurrence of disappointment before regret reduces the negative effect of regret on consumers' repurchase intentions and coping behaviours. Therefore, hypothesis 10b is supported.

This research also tested alternative models such as regret preceding disappointment when testing the sequential mediation in Study 2. However, those competing models were not significant except for the effect of expectation on vindictive nWOM. In particular, disappointment and outcome regret were found to simultaneously mediate the effect of expectation on vindictive nWOM. Furthermore, this thesis did not report the total specific indirect effects flowing from responsibility attribution and from expectation to repurchase intentions and coping behaviours through disappointment. Those specific indirect effects were not significant were therefore omitted.

5.5 Conclusion

This chapter presented the hypotheses, a detailed explanation of the research design, the data analysis, and findings concerning conceptual model 2. This conceptual model demonstrates the effects of responsibility attributions, expectations, and information search in triggering the feeling of disappointment and types of regret, which in turn affects consumers' repurchase intentions and coping behaviours. The hypotheses were derived from theories of

causal attributions, expectations, information search, disappointment, regret, and cognitive appraisals.

This research finds support for all the proposed hypotheses. In particular, Study 2 established that when the consumer's role changes from a passive to an active decision-maker, their attributions of responsibility do not create a difference in their feeling of disappointment after a bad outcome. Meanwhile, their feelings of regret vary; in particular, the attribution of external and internal responsibility for a bad outcome triggers different types of regret. Study 2 also established that when consumers feel that they made a real choice, their higher and lower expectations about a consumption experience trigger disappointment differently. Meanwhile, in this context, it was established that the types of regret are triggered differently by higher and lower expectations unlike the findings of Study 1. In terms of the effects of these emotions on consumers' behavioural responses, Study 2 established that disappointment and regret sequentially affect consumers' repurchase intentions and coping behaviours. Furthermore, the occurrence of disappointment before regret decreases the negative effect of regret on these behaviours.

Study 1 and Study 2 of this research considered external responsibility attribution as a single construct although it can be agent-related and situation-related which may result in different emotional and behavioural reactions after a bad outcome. Furthermore, recent studies on expectation suggested that post-consumption evaluations can be affected according to whether expectations have been stated or unstated prior to consumption. The next study therefore was designed to extend the findings of the earlier studies of this thesis by investigating the effects of these external attributions and types of expectations on consumers' feelings of disappointment and regret, and their behavioural intentions. In addition, Study 1 and Study 2 of this research considered disappointment as a single-dimension construct while

prior literature suggested it to be multidimensional. Therefore, Study 3 took into account the multiple dimensions of disappointment. The following chapter presents Study 3 which was intended to test conceptual model 3.

CHAPTER 6 : STUDY 3

6.1 Introduction

This chapter presents the third experimental study, intended to test the third conceptual model. The aim of this study was to (1) investigate whether different external responsibility attributions and stating of consumption expectations induce the feeling of disappointment and regret differently, and (2) examine how these two emotions impact on consumers' behavioural intentions. This chapter offers a detailed explanation on the third conceptual model along with the hypotheses. Furthermore, it presents a detailed explanation of the experimental design, method and procedure, and analysis of the data produced by this third study.

6.2 Conceptual model 3: Hypotheses

Conceptual model 3 reveals the effects of external responsibility attributions and stating of consumption expectations on triggering various types of disappointment and regret. It also demonstrates the mediating role played by these emotions. Study 3 which tests conceptual model 3 is different from Study 2 in that it focuses on different types of external responsibility attributions. Studies 1 and 2 focus on only one type of external responsibility attribution. Study 3 focuses on the dimension of stating of expectations, while prior studies of this research focus on the dimension of high and low expectation. Study 3 also takes into account the multiple dimensions of disappointment. The details of Study 3 that are presented later in this chapter will further demonstrate the differences between Study 3 and Studies 1 and 2. Study 3 tests two sets of hypotheses which are proposed in conceptual model 3 (Figure 6.1).

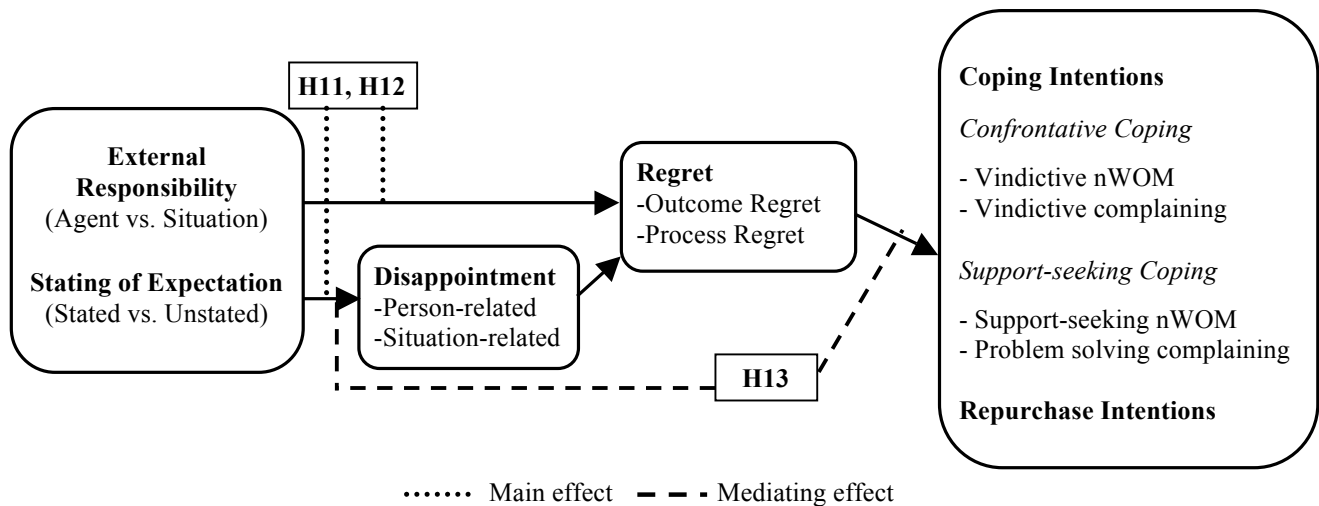


Figure 6.1: Conceptual model 3

The first set of hypotheses address research questions 2 and 3 by proposing that external responsibility attributions and the stating of consumption expectations induce types of disappointment and regret differently after a negative consumption experience. The second set of hypotheses addresses research question 4 by proposing that the types of disappointment and regret induced will sequentially direct consumers' repurchase intentions and coping behaviours. The first and second sets of hypotheses are presented in the following section.

6.2.1 The effect of external responsibility attributions on disappointment and regret

As previously discussed in Chapter 2, disappointment has two dimensions: person-related disappointment and outcome-related disappointment. After a negative consumption experience, consumers may feel outcome-related disappointment, person-related disappointment, or both. Outcome-related disappointment occurs if a consumer feels disappointed due to the negative outcome of an event. It is usually linked to an event-based emotion where the focus is on the situation and its consequences (van Dijk & Zeelenberg, 2002b). On the other hand, person-related disappointment occurs if consumers feel disappointed because of the actions of an external party (van Dijk & Zeelenberg, 2002b).

However, the intensity of the feeling of either person-related disappointment or outcome-related disappointment or both depends on who or what is responsible for the negative consumption experience.

It is predicted that when consumers attribute the responsibility for a negative consumption experience to a third-person (e.g. a provider or employee), they will feel mostly person-related disappointment because they determine that the external party could have prevented the outcome from happening (Frijda et al., 1989; van Dijk & Zeelenberg, 2002b). Indeed, prior research argues that other-person agency and their actions are important in generating person-related disappointment (Zeelenberg, van Dijk, Manstead, et al., 1998). In contrast, when consumers attribute the bad outcome to a situational circumstance, they evaluate it as something that could not have been prevented (van Dijk, Zeelenberg, & van der Pligt, 1998; Zeelenberg et al., 2000; Zeelenberg, van Dijk, Manstead, et al., 1998). Nevertheless, the bad outcome represents a situation of unmet expectations. Consumers' consequent attribution of circumstance agency for such a situation will therefore trigger a high level of outcome-related disappointment as suggested by van Dijk and Zeelenberg (2002b). Hence, this research predicts:

H11a: Compared to situation-related attribution, agent-related attribution induces (a) higher levels of person-related disappointment, and (b) lower levels of outcome-related disappointment.

External individual factors are typically more stable than external environmental factors (Weiner, 1985a). Therefore, when consumers attribute more responsibility for a bad outcome to an external individual than to an external situation, they are likely to characterize the cause as a trait of such external individual (van Dijk & Zeelenberg, 2002b; Zeelenberg et

al., 2000). This consumer perception about that external individual is likely to generate a greater number of counterfactual thoughts regarding the possible superiority of forgone alternatives and the loss of utility from time of purchase to time after purchase. As a result, they will feel greater outcome regret if their attribution is to an external individual than to an external situation.

Consumers perceive lower control over a bad outcome when their attribution is to an external situation rather than to an external individual (van Dijk & Zeelenberg, 2002b; Zeelenberg et al., 2000). They have had a greater opportunity to determine the characteristics of the external individual during the decision-making process. They were in control of their decision and are therefore likely to feel that the negative outcome could have been avoided if they had decided differently. The perceived superiority of alternative decision processes is likely to be greater in this instance. As a result, consumers will experience greater process regret in case of an external individual attribution than in the case of an external situational attribution. Hence, this research hypothesizes that:

H11b: Compared to situation-related attribution, agent-related attribution induces (a) higher levels of outcome regret, and (b) higher levels of process regret.

6.2.2 The effect of stated vs. unstated expectation on disappointment and regret

Prior research finds that if individuals are asked to explicitly state their expectations prior to an experience, they evaluate the experience more negatively than when they are not explicitly asked to do so (Ofir & Simonson, 2001). This is because they focus more on the negative aspects of the experience when they are asked to evaluate it (Ofir & Simonson, 2001, 2007). However, this research proposes that if the experience itself is negative, independent of the effect of stated versus unstated expectation as suggested by Ofir and Simonson (2007),

then stated vs. unstated prior expectations may work differently at the post-consumption evaluation stage.

When consumers are asked to explicitly state their expectations prior to experiencing a consumption experience, they process the available surrounding cues more alertly, resulting in the formation of a more concrete expectation (Bettman, Luce, & Payne, 1998). In contrast, when consumers are not asked to indicate their expectations, they may still form expectations but their expectations may less accurately reflect prospective likely outcomes- because they may pay less attention to the available surrounding cues such as price or reputation of the company. In such instances, they may retrieve additional cues from memory, such as past experience and normative standards. Because people tend to be optimistic in their personal prediction and have a positive orientation towards the world with respect to consumption experience (McCracken, 1988; Taylor & Shepperd, 1998), bringing in these additional cues may result in heightened expectations compared to those who overtly state their expectations. Consequently, if consumers experience a negative outcome, then higher initial expectations increase the likelihood of a mismatch between initial expectations and actual performance for those who did not state their expectations. This effect is then likely to lead to greater feelings of disappointment. Person- and outcome-related disappointment are both likely to be affected by stated and unstated expectations and in equal amounts, because these disappointments are likely to occur after expectations have been disconfirmed as well as when consumers produce specific responsibility attributions (i.e., external party, external environment) for the negative outcome (van Dijk & Zeelenberg, 2002b). This research thus proposes that:

H12a: After encountering a negative consumption experience, consumers will experience (a) equal levels of person-related disappointment, and (b) equal levels of

outcome-related disappointment regardless of whether they stated or did not state their expectations of consumption.

If expectations are not met, counterfactuals are produced which in turn trigger the feeling of regret (Huang & Tseng, 2007; Huang & Zeelenberg, 2012; Lin et al., 2006). This research therefore proposes that in relation to regret, consumers who did not state their expectations are likely to produce more counterfactuals than those who did state their expectations, because the violation of heightened expectations owing to a greater mismatch between expectations and actual performance is likely to trigger more counterfactuals in unstated than in stated prior expectations. This effect results in greater feelings of regret. Meanwhile, the greater mismatch is likely to trigger a higher number of counterfactuals about the superiority of the forgone alternatives and the loss of utility since the time of purchase. This consequence leads to greater feelings of outcome regret.

The process dimensions of regret (i.e., the under- and over-consideration of resources) are not likely to be affected differently by stated and unstated expectations, because process regret originates from consumers reflecting on their own decision-making process, for which expectations are less relevant, regardless of whether they are stated or unstated. This research thus proposes:

H12b: After encountering a negative consumption experience, compared to consumers who did state their expectation, consumers who did not state their expectation of the consumption will experience (a) greater outcome regret and (b) equal levels of process regret.

6.2.3 The mediating effects

This research argued and found support in Study 1 and Study 2 for the proposal that disappointment and regret act in sequence when directing consumers' repurchase intentions and coping behaviours after a bad outcome (Zeelenberg, van Dijk, Manstead, et al., 1998). In particular, consumers first experience disappointment due to the mismatch between expectation and performance, followed by further detailed assessments such as 'if I had chosen the other options, things could have been better'. Counterfactuals such as these are likely to lead to feelings of regret about the outcome and the decision process the consumer followed. Meanwhile, external responsibility attributions and stated and unstated expectations are likely to differently trigger the types of disappointment and regret (H11 and H12), so variations are expected when these emotions emerge sequentially through the cognitive appraisal process and affect the repurchase intentions and coping behaviours.

As disappointment and regret types are triggered differently by external responsibility attributions (H11), they are likely to influence repurchase intentions and coping behaviours sequentially. In particular, person-related disappointment and outcome regret, and outcome-related disappointment and outcome regret, can occur sequentially. Meanwhile, although process regret is predicted to be triggered by external responsibility attributions [H11b (b)], by nature it contains a self-attribution component. As process regret is related to consumers' own decision-making processes (Pieters & Zeelenberg, 2005), person-related disappointment and process regret are less likely to occur sequentially. Outcome-related disappointment and process regret can both be triggered through other than agent-related external attributions (Pieters & Zeelenberg, 2005; van Dijk & Zeelenberg, 2002b; van Dijk et al., 1998). Therefore, outcome-related disappointment and process regret can probably occur sequentially.

Since the stating of expectations is not liable to influence how types of disappointment are triggered (H12a), this research does not expect any sequential mediation by the multiple types of disappointment and regret. Hence, this research proposes:

H13a: Disappointment precedes regret and the two emotions in sequence mediate the effect of external responsibility attributions on repurchase intentions and coping behaviours.

Emotions are episodes that may involve continuous and recursive changes in a number of organismic subsystems or components (Moors et al., 2013), so changes in one emotion can feed back to other emotions (e.g., Ellsworth, 1991; Lazarus, 1991a, 1991b; Scherer, 2009). This research thus predicts that the presence of different types of disappointment (i.e. agent-related, outcome-related) prior to the types of regret (i.e. outcome regret, process) will reduce the negative effect of regret types on repurchase intentions and coping behaviours. Prior research suggests that a fact-based judgment rests primarily on known or assumed factual information derived from actual people or events/situations while simulation-based judgment is fundamentally derived from supposition, conjecture and imagination (Davies & Stone, 1995; Kahneman & Tversky, 1982). Therefore, the presence of realistic or fact-based comparisons (e.g. expectations and perceived performance) can reduce the negative effect of relatively less realistic or simulation-based comparisons (e.g. perceived performance and counterfactual performance of non-chosen alternatives) on repurchase intentions and coping behaviours. This research therefore predicts:

H13b: The presence of disappointment prior to the feeling of regret decreases the negative effect of regret on repurchase intentions and coping behaviours.

6.3 Testing conceptual model 3 & the hypotheses: Scenario-based experiment

As noted earlier, in order to test conceptual model 3 and the relevant hypotheses, a scenario-based experiment was used. The details of the hypotheses used to test conceptual model 3 were presented in the preceding section. The following sub-sections provide the details of Study 3, especially the independent variables, type of experimental design used, and questionnaire used to collect the data for Study 3.

6.3.1 Independent variables

There are two independent variables in conceptual model 3:

1. *External responsibility attributions*: these are the external factors that are responsible for the negative consumption experience. This has two treatment levels: agent-external attribution and situation-external attribution.
2. *Stating status of expectations*: indicates whether consumers state their expectations before the consumption experience, which has two treatment levels: Unstated (e.g. consumers do not state their expectations prior to consumption) and Stated (e.g. consumers do state their expectations prior to consumption).

6.3.2 Type of experimental design

The experimental research is designed to test conceptual model 3 has two independent variables with two treatment levels each. The subjects of the study responded to questions that were relevant to only one experimental condition. All combinations of all levels of all independent variables were considered in Study 3. This implies a 2 (external responsibility attributions: agent vs. situation) by 2 (expectations: stated vs. unstated) between-subjects full factorial design. This resulted in 4 experimental conditions, which are presented in Table 6.1.

Table 6.1: Experimental design for conceptual model 3

Condition	Responsibility	Expectation
1	Agent	Stated
2		Unstated
3	Situation	Stated
4		Unstated

6.3.3 Study subjects and sampling procedure

The sampling procedure and criteria for Study 3 are similar to those of Studies 1 and 2. A US-based online research panel was used to collect the data for Study 3. For every experimental condition, this study aimed to recruit at least 25 sampling units. Thus, for 4 experimental conditions, the minimum requirement for the sampling units was at least $4 * 25 = 100$. Similar to Studies 1 and 2, this study also randomized the distribution of the questionnaire among respondents to increase the internal validity of the experiment. The ‘Qualtrics’ survey research tool was used to perform the task of randomization in Study 3.

6.3.4 Research questionnaire of Study 3

The following sub-sections present different sections of the research questionnaire of Study 3. However, the questionnaire and scenario used in Study 3 is similar to Study 2. In particular, from section A (i.e. opening information and warm-up questions) to section D (scenario related to holiday purchase) this study used same content as used in Study 2. Except there was no manipulation regarding respondents’ a) expectations by varying the information of the travel providers; b) information search behaviour by varying the volume of information presented to the respondents about the travel provider. Otherwise, the order of the sub-sections as presented below is of the order as shown to the respondents while participating in

the experiment. To avoid repetition of Study 2, the section that is new and relevant in Study 3 is only presented in the following.

6.3.4.1 Section D: Scenario related to buying the holiday

6.3.4.4.1 Manipulation of expectations and its checks

Immediately after selecting the holiday provider, making the booking and payment, the respondents were presented with the manipulation of stating their consumption expectation. In the stated expectation condition, the respondents are presented with the question as shown in Table 6.2. The bipolar scaled question directly asks for the respondents’ expectations of the holiday purchase from this travel provider. An open-ended statement asking respondents to write the reasons for their rating of the expectation manipulation check question follows this. Meanwhile, in the unstated expectation condition, the respondents are not asked any of the questions shown in Table 6.2. The presence/absence of the expectation-related questions served as the manipulation check for the current investigation.

Table 6.2: Questions asked in the stated expectation condition

Expectation:
<ol style="list-style-type: none"> 1. What would be the couple’s level of expectation regarding their choice? ^a 2. What are the reasons for your answer to the previous questions? ^b

^a measured on a 5-point bipolar scale 1 = Low, 5 = High

^b open ended statement

6.3.4.2 Section E: The holiday experience

The story that reveals the respondents’ actual holiday experience are presented right after their exposure to the manipulation of stating their expectations. The hypothetical story that reveals respondents’ holiday experience is presented in Table 6.3.

Table 6.3: The holiday experience

THE HOLIDAY EXPERIENCE

You arrive at the holiday destination. Later you discover that the hotel is not like the 4**** hotel that you have stayed before. This hotel barely meets 3*** criteria.

You return from the holiday without feeling refreshed and relaxed.

6.3.4.2.1 Measures of dependent variable: Disappointment

The respondents' feeling of overall disappointment is measured right after their exposure to the actual holiday experience by adapting two items from Zeelenberg and Pieters (2004). This study used these same measures in Studies 1 and 2. Although Study 3 measures overall disappointment but it did not formulate any hypothesis regarding this. This is due to the study's focus on exploring the effect on types of disappointment.

6.3.4.2.2 Manipulation of external responsibility attribution

The respondents are presented with the manipulation of external responsibility attribution when they have finished answering the questions about the feeling of overall disappointment. This research creates this manipulation solely for the current investigation (Table 6.4).

Table 6.4: External responsibility manipulation

Your reflection on the holiday experience.....
Agent Responsible Condition
<i>You search for more information online and find that the pictures of the hotel do not match the pictures posted on the travel provider's website.</i>
<i>You also come across a new media report that indicates online travel providers make misleading claims.</i>
Situation Responsible Condition
<i>You search for more information online and find that the company responsible to update the travel provider website had a computer problem due to extreme weather conditions including lightning.</i>
<i>This resulted in displaying inaccurate pictures and information on the travel provider website on the day you made your holiday booking.</i>

6.3.4.3 Section F: Types of disappointment, regret and repurchase intention as the dependent variables

This section measures respondents' feeling the various types of disappointment, overall regret and their repurchase intentions. This study developed a single item each for measuring the respondents' agent- and outcome-related disappointment (Table 6.5).

Meanwhile, from Zeelenberg and Pieters (2004), this study adapted the measures of overall regret (Table 6.5). Consumers' repurchase intentions were measured through a single item that was developed for this investigation (Table 6.5).

Table 6.5: Measure of types of disappointment, regret, and repurchase intention

Types of disappointment ^a: (Newly developed)
Please rate your agreement with the following items, considering your bad holiday experience
<ol style="list-style-type: none"> 1. My disappointment is primarily related to online travel provider. 2. My disappointment is primarily related to the circumstance that is beyond the control of the travel provider.
Regret ^{b, c}: (Zeelenberg & Pieters, 2004)
Please answer the following questions by checking the option that best represents your answer.
<ol style="list-style-type: none"> 1. How much regret do you feel over your choice? ^b 2. How bad do you judge your decision to choose this travel provider? ^c
Repurchase intention ^d: (Newly developed)
<ol style="list-style-type: none"> 1. What is your likelihood of purchasing from this travel provider again?

^a Measured on a 5-point Likert scale labelled as 1 = Strongly disagree, 5 = Strongly agree

^b Measured on a 5-point scale labelled as 1 = None, 5 = Very much

^c Measured on a 5-point scale labelled as 1 = Not at all bad, 5 = Very bad

^d Measured on a 5-point scale labelled as 1 = Very unlikely, 5 = Very likely

6.3.4.4 Section G: Manipulation checks of external responsibility attribution

When the respondents finished responding to some of the dependent variables (i.e. types of disappointment, overall regret and repurchase intention), the manipulation check questions about external responsibility attribution were presented (Table 6.6). These manipulation checks were developed primarily for Study 3. Two items were developed while one item was reverse-coded so that an index could be established to check the manipulation of external responsibility attribution. An open-ended statement asking the respondent to write

the reasons for their rating of the external manipulation check measure followed the external responsibility attribution manipulation check items. This was done expressly to explore respondents' thoughts when answering the manipulation check items.

Table 6.6: Manipulation check measures of external responsibility attribution

External responsibility attributions ^a: (Newly developed)
<i>The following statements and questions concern the causes of your holiday experience. Please think about your holiday experience and select the option that most closely corresponds to how you feel about it.</i>
<ol style="list-style-type: none"> 1. The bad holiday experience is ^a: 2. The bad holiday experience is ^b: 3. Please write down the reasons behind your answers to the previous questions ^c

^a Measured on a 5-point scale labelled as 1 = Not at all caused by the online travel provider, 5 = Very much caused by the online travel provider

^b Measured on a 5-point scale labelled as 1 = Not at all caused by the circumstances beyond the control of the travel provider, 5 = Very much caused by the circumstances beyond the control of the travel provider.

^c Open ended statement

6.3.4.5 Section H: Outcome & process regret as the dependent variables

The participants responded in terms of their feelings of outcome and process regret in this section of the questionnaire. To measure outcome and process regret, this study adapted 8 items each from Lee and Cotte (2009). These same measures were used in Studies 1 and 2. Similar to these earlier studies, 4 out of 8 items that measured respondents' feeling of process regret were reverse-coded as these 4 items (i.e. regret due to over-consideration) measured just the opposite of what the other 4 items (i.e. regret due to under-consideration) measured. Appendix 3 presents the measures of outcome and process regret.

6.3.4.6 Section I: Coping intentions as the dependent variable

In this section of the questionnaire, the respondents responded to questions related to their coping intentions. This study used the same coping intention measures as those used in Study 1 and Study. Appendix 3 presents the coping intention measures that were used in Study 3.

6.3.4.7 Section J & K: Task checks & demographics

The respondents' perception of the given tasks and some demographic data are collected in these sections. Appendix 3 presents the items that measure respondents' perception about the experimental task used in Study 3. The demographic information collected for Study 3 included the respondents' age, gender, and English language status. The details of Study 3 questionnaire are provided in Appendix 3.

6.4 Conceptual model 3: Data analysis and findings

This section presents the data analysis and findings of Study 3 after describing the data collection procedures including sample characteristics, factor analysis results for testing the reliability and validity of some of the measurement scales, and results of manipulation checks.

6.4.1.1 Pre-testing the questionnaire

Similar to the earlier studies of this research, the final draft of the Study 3 questionnaire underwent two-stages of pre-tests prior to the main data collection. Comprehension and flow analysis were conducted to increase the content and face validity of the questionnaire in the first stage of the pre-tests. Both academics and non-academics were asked to respond to a paper-based questionnaire. This study collected respondents' feedback about comprehensibility, flow, and the timing of the questionnaire. They suggested several minor changes to the questionnaire. It took on average 18 minutes for them to complete the

survey which, they acknowledged, was not lengthy. The second-phase of the pre-testing included an online survey to further assess the timing, reliability, validity of the constructs and other possible shortcomings if there is any. A sample of 80 respondents was recruited from an online research panel and the survey was distributed by using the online research tool ‘Qualtrics’. It took on average 15 minutes for the respondents to complete the survey.

6.4.1.2 Data collection, data cleaning, and sample characteristics

For Study 3, 180 panel members were recruited from a US-based online research panel. Fifteen respondents did not complete the survey, which resulted in a completion rate of 91 percent, leaving 165 completed survey questionnaires. Respondents took an average of 14 minutes that is close to the results obtained in the pre-tests. Similar to the earlier studies, several strategies were used to clean the data including the subjects with too many repetitions in their ratings on different measures, taking too short (e.g. 3 minutes or less) or too long (e.g. 40 minutes or more) a time to complete the survey, or having too many missing values in the responses. This resulted in the removal of a further 9 participants (around 5%) resulting in 156 respondents (44% males and 56% females) for the main data analysis. The respondents’ distribution across the 4 experimental conditions for Study 3 is presented in Table 6.7. Table 6.8 presents the sample demographics and respondents’ degree of familiarity with online shopping in Study 3.

Table 6.7: Distribution of respondents among conditions

Responsibility Attribution	Expectation	n
Agent	Stated	37
	Unstated	46
	Total	83
Situation	Stated	40
	Unstated	33
	Total	73

Table 6.8: Sample demographics and familiarity with online shopping

Sample Demographics	Categories	Percentage (N=156)
Gender	Male	44
	Female	56
Age	18-25	29
	26-35	34
	36-45	14
	46-55	17
	56-65	5
	66 and above	1
English language status	Native	94
	Non-native	6
Online Shopping	Categories	Percentage (N=156)
Frequency of online shopping	More than once a month	57
	Once a month	19
	Once every 3-6 months	16
	Once a year	7
	Never	1

6.4.1.3 Testing the reliability and validity of the measurement items

Similar to Studies 1 and 2, this study primarily used Cronbach Alpha (Cronbach, 1951) to test the reliability of the items measuring the dependent variables. To reconfirm the

dimensionality of outcome and process regret, Study 3 also used Exploratory Factor Analysis (EFA).

The correlation matrix that includes the outcome and process regret measures was assessed first in the EFA and the correlations among the items measuring the respective factor were found significant at above .30. This represents the adequacy of correlations among the variables to produce the representative factors (Hair et al., 2012). Study 3 used Principal Component Analysis and Varimax as the extraction and rotation methods. The KMO measure of sampling adequacy was found to be .85 (Kaiser, 1974); Bartlett's test of sphericity was also significant ($p < .0001$) (Bartlett, 1954). Thus, the data was found to be appropriate for further analysis.

Table 6.9: Factors loadings for outcome and process regret measures

Factor	Outcome regret due to forgone alternatives ($\alpha = .84$)	Outcome regret due to change in the significance ($\alpha = .91$)	Process regret due to under- consideration ($\alpha = .87$)	Process regret due to over- consideration ($\alpha = .90$)
*OR_FA 4	.842			
OR_FA 1	.784			
OR_FA 3	.725			
OR_FA 2	.594			
**OR_SC 3		.882		
OR_SC 4		.875		
OR_SC 2		.871		
OR_SC 1		.731		
***PR_UC 3			.908	
PR_UC 4			.904	
PR_UC 2			.893	
PR_UC 1			.533	
****PR_OC 1				.886
PR_OC 3				.881
PR_OC 2				.880
PR_OC 4				.871

*OR_FA = Outcome regret due to forgone alternatives

**OR_SC = Outcome regret due to change in significance

***PR_UC = Process regret due to under-consideration

****PR_OC = Process regret due to over-consideration

Four factors were extracted with eigenvalues greater than one. These factors explained 75 percent of the variance in the data (Goursuch, 1983). The rotated component matrix with factor loadings of above .40 is shown in Table 6.9 for Study 3. Almost all factor loadings were found to be over .60 and almost all communalities were greater than .50. This indicated the validity of the measures for Study 3.

Next the reliability of these regret dimensions was assessed again when assessing the reliability of the measures of the other dependent variables of Study 3. This was done by using Cronbach Alpha. Similar to the earlier studies of this research, Study 3 consider the Cronbach Alpha level of .70 and above as an acceptable scale for measuring the respective dependent variables. Meanwhile, the third item of the vindictive complaining measure was found to have very low correlations with the other items. The deletion of this item increased the reliability value (Cronbach Alpha) substantially so, like the other previous studies, the third item was deleted for Study 3. As presented in Table 6.10, all measurement scales for Study 3 were acceptable.

Table 6.10: Reliability of the measurement scales

Name of the summated scale	Study 3 (α)
Outcome regret	.90
Process regret	.80
Vindictive nWOM	.85
Vindictive complaining	.87
Support-seeking nWOM	.86
Problem-solving complaining	.91

6.4.1.4 Manipulation checks

6.4.1.4.1 Manipulation check of external responsibility attribution

The mean external responsibility attribution index for agent and situation-related external responsibility attribution is presented in Figure 6.2.

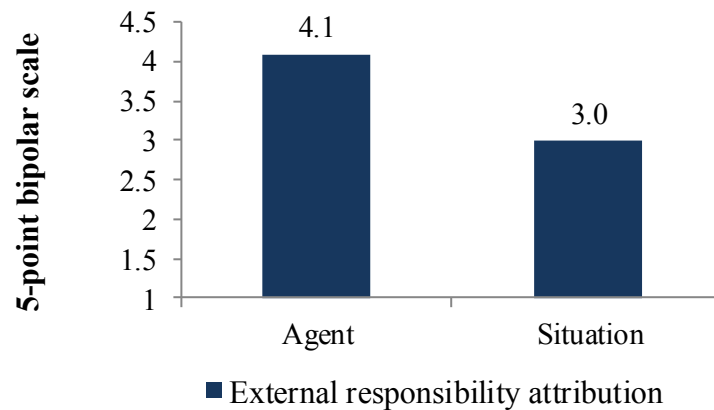


Figure 6.2: Manipulation check for external responsibility attribution

A one-way ANOVA was performed to check whether the manipulation of external responsibility attribution differentiated between agent and situation-related attribution in the intended way. The test results showed that the mean external responsibility attribution score was significantly higher in agent-related attribution than in situation-related attribution ($M_{Agent} = 4.1$, $M_{Situation} = 3.0$; $F(1, 154) = 69.67$, $p < .0001$) (Figure 6.2). This confirmed the manipulation of external responsibility attribution. Furthermore, when respondents provided the reasons for their rating in agent and situation-related external responsibility attribution conditions, they respectively mentioned the travel provider's responsibility and the situation's responsibility for the bad outcome.

6.4.1.4.2 Manipulation check of expectations

As stated previously, the design of Study 3 served the manipulation check of stating the expectation. In particular, the respondents in the stated expectation condition received the question asking about their expectations of the holiday that they booked with the travel provider. In contrast, the respondents in the unstated expectation condition did not receive any such question. Hence, no further manipulation check measure was required to check the manipulation of stating of expectations.

6.4.1.5 Task checks

One-sample t-tests results with a test value of 3 indicated the appropriateness of the tasks used in Study 3: the scenario was found to be highly realistic ($M=3.87$, $t=49.71$, $df=155$, $p<.001$) and highly relatable ($M=4.30$, $t=70.96$, $df=155$, $p<.001$). This confirmed that the respondents found the tasks appropriate.

6.4.1.6 Testing the hypotheses

6.4.1.6.1 Effects of external responsibility attributions

The mean person- and outcome-related disappointment, outcome and process regret index triggered by external responsibility attribution in Study 3 is presented in Figure 6.3 and Figure 6.4.

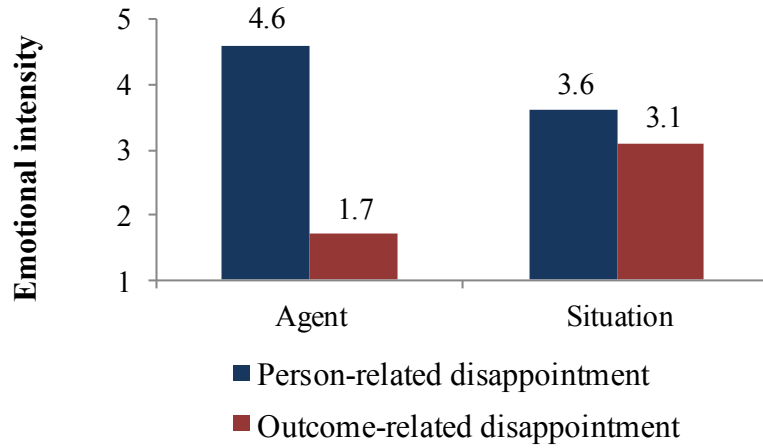


Figure 6.3: Effect of external responsibility attributions on disappointment

A one-way ANOVA of the effect of external responsibility attribution on person-related disappointment showed that person-related disappointment was significantly higher in the agent-related external responsibility attribution condition than in the situation-related external responsibility attribution condition ($M_{Agent} = 4.6$, $M_{Situation} = 3.6$; $F(1, 154) = 61.73$, $p < .0001$). Furthermore, a one-way ANOVA of the effect of external responsibility attribution on outcome-related disappointment showed that outcome-related disappointment is significantly lower in the agent-related external responsibility attribution condition than in the situation-related external responsibility attribution condition ($M_{Agent} = 1.7$, $M_{Situation} = 3.1$; $F(1, 154) = 63.87$, $p < .0001$) (Figure 6.3). Therefore, H11a is supported.

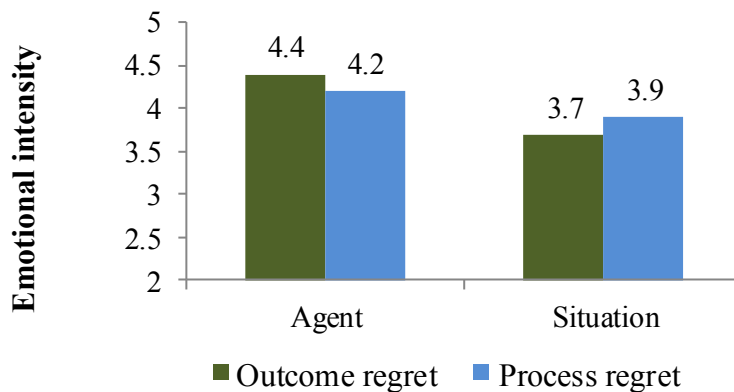


Figure 6.4: Effect of external responsibility attributions on regret

In this study, the effect of external responsibility attributions on regret types is predicted in H11b. As expected a one-way ANOVA of the effect of external responsibility attributions on outcome regret showed that outcome regret is significantly higher in the agent-related external responsibility attribution condition than in the situation-related external responsibility attribution condition ($M_{Agent} = 4.4$, $M_{Situation} = 3.7$; $F(1, 154) = 38.65$, $p < .0001$). Another one-way ANOVA of the effect of external responsibility attribution on process regret showed that process regret is significantly higher in the agent-related external responsibility attribution condition than in the situation-related external responsibility attribution condition ($M_{Agent} = 4.2$, $M_{Situation} = 3.9$; $F(1, 154) = 8.24$, $p < .01$) (Figure 6.4). Hence, H11b is supported.

6.4.1.6.2 Effects of expectations

In hypothesis 12a, this study predicted the effects of expectations on types of disappointment. As expected, a one-way ANOVA of the effect of stated vs. unstated expectations on person-related disappointment showed that there was no difference in person-related disappointment between stated and unstated expectations ($M_{Stated\ expectation} = 4.1$, $M_{Unstated\ expectation} = 4.2$); $F(1, 154) = 0.58$, $p > .4$) (Figure 6.5). Another one-way ANOVA of the effect of stated and unstated expectations on outcome-related disappointment showed that, there was no difference in outcome-related disappointment between stated and unstated expectations ($M_{Stated\ expectation} = 2.5$, $M_{Unstated\ expectation} = 2.2$); $F(1, 154) = 2.32$, $p > .13$), which is also as expected (Figure 6.5). Therefore, hypothesis 12a is supported.

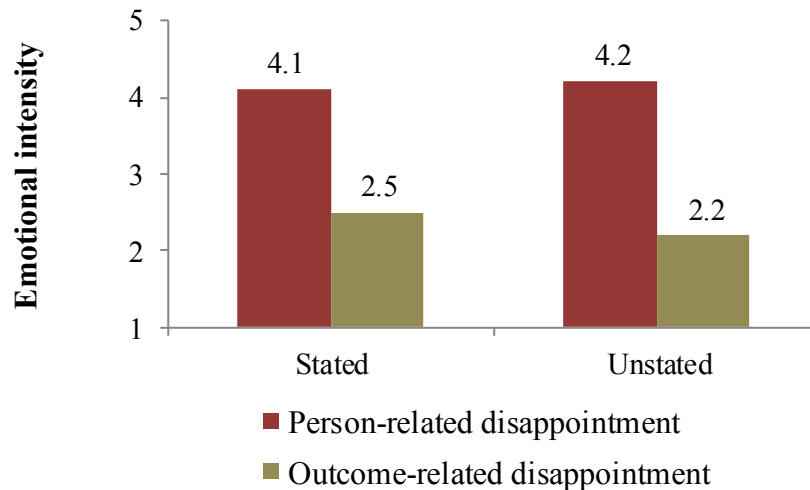


Figure 6.5: Effect of expectations on disappointment

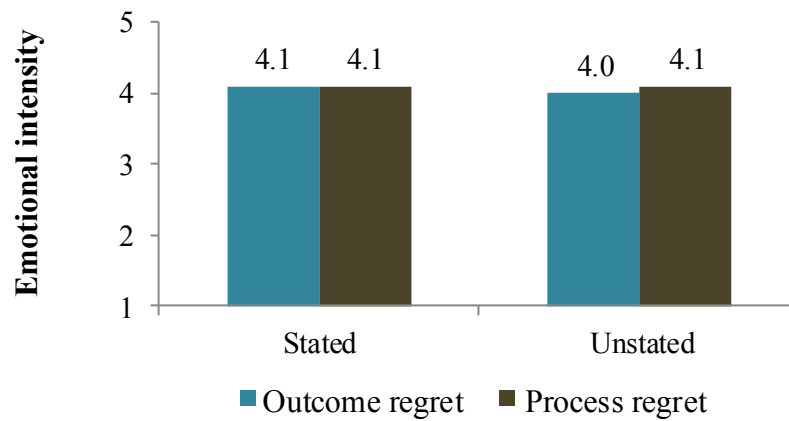


Figure 6.6: Effect of expectations on regret

This study predicted the effects of stated and unstated expectations on consumers' feelings of different types of regret in hypothesis 12b. A one-way ANOVA of the effect of stated and unstated expectation on outcome regret showed that there is no difference in outcome regret between the stated and unstated expectation conditions ($M_{\text{Stated expectation}} = 4.1$, $M_{\text{Unstated expectation}} = 4.0$); $F(1, 154) = 0.50$, $p > .4$) (Figure 6.6). This is contrary to the prediction of this study. Meanwhile, as expected, a one-way ANOVA of the effect of stated and unstated expectation on process regret showed that there was no difference in process

regret between the stated and unstated expectation conditions ($M_{\text{Stated expectation}} = 4.1$, $M_{\text{Unstated expectation}} = 4.1$); $F(1, 154) = 0.19$, $p > .6$) (Figure 6.6). Therefore, H12b is not supported.

6.4.1.6.3 Additional analysis

Although this study did not formulate any hypothesis about the effect of external responsibility attributions and stated vs. unstated expectations on consumers' feelings of overall disappointment and regret due to its focus on the types of these two negative emotions, it had measures in place to explore such effects. Therefore, some additional analyses were conducted. A one-way ANOVA of the effect of external responsibility attributions on overall disappointment showed that overall disappointment was marginally higher in the agent-related external responsibility attribution condition than in the situation-related external responsibility attribution condition ($M_{\text{Agent}} = 4.3$, $M_{\text{Situation}} = 4.0$; $F(1, 154) = 3.00$, $p < .10$). Another one-way ANOVA of the effect of external responsibility attribution on overall regret showed that overall regret was significantly higher in the agent-related external responsibility attribution condition than in the situation-related external responsibility attribution condition ($M_{\text{Agent}} = 4.4$, $M_{\text{Situation}} = 3.6$; $F(1, 154) = 34.91$, $p < .0001$).

Furthermore, a one-way ANOVA of the effect of stated and unstated expectations on overall disappointment showed that overall disappointment was significantly higher in the unstated expectation condition than in the stated expectation attribution ($M_{\text{Unstated expectation}} = 4.3$, $M_{\text{Stated expectation}} = 3.9$); $F(1, 154) = 7.27$, $p < .01$). Another one-way ANOVA of the effect of expectation on overall regret showed that overall regret was marginally higher in the unstated expectation condition than in the stated expectation condition ($M_{\text{Unstated expectation}} = 4.2$, $M_{\text{Stated expectation}} = 3.9$); $F(1, 154) = 3.23$, $p < .08$). These results suggested a similar pattern of the effects of stated and unstated expectations on disappointment and regret as predicted in the proposed hypotheses.

6.4.1.7 Testing the mediating effects

Hypothesis 13a predicted that the disappointment and regret types sequentially mediate the effect of external responsibility attributions on repurchase and coping intention behaviours. Similar to other studies of this research Study 3 used model 6 of Hayes PROCESS Macro (Hayes, 2013) to explore this sequential multiple mediator model. This study also predicted in hypothesis 13b that the presence of the types of disappointment before the types of regret will reduce the effect of regret types on repurchase intentions and coping behaviours. The following section presents the results of mediation analysis.

6.4.1.7.1 The mediating effects of types of disappointment and regret

This study investigated the presence of conditional indirect effects of external responsibility attributions on repurchase and coping intentions in H13a. In these relationships, the conditions imply that the types of disappointment and regret sequentially mediate the relationships. In addition, in H13b, this study investigated whether the occurrence of disappointment types prior to regret types reduces the effect of regret types on repurchase intentions and coping behaviours.

To test the sequential mediation, this study needed to examine the indirect effects that accompany both disappointment and regret types. The confidence intervals of these specific indirect effects need to be investigated to see whether or not they contain any zero. If they do not contain zero, then it can be claimed that sequential mediation exists in the posited relationships. Table 6.11 and Table 6.12 present the results of the sequential mediation tests. This study presents only the specific indirect effects that are relevant to the hypotheses.

For the effects of external responsibility attributions on repurchase intentions, the bootstrap confidence intervals for the specific indirect effects of person-related

disappointment and outcome regret do not contain zero (Table 6.11). Furthermore, the bootstrap confidence intervals for the specific indirect effects of situation-related disappointment and outcome regret and situation-related disappointment and process regret do not contain zero (Table 6.11). Meanwhile, the bootstrap confidence interval for the specific indirect effects of person-related disappointment and process regret contain zero (Table 6.11). This is understandable as it is argued in the earlier studies of this research that process regret is less aligned with future buying behaviour. However, as argued previously, due to higher alignment with outcome-related disappointment, outcome-related disappointment and process regret sequentially direct consumers' repurchase intentions. Hence, Study 3 found support for sequential mediation as disappointment and regret types mediate sequentially.

Table 6.11: The mediating effect on repurchase intention

IV	M1 (Disappoint- ment)	M2 (Regret)	DV	a1	b1	a2	b2	a3	c'	a1*b1	a2*b2	a1*a3*b2	95% CI	
													Lower	Upper
Responsibility	Person	Outcome	Repurchase	1.09****			-.51****	.23**	-.27*			-.13	-.27	-.05
Responsibility		Outcome	Repurchase			.45***	-.51****				-.23		-.42	-.10
Responsibility	Person	Process	Repurchase	1.09****			-.37***	.23**	-.43**			-.03	-.10	.02
Responsibility		Process	Repurchase			.22	-.37***				-.08		-.22	-.00
Responsibility	Outcome	Outcome	Repurchase	-1.37****			-.50****	-.12*	-.23			-.08	-.21	-.00
Responsibility		Outcome	Repurchase			.54***	-.50****				-.27		-.47	-.13
Responsibility	Outcome	Process	Repurchase	-1.37****			-.35****	-.11*	-.45**			-.05	-.14	-.01
Responsibility		Process	Repurchase			.14	-.35****				-.05		-.16	.02

IV: Independent variable

DV: Dependent variable

M1: Mediating variable 1

M2: Mediating variable 2

Bootstrap sample: 5000

Coding= agent responsibility attribution="0"; situation responsibility attribution="1"

a1: effect of IV on M1

b1: direct effect of M1 on DV

a2: effect of IV on M2

b2: direct effect of M2 on DV

a3: effect of M1 on M2

****significant at $p < .0001$

*** significant at $p < .001$

** significant at $p < .01$

* significant at $p < .05$

c': direct effect of IV on DV

Table 6.12 presents the results of the effects of external responsibility attributions on consumers' coping intentions. For the specific indirect effects of external responsibility attributions on vindictive nWOM and problem-solving complaining, Study 3 found that the bootstrap confidence interval for the specific indirect effects of person-related disappointment and outcome regret do not contain zero. These results indicate that consumers feel a higher level of person-related disappointment (a_1 is positive) in external agents than in external situation-related attribution which later drives their feeling of outcome regret (a_3 is positive). This then encourages consumers to engage in vindictive nWOM and problem-solving complaining. Meanwhile, of the size of the coefficients of these indirect effects indicates that consumers show higher intent to engage in vindictive nWOM rather than problem-solving complaining.

Study 3 also finds that the specific indirect effects of outcome-related disappointment and outcome regret on the coping intentions except vindictive complaining do not contain zero (Table 6.12). This means that consumers feel less outcome-related disappointment (a_1 is negative) when they attribute the responsibility to an external agent rather than the situation. This further reduces consumers' feeling of outcome regret (a_3 is negative) and later drives their coping intentions except for vindictive complaining intentions. However, of the size of the coefficients of these indirect effects indicates that consumers' show higher intent to spread vindictive nWOM than problem-solving complaining and vindictive complaining.

Table 6.12: The mediating effect between external attribution and coping intentions

IV	M1 (Disappoint- ment)	M2 (Regret)	DV	a1	b1	a2	b2	a3	c'	a1*b1	a2*b2	a1*a3*b2	95% CI	
													Lower	Upper
Responsibility	Person	Outcome	Vindictive nWOM	1.09****			.45****	.23***	.80****			.11	.05	.23
Responsibility		Outcome	Vindictive nWOM			.46***	.45****				.20		.08	.40
Responsibility	Person	Outcome	Vindictive complaining	1.09****			.06	.23***	.23			.01	-.04	.09
Responsibility		Outcome	Vindictive complaining			.46***	.06				.03		-.07	.16
Responsibility	Person	Outcome	Support-seeking nWOM	1.09****			.18	.23***	.19			.05	-.01	.15
Responsibility		Outcome	Support-seeking nWOM			.46***	.18				.08		-.02	.24
Responsibility	Person	Outcome	Problem-solving complaining	1.09****			.30*	.23***	-.33			.08	.02	.19
Responsibility		Outcome	Problem-solving complaining			.46***	.30*				.13		.03	.32
Responsibility	Outcome	Outcome	Vindictive nWOM	-1.37****			.45****	-.12*	.68****			.07	.00	.19
Responsibility		Outcome	Vindictive nWOM			.54***	.45****				.25		.11	.43
Responsibility	Outcome	Outcome	Vindictive complaining	-1.37****			.14	-.12*	.38			.02	-.01	.10
Responsibility		Outcome	Vindictive complaining			.54***	.14				.08		-.04	.26
Responsibility	Outcome	Outcome	Support-seeking nWOM	-1.37****			.23*	-.12*	.26			.04	.00	.14
Responsibility		Outcome	Support-seeking nWOM			.54***	.23*				.13		.00	.32
Responsibility	Outcome	Outcome	Problem-solving complaining	-1.37****			.31*	-.12*	-.26			.05	.01	.13
Responsibility		Outcome	Problem-solving complaining			.54***	.31*				.17		.04	.37

IV: Independent variable

DV: Dependent variable

M1: Mediating variable 1

M2: Mediating variable 2

Bootstrap sample: 5000

Coding= agent responsibility attribution="0"; situation responsibility attribution="1"

a1: effect of IV on M1

b1: direct effect of M1 on DV

a2: effect of IV on M2

b2: direct effect of M2 on DV

a3: effect of M1 on M2

****significant at $p < .0001$ *** significant at $p < .001$ ** significant at $p < .01$ * significant at $p < .05$

c': direct effect of IV on DV

The bootstrap confidence interval for the specific indirect effects of person-related disappointment and outcome regret flowing from external responsibility attribution to vindictive complaining and support-seeking nWOM do contain zero (Table 6.12).

Furthermore, the bootstrap confidence interval for the specific indirect effects of outcome-related disappointment and outcome regret flowing from external responsibility attribution to vindictive complaining do contain zero. These instances are understandable as feeling disappointed due to the actions of external party, or even due to situations and the subsequent feeling of outcome regret, will deter individual from complaining aggressively to vent their emotions. In addition, people do not like to complain, especially to the offending external party (Chelminski & Coulter, 2011; Voorhees, Brady, & Horowitz, 2006). Meanwhile, the consumer chooses the offended company so they had control over their decision (van Dijk & Zeelenberg, 2002a). This perception does not help to justify a bad decision process to external entities, and therefore may deter consumers from seeking empathy from surrounding sources by employing support-seeking nWOM. Considering the preceding discussions, it is reasonable to conclude that H13a is supported as disappointment and regret types mediate sequentially.

A further analysis of the results presented in Table 6.11 and Table 6.12 demonstrates that the presence of disappointment types prior to regret types reduces the estimate of the regret types on repurchase intentions and coping behaviours. This study compares the indirect effects that accompany both disappointment and regret types with the indirect effects that accompany only regret types as the mediator. Results show that for the effects of external responsibility attributions on repurchase intention the coefficients of the total specific indirect effects that accompany disappointment and regret types are smaller than those of the total specific indirect effects that only include regret types as mediator (Table 6.11). This demonstrates that the occurrence of disappointment types prior to regret types reduces the negative effects of regret types on repurchase, thereby increasing consumers' repurchase intentions. Furthermore, for the effects of external responsibility attributions on coping

intentions, this study also found that the coefficients of the total specific indirect effects that accompany disappointment and regret types are smaller than those of the total specific indirect effects that include only regret types as mediator (Table 6.12). This shows that the presence of disappointment types prior to regret types reduces the negative effects of regret types on coping intentions. This consequently reduces consumers' vindictive nWOM, support-seeking nWOM and problem-solving complaining intent. The negative effect of regret decreases more for vindictive nWOM followed by problem-solving complaining and support-seeking nWOM. Therefore, hypothesis 13b is supported.

Similar to the earlier studies, Study 3 also tested alternative models such as regret preceding disappointment when testing the sequential mediation. Those competing models were not significant except only for the effect of external responsibility attributions on vindictive nWOM. In particular, disappointment and regret types were found to simultaneously mediate the effect of external responsibility attribution on vindictive nWOM. In addition, Study 3 did not report the total specific indirect effects flowing from external responsibility attribution to repurchase intentions and coping behaviours through the disappointment types. Those specific indirect effects were not significant except for vindictive nWOM, and were therefore not reported.

6.5 Conclusion

This chapter presented the hypotheses, research design, data analysis, and findings related to conceptual model 3. The conceptual model presents the research hypotheses indicating the effects of external responsibility attribution and stating of expectation on disappointment and regret types, and the effect of these emotions on repurchase intentions and coping behaviours. This study finds support for all the hypotheses except one. In particular,

Study 3 established that attributing agent and situation as responsible for a bad outcome leads consumers to feel different types of disappointment and regret. Study 3 also established that consumers' stating of expectations (i.e. stated vs. unstated) prior to consumption does not influence their feeling of various types of disappointment and regret. However, these types of expectations do influence the feeling of overall disappointment and overall regret. Study 3 demonstrated that disappointment and regret types sequentially affect consumers' repurchase intentions and coping behaviours. In addition, the occurrence of disappointment types before regret types reduces the negative effect of regret types on these behaviours.

The following will discuss the findings of Studies 1 to 3 and the theoretical and managerial implications of this research. The limitations of the present research along with the future research directions conclude the thesis.

CHAPTER 7 : CONCLUSIONS AND IMPLICATIONS

7.1 Introduction

This chapter summarises and discusses the findings of this research. It presents the significant theoretical and managerial contributions of this research. The chapter concludes by identifying the research limitations and suggesting directions for future research avenues.

7.2 Summary of the studies

The primary aim of this research was to explore the effects of consumption-associated cues on two negative emotions (i.e. disappointment and regret) and post-consumption behavioural intentions. Three consumption experience associated cues, in particular causal attributions, expectations, and perceived information search were selected as the proposed trigger of disappointment and regret in the negative consumption experience context. These two negative emotions were predicted to sequentially mediate the relationships between consumption experiences associated cues and post-consumption behavioural intentions.

Three conceptual models were developed to investigate the relationships of the variables involved in this research. It is worth mentioning that the conceptual models were not entirely different from each other. The differences between these three models were: first, when testing conceptual model 2 through the empirical study, respondents went through a typical decision-making process just like a consumer by assuming a self-perspective. The respondents did not go through this decision-making process and assumed an observer perspective in the empirical study conducted to test conceptual model 1. Second, conceptual model 2 discarded stability attribution and included information search as a new independent variable. Third, conceptual model 3 dropped information search, internal responsibility

attribution and added the new dimensions of responsibility attributions and expectations (i.e. agent, situation external responsibility attribution and stated, unstated expectation) as independent variables and dimensions of disappointment as additional dependent variables.

Three scenario-based experimental studies specifically, Study 1, Study 2 and Study 3 were conducted to test the proposed relationships in the conceptual models. Overall, the findings of these studies confirmed the primary assertion of this research: that consumers are influenced by several consumption experience associated cues that induce feelings of disappointment and regret. The feelings of disappointment followed by regret are also found to determine their post-consumption behavioural intentions. A brief review of the three studies is presented below.

7.2.1 *Summary of Study 1*

The aim of Study 1 was to investigate the role of causal attribution and expectation as triggers of disappointment and different types of regret after consumers experience a negative consumption outcome. This study also examined the mediating role of these emotions between consumption experience associated cues and post-consumption behavioural intentions. Study 1 investigated these by adopting an observer perspective. The next sub-sections discuss the main findings of Study 1.

7.2.1.1 Causal attribution and expectation induce disappointment and the dimensions of regret

Drawing on attribution theory (Weiner, 1980, 1985a, 1985b, 2000) as well as the research on expectations (Deliza & MacFie, 1996; Huang & Zeelenberg, 2012; Lee, Frederick, & Ariely, 2006; van Dijk et al., 2003), this study revealed that when consumers attribute the responsibility of a bad outcome to external rather than internal sources, they feel greater

disappointment and greater outcome regret. However, they feel lower process regret in this instance. Study 1 also explored that when consumers attribute a negative outcome as stable or frequently occurring instead of unstable or infrequently occurring, they feel both higher outcome and process regret. Meanwhile, their feelings of disappointment were found to be unaffected due to stability attributions after a bad outcome.

In regards to the effects of expectations, this study revealed that consumers' higher rather than lower expectations about the consumption experience trigger greater disappointment after a negative consumption experience. Meanwhile, such expectations produce lower outcome regret and equal levels of process regret.

This study, on the basis of attribution theory (Weiner, 1980, 1985b) and regret theory (Landman, 1987; Walster, 1964; Wrosch et al., 2005) also revealed that consumers' attribution of responsibility and stability about a negative consumption experience interact when they affect the feeling of process regret. It was demonstrated that after a negative consumption experience, consumers feel greater process regret in stable rather than unstable attribution conditions when the provider is held responsible, while their feeling of process regret is unaffected by stability attributions when the consumer is deemed responsible.

7.2.1.2 Disappointment and regret mediate sequentially

Zeelenberg, van Dijk, Manstead, et al. (1998) suggested that disappointment and regret may operate sequentially. Based on their suggestion, it was argued in this study that disappointment and regret act sequentially after a negative outcome. This prediction was based on cognitive appraisal theory, which proposes a causal link between cognition-emotion-behaviour (Lazarus, 1966, 1991a; Nyer, 1997). Furthermore, drawing on the proposition of Lazarus (1991a) and Moors et al. (2013), this study predicted that disappointment influences

regret when they sequentially direct consumers' post-consumption behavioural intentions. Study 1 demonstrated that in a negative consumption experience, disappointment and regret sequentially mediate the effects of responsibility attributions and expectations on consumers' repurchase intentions and coping behaviours. It also demonstrated that the occurrence of disappointment prior to the feeling of regret reduces the negative effect of regret on consumers' repurchase intention and coping behaviours. For responsibility attributions, the negative effect of regret decreases more for vindictive nWOM followed by vindictive complaining and support-seeking nWOM. However, for expectations, the negative effect of regret increases further for vindictive nWOM followed by vindictive complaining and support-seeking nWOM.

7.2.2 *Summary of Study 2*

The aim of Study 2 was to investigate the triggering role of responsibility attribution, expectations and perceived information search on disappointment and different types of regret after consumers experience a negative consumption outcome. This study also investigated whether these emotions sequentially mediate between consumption experience associated cues and post-consumption behavioural intentions. Study 2 investigated these by adopting a first person or an actor perspective where respondents were involved in a decision-making task that relates to them. Furthermore, the choice situation involved in the decision-making task was also different from Study 1. The following section discusses the main findings of Study 2.

7.2.2.1 Responsibility attribution, expectation and information search induce disappointment and the dimensions of regret

Study 2 draws on attribution theory (Folkes et al., 1987; Tsiros et al., 2004), expectation (Lee et al., 2006; Lin et al., 2006) and information search literature (Beatty & Smith, 1987; Newman, 1977; Schmidt & Spreng, 1996) and demonstrated that the attribution of responsibility after a bad outcome does not make a difference to consumers' feelings of disappointment when they choose the consumption option through a typical decision-making process. Meanwhile, attribution of responsibility differently triggers the dimensions of regret. In particular, external responsibility attribution (e.g. company, employee) induces greater outcome regret, while internal responsibility attribution (e.g. consumer) induces greater process regret. Study 2 also revealed that consumers' higher expectations about the consumption experience trigger higher disappointment and higher outcome regret than lower expectations, while process regret is not differently affected by expectation levels.

In regards to the effects of perceived information search, Study 2 revealed that a more thorough pre-purchase information search leads to greater disappointment and higher outcome regret than a scantier pre-purchase information search after a negative consumption experience. Meanwhile, consumers' feeling of process regret is found to be unaffected by pre-purchase information search except when the expectation of the consumption experience is taken into account. Study 2 find that consumers feel greater process regret when they have conducted less rather than more pre-purchase information search, and have higher rather than lower expectations about the consumption experience. This interaction effect was expected in Study 2 on the basis of prior literature regarding expectations (Lee et al., 2006), information search (Beatty & Smith, 1987; Newman, 1977) and regret (Carmon et al., 2003; Huang & Zeelenberg, 2012).

7.2.2.2 Disappointment and regret mediate sequentially

Study 2 also demonstrates the presence of multiple sequential mediators which affect consumers' behavioural actions. In particular, the mediation analysis revealed that disappointment and regret indeed sequentially mediate the effect of responsibility attribution and expectations on consumers' repurchase intentions and coping behaviours. This is in a context where consumers choose the consumption alternative by going through a typical decision-making process and then encountering a negative outcome with the chosen option. This study finding also confirms that the occurrence of disappointment before regret reduces the negative effect of regret on repurchase intentions and coping behaviours. For responsibility attributions and expectations, the negative effect of regret decreases more for vindictive nWOM than for vindictive complaining.

7.2.3 *Summary of Study 3*

Study 3 was intended to examine the role of external responsibility attribution and consumers' stating of prior-to-consumption expectations in triggering different types of disappointment and regret after they experience a negative consumption outcome. This study also investigated the mediating role played by these dimensions of disappointment and regret between consumption experiences associated cues and post-consumption behavioural intentions. Study 3 also adopted an actor perspective by giving respondents a decision-making task which is similar to Study 2. The following sub-sections discuss the main findings of Study 3.

7.2.3.1 External responsibility attribution and stating of expectations trigger the dimensions of disappointment and regret

Grounded in the literature pertaining to external responsibility attribution (deCharms, 1968; Heider, 1958; Ryan & Connell, 1989), stating of expectations (Ofir & Simonson, 2001, 2007), disappointment (van Dijk & Zeelenberg, 2002b) and regret (Lee & Cotte, 2009), Study 3 revealed that when consumers attribute the responsibility of a bad experience to an external agent (e.g. company, employee), they feel greater person-related disappointment. Conversely, when they attribute the cause of the experience to an external situation (e.g. environmental factors), they feel greater outcome-related disappointment. In addition, agent-related external responsibility attribution induces a higher level of outcome and process regret than situation-related external responsibility attribution.

In regards to the effects of stating expectations prior to consumption, this study demonstrated that stated and unstated expectations do not affect the types of disappointment differently. Not hypothesized, but argued, it was found that unstated expectations trigger greater overall disappointment and regret than stated expectations after a negative consumption experience. As hypothesized, stated and unstated expectations prior to consumption do not make a difference in consumers' feelings of process regret. However, Study 3 failed to find support for its prediction that unstated prior expectations trigger greater outcome regret than stated prior expectations. It is suspected that consumers' comparison of expectations and actual performance in terms of stated versus unstated expectations in Study 3 is less direct than the comparison they made in terms of high versus low expectations in Study 2. The mismatch thus is not intense, which probably results in a non-differentiated feeling of outcome regret in stated versus unstated expectations.

7.2.3.2 Dimensions of disappointment and regret mediate sequentially

Study 3 extended the findings relating to sequential mediation by demonstrating that the dimensions of disappointment and regret mediate sequentially. In particular, the mediation analysis conducted through model 6 of Hayes PROCESS Macro (2013) revealed that the dimensions of disappointment and regret sequentially mediate the effect of external responsibility attribution on consumers' repurchase intentions and coping behaviours. The findings of this study also demonstrated that the occurrence of disappointment dimensions before regret dimensions reduces the negative effect of regret dimensions on repurchase intention and coping behaviours. For responsibility attributions, the negative effect of regret decreases more for vindictive nWOM followed by problem-solving complaining and support-seeking nWOM.

Overall, the findings of all three Studies support the primary premise of this research that consumption-associated cues, in particular causal attributions, expectations and perceived information search, trigger consumers' feelings of disappointment and regret, including their dimensions, differently. The emotions in turn sequentially direct consumers' repurchase intentions and coping behaviours.

7.3 Discussion on the findings

The previous section presented the findings of this research. This section provides a critical discussion of the major findings of this research.

Study 1 of this research showed that the attribution of responsibility for a bad outcome triggers the feelings of disappointment and regret differently as suggested in prior literature (Frijda et al., 1989; Zeelenberg & Pieters, 2004). This study also showed that consumers' higher and lower expectations prior to consumption trigger disappointment and types of regret

differently if the consumption experience is a negative one. Study 1 supported the prediction of Zeelenberg, van Dijk, Manstead, et al. (1998) by showing that disappointment and regret sequentially mediate and direct several behavioural intentions. Furthermore, it established that one emotion can influence the subsequent emotion as has been suggested in prior literature (Lazarus, 1991a; Moors et al., 2013), by showing that the occurrence of disappointment before regret reduces the negative effect of regret on consumers' behavioural intentions.

Study 1 obtained these findings by adopting an observer perspective which did not involve any decision-making task. Prior research suggests that the respondents' assumed mental imagery tends to have different effects on their emotions (McIsaac & Eich, 2002, 2004) which may lead to different behavioural actions. Furthermore, the choice situation as provided in Study 1 was too simplistic because respondents could easily explore the superiority of alternatives and form their expectations accordingly. Considering the number of close alternatives that consumers encounter across different product categories prior to purchasing, such simplistic choice situations hardly correspond to the reality of today. To overcome these limitations, and to extend the findings of Study 1, this research conducted Study 2.

In a consumer decision-making setting, Study 2 revealed differences in consumers' emotional reactions. In particular, Study 2 showed that consumers' attribution of responsibility does not affect consumers' feelings of disappointment which is suggested in prior literature (Giorgetta et al., 2012; van Dijk, Zeelenberg, et al., 1999). However, responsibility attributions affect their feeling of regret similarly as found in Study 1. Study 2 also showed that higher and lower expectations about a consumption experience trigger disappointment and types of regret, although these are different from the findings of Study 1. Study 2 further established that disappointment and regret sequentially mediate and direct behavioural intentions even in a decision-making context. Finally, it demonstrated that the

occurrence of disappointment prior regret reduces the negative effect of regret on the behavioural intentions. Study 1 and Study 2 of this research thus established the effect of responsibility attributions and expectations on disappointment and regret in non-decision-making and decision-making contexts.

Prior studies find that after a negative outcome, people use both agent-related and situation-related external responsibility attributions (Weiner, 1985a; Weiner et al., 1971) whereas the earlier studies of this thesis considered external responsibility attribution as a single dimensional construct. The prior studies of this thesis considered expectations as only two types; however, recent expectation literature suggests another two types of expectations which lead to different post-consumption evaluations (Ofir & Simonson, 2001, 2007). Furthermore, disappointment was primarily considered as a single-dimension construct in spite of van Dijk and Zeelenberg (2002b) suggesting that it can be person-related and outcome-related. These limitations of the earlier studies primarily inspired this research to conduct Study 3.

In Study 3, this research extended the findings of Study 2 by showing that consumers' attributions of different external responsibility differently induce feelings in the dimensions of disappointment and regret. Study 3 also demonstrates that variations in consumers' stating and not stating their expectations prior to consumption do not affect feelings in the dimensions of disappointment and regret. However, it does affect the feelings of overall disappointment and regret. Study 3 further extended the finding relating to sequential mediation by establishing that disappointment and regret types mediate sequentially and direct consumers' behavioural intentions. Furthermore, it established that the occurrence of disappointment dimensions before regret dimensions reduces the negative effect of regret on consumers' behavioural intentions. Finally, it is worth mentioning that this research also

tested the alternative models such as regret preceding disappointment in all the studies when testing the sequential mediation. However, those competing models were not significant which further supports the prediction of sequential mediation by disappointment and regret as demonstrated in this research.

The findings of the three experimental studies of this research established a consistent set of findings, which has important theoretical and managerial implications. The implications are explained in the following sections.

7.4 Theoretical contributions

The present research advances our knowledge of the role of negative emotions, in particular disappointment and regret in the context of negative consumption experiences in several ways. It refines the current conceptualization of disappointment and regret including specific reference to the multi-dimensionality of these constructs.

This research responded to the call of van Dijk and Zeelenberg (2002b) and Lee and Cotte (2009) to explore the antecedent status of the dimensions of disappointment and regret. In particular, first, this research provides insights into the role of responsibility attribution as an antecedent to disappointment and regret. Although prior studies show that responsibility can be an antecedent to disappointment and regret, the relationships shown in these studies were unclear and not fully substantiated (e.g., Giorgetta et al., 2012; Ordóñez & Connolly, 2000; van Dijk & Zeelenberg, 2002b; Zeelenberg, van Dijk, & Manstead, 1998). The prior literature is fragmented and most studies were conducted in non-decision making contexts. By accommodating both disappointment and regret, including their multiple dimensions, in a non-decision-making as well as a consumer decision-making context, this research shows the antecedent role played by specific responsibility attributions in triggering disappointment and

regret, including their various types. Therefore, it also provides important insights into resolving the current controversies about the deterministic role of responsibility attribution to disappointment and regret (Connolly et al., 1997; Giorgetta et al., 2012; Simonson, 1992; van Dijk, van der Pligt, et al., 1999; Zeelenberg & Pieters, 2004).

Second, this research offers insights into the antecedent effect of stability attributions on disappointment and regret. Although prior research unrelated to an everyday consumption experience context shows that stability attributions affect disappointment (Ruthig, Perry, Hall, & Hladkyj, 2004), to the best of our knowledge no studies to date have investigated this in an everyday consumption experience context. This research investigates this effect in an everyday consumption experience context and finds that stability attributions do not affect consumers' feelings of disappointment differently if the experience turns out to be negative. In addition, this research reveals the specific stability attribution that triggers the specific dimension of regret, thereby establishing the causal link between stability attributions and the types of regret.

Third, this research provides novel insights into the interaction of specific causal attributions and their effects on negative emotions with specific reference to disappointment and regret in a negative outcome situation. Although prior studies show that stability and responsibility interact when affecting satisfaction levels (Tsiros et al., 2004), studies are yet to show the effects of such interactions on disappointment and regret. This research shows that the interaction of responsibility and stability attributions affects consumers' feeling of regret, in particular process regret, not disappointment. Therefore, this research extended the findings of Tsiros et al. (2004). Furthermore, by showing the equal effect of stability on negative emotion, in particular on process regret when the consumer is responsible for a bad outcome in the interaction, this research validates Faure and Mick's (1993) prediction. In particular,

they predicted but did not test whether an unstable cause increases the specialness of a situation in consumers' self-failed achievement context.

Fourth, this research also establishes expectation as an antecedent to disappointment and regret including their multiple dimensions. Prior research shows the causal role played by expectation in triggering disappointment and regret (Huang & Zeelenberg, 2012; van Dijk et al., 2003); however, no prior study involved a decision-making process that consumers typically engage in during purchase and consumption. Furthermore, expectation is yet to be established as an antecedent to the multiple dimensions of disappointment and regret. In both consumer non-decision making and decision-making settings, this research shows the causal influence of expectation on disappointment and regret. Furthermore, this research explores the impact of stating expectations prior to consumption on triggering the feelings of disappointment and regret. Whereas prior research focused on the effect of stated and unstated expectations on the evaluation of service and the shopping experience itself (Ofir & Simonson, 2001, 2007), this research shows that consumers' evaluations that result from stated and unstated expectations, persists and leverages differently from the expectation of Ofir and Simonson (2007) to negative emotions, if the consumption experience becomes negative. In particular, unstated expectations induce more overall disappointment and regret than stated expectations. This research, however, also finds that for the multiple dimensions of disappointment and regret, stated and unstated expectations do not make a difference to these feelings. Ofir and Simonson's (2001, 2007) work thus is extended with new insights regarding stated and unstated expectations.

Fifth, this research provides fresh insights into the role of information search as an antecedent to disappointment and regret. Although prior research shows that information search contributes to feelings of disappointment and regret, the findings are fragmented (e.g.,

Park, 2011; Sparks et al., 2012; van Dijk, van der Pligt, et al., 1999). This research explored the emotions of disappointment and regret along with the multiple dimensions in a decision-making context and demonstrated the antecedent role played by information search in triggering disappointment and dimensions of regret. This offers important insights which may reduce the controversies about the antecedent effect of information search on disappointment and regret. This also provides novel insights into the role of information search in inducing specific dimensions of regret. Relatedly, by showing the interaction of information search and expectations on regret, this research offers insights into how attribution-irrelevant but consumption-relevant cues interact when inducing discrete negative emotions.

Sixth, this research makes a unique contribution to disappointment and regret research by exploring the sequential operation of these emotions and their multiple dimensions. Although prior literature documented the distinctiveness and close connection of disappointment and regret for quite a while (Loomes & Sugden, 1987; Yi & Baumgartner, 2004), only Zeelenberg, van Dijk, Manstead, et al. (1998) mentioned the possibility of a hierarchical relationship between these two emotions, although they did not test this proposition. Grounded in cognitive appraisal theory, this research tested this proposition by means of three experiments and established that after a negative consumption experience, disappointment and regret occur sequentially. A related novel finding of this research is that while disappointment and regret sequentially mediate, disappointment reduces the negative effect of regret on consumers' behavioural intentions. Although prior appraisal theorists suggest that emotions are episodes rather than static states and can feed back to other emotions and can interfere with other emotions (Lazarus, 1991a, 1991b; Moors et al., 2013), no studies to date have shown this inter-emotion influence through the cognitive appraisal process. Using disappointment and regret along with the dimensions as the emotions elicited

by negative consumption experience, this study shows that disappointment influences regret while they act in sequence. This is a very important contribution to the extant research on disappointment and regret, and emotion research in general.

Seventh, this research also contributes to experimental research in the field of consumer behaviour in general by exploring the effects of different mental imageries on respondents' emotional and behavioural responses. Prior research suggests that the assumed mental imagery such as events imagined from one's own perspective vs. other or observer perspectives tends to have different effects on emotions (Holmes, Coughtrey, & Connor, 2008; McIsaac & Eich, 2002, 2004; Nigro & Neisser, 1983). The clinical and cognitive studies suggest that the observer perspective protects against negative affect while a personal, subjective perspective allows for greater affective engagement (Holmes et al., 2008). However, this claim is yet to be validated in a consumer behaviour setting, particularly when the experimental context is an everyday consumption experience and the consumer goes through a typical decision-making process. By accommodating these limitations, the current research shows that respondents' assumed mental imageries result in different emotional and behavioural reactions. Therefore, it makes important contributions to experimental research that deals with consumers' affective and behavioural responses in the field of consumer behaviour.

Eighth, the results obtained in this research provide an inclusive perspective to appraisal-emotion-action in a consumption experience context by accommodating the most common consumption associated cues, emotions and actions. This conceptual connection further reinforces the tripartite division with psychology of thought, feeling and action (Gross, 2001; Nyer, 1997; Schmidt et al., 2010; Weiner, 1980).

7.5 Managerial implications

This research has several important implications for marketing practitioners.

First, in the event of a negative consumption experience, when the marketers are not responsible for the negative outcome, they should attempt to focus consumers' attention on those factors that are not within the marketers' control such as high customer traffic or things related to third-party activities. This is because we find that such external attributions reduce consumers' feelings of disappointment and regret which eventually do not affect their repurchase, nWOM and complaining behaviours negatively. Prior research suggests that people show greater sensitivity and responsiveness to a perceived injustice when they attribute the injustice to the external agents rather than external situational factors (e.g., Cohen, 1982; Utne & Kidd, 1980). So, this suggested strategy can assist marketers to reduce consumers' negative emotions and their detrimental effect on repurchase, nWOM and complaining behaviours.

Second, an analysis of the influence of disappointment on regret, presented in the results sections of the studies, reveals that consumers' feeling of outcome regret decreases their repurchase intentions and increases vindictive nWOM, complaining intentions. Moreover, the research found that the sequential feelings of disappointment including its dimensions and outcome regret can make a difference in such inclinations, in particular, in terms of increasing the repurchase intentions and decreasing the vindictive nWOM and complaining intentions. Therefore, when consumers experience a negative consumption outcome, it is more beneficial for marketers to remind consumers about their disappointment first. Reminding consumers about their expectation-disconfirmation (i.e. disappointment) works as a reality check for them because this assessment is based on fact-based judgment. Thereby, this judgment reduces the negative impact of counterfactual-based judgment (i.e.

regret) on repurchase, nWOM and complaining intention. The strategy for marketers is therefore to highlight the fact-based comparison (i.e. disappointment including the dimensions) so that consumers will feel disappointed, which can act as a buffer between the counterfactual-based comparison (i.e. regret) and subsequent action.

Third, this research found that after a negative consumption outcome, consumers' expectations about the consumption experience will trigger their feeling of outcome regret which drives their repurchase and coping intention behaviours negatively. To reduce this negative feeling and its detrimental effect on consumers' behavioural intentions, marketers are advised to differentiate their offerings from competitors' offerings even after the consumption experience. This is equally important for firms for which consumers hold high or low expectations. If a less reputable firm competes with a highly reputable firm and wins over the consumers, then upon failure to deliver on its promise, managers of this firm need to lift its reputation in the eyes of consumers. This is in order to decrease the attractiveness of alternative offerings. Successful implementation of such strategy will reduce consumers' feeling of outcome regret. This in turn is not likely to decrease their repurchase and increase nWOM and complaining intentions. Meanwhile, in the event of a negative consumption outcome, highly reputable firms also need to differentiate their approach from those of their competitors. Although prior research shows that consumers are more forgiving towards high reputation firms (Hess et al., 2003), this may not be the case when equally attractive firms are readily available and consumers choose from equally attractive high reputation firms. They do feel greater regret about the outcome due to the attractiveness of the forgone alternative offerings. Therefore, marketers of high or low reputation firms need to know the offerings of those with whom they are competing. This knowledge will help them to devise strategies to

reduce the negative impact of regret on post-consumption behavioural intentions in a negative consumption experience.

Fourth, marketers should explicitly ask consumers to communicate their expectations in writing or in oral form prior to experiencing the consumption. By using this strategy, marketers will help their consumers to form a realistic expectation. This is because consumers concentrate on surrounding cues when asked to state their consumption expectations. If they encounter a negative outcome afterwards, then due to the realistic expectations, it is quite easy for them to compare and accept the situation, thereby feeling less disappointed and regretful. Meanwhile, if consumers are not asked to explicitly state their expectations, they may concentrate less on the surrounding cues and may consider additional purchase-related cues such as similar past purchases, normative standards. This results in forming relatively less realistic and heightened expectations. If they encounter a negative outcome in such instances, consumers will perceive a higher mismatch which will result in feeling greater disappointment and regret. So, it is better for marketers to use the strategy of persuading consumers to state their expectations prior to experiencing consumption.

7.5 Limitations and directions for future research

The limitations of this research suggest several important directions for further research. First, this research focuses on only a few antecedents of the recently-proposed multiple dimensions of disappointment and regret (Lee & Cotte, 2009; van Dijk & Zeelenberg, 2002b). Further research could focus on other possible antecedents such as pre-purchase evaluation of attributes, alternatives, invested efforts that are shown as an antecedent to the single dimensional feeling of disappointment and regret (e.g., Keaveney et al., 2007; Tsiros & Mittal, 2000; Zeelenberg, van Dijk, Manstead, et al., 1998). This is because prior research suggests that every emotion accompanies more than one key appraisal (Lerner & Keltner,

2000, 2001) so it is useful to study other relevant appraisals that can affect emotions (Garg & Lerner, 2013) such as disappointment and regret.

Second, emotions serve naturally as facilitators to the temporal sequence of cognition-emotion-behaviours (Chebat, Davidow, & Borges, 2010; Frijda, 1986; Weiner, 1980); however, scant attempt has been made so far to experimentally show the existence of this sequence. This is even rare for closely connected emotions that may occur in a hierarchy. By demonstrating the sequential occurrence of disappointment and regret along with their dimensions, this research invites researchers to investigate this mediating pattern for other closely connected, post-purchase negative emotions including anger, frustration, worry, guilt and shame. Furthermore, although this research shows the causal flow between appraisals-emotion-coping behaviours, it does acknowledge that this causal chain especially between emotion and coping behaviours is bidirectional (Folkman & Lazarus, 1988; Lazarus & Folkman, 1987). However, an investigation of this direction was beyond the scope of this research.

Third, this research presented to participants (a) a situation where an attractive/unattractive alternative is chosen over an unattractive/attractive alternative, (b) a situation requiring choice where they choose from equally attractive or equally unattractive alternatives. However, in reality, consumers' choice situations include attractive as well as unattractive, possibly dominant alternatives. So, replication of this study finding is required in a more realistic experimental and possibly field setting.

Fourth, in this research, the decision-making process that the respondents went through was somewhat artificial with a limited array of information to search and evaluate. This was done purposely to ensure experimental control. However, in reality, the buying

process involves additional information search from different sources in addition to the information provided by the company. The quality of such search as well as the process involved may contribute to the consumers' feelings of post-consumption disappointment and regret. As marketers now have the opportunity to track consumers' information search behaviour specific to their sites as well as to the third party sites, future research should test these research findings in such realistic settings.

Fifth, due to the constraints placed by experimental control and space, this research was able to investigate only the predictions made by this research in the context of a bad holiday experience which is primarily hedonic in nature. Future research should replicate the findings of this research in different contexts, such as where the consumption experience is driven by utilitarian motivations. Prior research shows that consumers' emotional responses and action tendencies towards utilitarian and hedonic goal-driven consumption experiences are quite diverse and unique (Chernev, 2004; Chitturi, Raghunathan, & Mahajan, 2007). So, the issues investigated in this research should be leveraged in context where consumers encounter a negative utilitarian consumption experience. This will offer us interesting insights into consumers' different consumption motivations and their effects on disappointment, regret and post-consumption behaviours.

Last but not least, the findings of Study 3 of this research regarding the stated and unstated expectations, although extending Ofir and Simonson's (2007) findings, suggest an opposite effect of these expectations on disappointment and regret to those anticipated according to Ofir and Simonson (2007). This study's context, purpose and design differ from those of Ofir and Simonson's (2007), and this may have contributed to the contradictory findings. Nonetheless, further studies are required to clarify such conflicts. Moreover, it will also be instructive to examine whether differences in stated or unstated expectations in terms

of different consumption experiences, e.g. products vs. services, high involvement vs. low involvement purchase, contribute to variations in disappointment and regret, including the dimensions of these emotions.

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Appendices

Appendix 1: Research questionnaire for Study 1

Explanatory Statement

Consumer Responses to Product Failure

The purpose of this survey is to study consumer responses to product failure. The survey will take about 15-20 minutes to complete. Your time to participate in this survey is highly appreciated.

The study is being conducted in the Department of Marketing of Monash University. The answers you provide will be used only for university research purpose.

Your participation is voluntary and anonymous. Please answer all questions. Data will be securely stored as required by university guidelines. We will keep your private information confidential, any data that the researcher extracts from the questionnaire/survey for use in reports or published findings will not, under any circumstances, contain names or identifying characteristics.

The researchers can be contacted at the email addresses below:

Muhammad Ismail Hossain: [REDACTED]

Professor Harmen Oppewal: [REDACTED]

Dr. Dewi Tojib: [REDACTED]

If you have questions concerning your rights as a research subject that have not been answered by the investigator, or you have a complaint concerning the manner in which this research is conducted, please quote the project reference number(CF11/1639 - 2011000911) and contact:

Executive Officer, Human Research Ethics
Monash University Human Research Ethics Committee (MUHREC)
Building 3e Room 111
Research Office
Monash University VIC 3800

[REDACTED]

Section A: Background story about the experimental task

The following story is about a couple where they are purchasing a weekend away holiday.

A COUPLE NEEDS A BREAK!!

The last couple of months were very exhausting for the couple due to overwhelming workload. They did not have any time out together, even on weekends. They have decided to go for a weekend holiday to have a relaxing weekend together. They are now about to purchase this holiday.

Section B: Experimental Scenario [Randomized in a between-subject full factorial design]

Condition 1:

Responsibility: Provider

Stability: Stable

Expectation: High

BOOKING THE HOLIDAY

After briefly browsing several online travel providers they select two sites that offer some attractive weekend holidays: Dreamholiday.com and Holidayheaven.com.

Dreamholiday.com is a highly recommended award-winning provider and seems good on quality. Holidayheaven.com is a new provider, hasn't proved itself yet but looks good on price. One destination and its attractions at *Dreamholiday.com (the award winning provider)* draw the couple's attention. The couple book this destination and make payment.

- 1) What would the couple's level of expectation regarding their choice?

Low	1	2	3	4	5	High
-----	---	---	---	---	---	------

- 2) What are the reasons for your answer to the previous question?

.....

THE HOLIDAY EXPERIENCE

The couple arrives at their holiday destination. Later they discover that the attractions of the destination are not lively. They return from the holiday without feeling refreshed and relaxed.

- 3) To what extent is the purchase worse than the couple's expectation?

Not at all worse	1	2	3	4	5	Much more worse
------------------	---	---	---	---	---	-----------------

- 4) What would be the couple's level of disappointment regarding their choice?

Low	1	2	3	4	5	High
-----	---	---	---	---	---	------

REFLECTING ON THE HOLIDAY EXPERIENCE

The couple searches for more information online and finds that recent media reports indicate *travel providers often* make misleading claims. The fact that *travel providers repeatedly* make misleading claims is also revealed in a recently released independent fact finding committee report.

Condition 2:

Responsibility: Provider

Stability: Stable

Expectation: Low

One destination and its attractions at *Holidayheaven.com (the new provider)* draw the couple's attention. The couple book this destination and make payment.

[Manipulation of responsibility and stability attribution; the questions asked: Same as condition 1]

Condition 3:

Responsibility: Provider

Stability: Unstable

Expectation: High

The couple searches for more information online and finds that recent media reports indicate that it is *very uncommon* for travel providers to make misleading claims.

[Manipulation of expectation as well as the questions asked: Same as condition 1]

Condition 4:

Responsibility: Provider

Stability: Unstable

Expectation: Low

[Manipulation of responsibility and stability attribution: Same as condition 3; manipulation of expectation: Same as condition 2; and the questions asked: Same as condition 1]

Condition 5:

Responsibility: Customer

Stability: Stable

Expectation: High

REFLECTING ON THE HOLIDAY EXPERIENCE

Upon reflection the *couple* realize that *they do have a habit of* not carefully reading all the product details when making the purchase. Their friends have also pointed out *this tendency* about them.

[Manipulation of expectation as well as the questions asked: Same as condition 1]

Condition 6:

Responsibility: Customer

Stability: Stable

Expectation: Low

One destination and its attractions at *Holidayheaven.com (the new provider)* draw the couple's attention. The couple book this destination and make payment.

[Manipulation of responsibility and stability attribution: Same as condition 5; and the questions asked: Same as condition 1]

Condition 7:

Responsibility: Customer

Stability: Unstable

Expectation: High

Upon reflection the *couple* realize that *they* did not carefully read all the product details when making the purchase, which is *uncharacteristic* for them.

[Manipulation of expectation as well as the questions asked: Same as condition 1]

Condition 8:

Responsibility: Customer

Stability: Unstable

Expectation: Low

[Manipulation of responsibility and stability attribution: Same as condition 7; manipulation of expectation: Same as condition 6; and the questions asked: Same as condition 1]

Section C: Dependent variables**Regret and repurchase intention**

Imagining how the couple feel in the above scenario, please answer the following questions by checking the option that best represents your answer.

- 1) How much regret do the couple feel over their choice?

None | 1 | 2 | 3 | 4 | 5 | Very much

- 2) How bad do the couple judge their decision to choose this travel provider?

Not at all bad | 1 | 2 | 3 | 4 | 5 | Very bad

3) What is the couple's likelihood of purchasing from this travel provider again?

Very unlikely | 1 | 2 | 3 | 4 | 5 | Very likely

Section D: Manipulation checks

The following statements and questions concern the **cause(s) of the couple's holiday experience**. Please think about the holiday experience of the couple and select the option that most closely corresponds to how you feel about the service failure(s).

1) The travel provider's responsibility for the bad holiday experience is:

Low | 1 | 2 | 3 | 4 | 5 | High

2) The couple's responsibility for the bad holiday experience is:

Low | 1 | 2 | 3 | 4 | 5 | High

3) What are the reasons for your answer to the previous statements?

.....

Considering the service failure situation as described above

4) How frequently would you expect this kind of failure to happen in future?

Infrequently | 1 | 2 | 3 | 4 | 5 | Frequently

5) What are the reasons for your answer to the previous question?

.....

Section E: Dependent variables

Outcome regret dimension: regret due to forgone alternatives

Now, please rate your agreement with the following items, considering the couple's holiday experience as exhibited in the above scenario

1) They should have chosen another travel provider than the one from which they have purchased

Strongly disagree | 1 | 2 | 3 | 4 | 5 | Strongly agree

2) They regret the choice of travel provider that they made

Strongly disagree	1	2	3	4	5	Strongly agree
3) They now realize how much better their choices of other travel providers were						
Strongly disagree	1	2	3	4	5	Strongly agree
4) If they were to go back in time, they would choose a different travel provider to purchase their holiday						
Strongly disagree	1	2	3	4	5	Strongly agree
Outcome regret dimension: regret due to change in significance						
5) They regret purchasing from this travel provider because the holiday did not serve them the way they thought it would						
Strongly disagree	1	2	3	4	5	Strongly agree
6) They wish they hadn't bought from this travel provider because the holiday has been useless to them						
Strongly disagree	1	2	3	4	5	Strongly agree
7) They regret their purchase from this travel provider because the holiday did not serve its purpose						
Strongly disagree	1	2	3	4	5	Strongly agree
8) They regret their purchase from this travel provider because they did not need this type of bad holiday						
Strongly disagree	1	2	3	4	5	Strongly agree
Process regret dimension: regret due to under-consideration						
Considering the couple's holiday experience as exhibited in the above scenario, please rate your agreement with the following items						
9) With more information, they feel that they could have made a better decision						
Strongly disagree	1	2	3	4	5	Strongly agree
10) They feel that they did not put enough consideration into buying their holiday						
Strongly disagree	1	2	3	4	5	Strongly agree
11) With more effort, they feel that they could have made a better decision						
Strongly disagree	1	2	3	4	5	Strongly agree

12) They regret not putting enough thought into their decision						
Strongly disagree	1	2	3	4	5	Strongly agree
Process regret dimension: regret due to over-consideration						
Please rate your agreement with the following items, considering the couple's holiday experience as exhibited in the above scenario						
13) They expended too much effort in making their decision						
Strongly disagree	1	2	3	4	5	Strongly agree
14) They wasted too much time in making their decision						
Strongly disagree	1	2	3	4	5	Strongly agree
15) They think they put too much thought in the buying process						
Strongly disagree	1	2	3	4	5	Strongly agree
16) They feel that too much time was invested in the purchase						
Strongly disagree	1	2	3	4	5	Strongly agree
Coping intentions: Vindictive nWOM						
Please answer the following questions by checking the option that best represents your answer						
What is the couple's likelihood of						
1) spreading negative word-of-mouth about the travel provider						
Very unlikely	1	2	3	4	5	Very likely
2) defame the travel provider to others						
Very unlikely	1	2	3	4	5	Very likely
3) warning others not to purchase holiday from this travel provider						
Very unlikely	1	2	3	4	5	Very likely

Coping intentions: Vindictive complaining

What is the couple's likelihood of complaining to the travel provider to

4) give them a hard time

Very unlikely | 1 | 2 | 3 | 4 | 5 | Very likely

5) be unpleasant with them

Very unlikely | 1 | 2 | 3 | 4 | 5 | Very likely

6) pay for its poor holiday quality

Very unlikely | 1 | 2 | 3 | 4 | 5 | Very likely

Coping intentions: Support seeking nWOM

What is the couple's likelihood of talking to other people about their negative experience in order to

7) get some comfort

Very unlikely | 1 | 2 | 3 | 4 | 5 | Very likely

8) reduce negative feelings

Very unlikely | 1 | 2 | 3 | 4 | 5 | Very likely

9) feel better

Very unlikely | 1 | 2 | 3 | 4 | 5 | Very likely

10) share feelings with others

Very unlikely | 1 | 2 | 3 | 4 | 5 | Very likely

Coping intentions: Problem-solving complaining

What is the couple's likelihood of complaining to the travel provider to

11) discuss the problem constructively

Very unlikely | 1 | 2 | 3 | 4 | 5 | Very likely

12) find an acceptable solution for both parties

Very unlikely | 1 | 2 | 3 | 4 | 5 | Very likely

13) work with the travel provider to solve the problem

Very unlikely | 1 | 2 | 3 | 4 | 5 | Very likely

Section F: Task checks

The following questions relate to the appropriateness of the described scenario. Please answer the questions by checking the option that best represents your answer

1) How realistic is the situation as described in the scenario?

Highly unrealistic | 1 | 2 | 3 | 4 | 5 | Highly realistic

2) How easy is it for anyone to relate to the scenario?

Very difficult | 1 | 2 | 3 | 4 | 5 | Very easy

Section G: Usage familiarity with online shopping

The following questions are related to some general aspects of online shopping. Please answer the questions by checking the option that best represents your answer.

1) How often do you have weekend away type of short holidays?

- More than once a month
- Once a month
- Once every 3-6 months
- Once a year
- Never

2) When did you have your last weekend away holiday?

- In last month
- 1-3 months ago
- 4-6 months ago
- 7-12 months ago
- Over a year ago
- Not applicable

3) Did you book your travel through an online travel provider?

- Yes
- No

4) How often do you make bookings through online travel providers?

- More than once a month
- Once a month

- Once every 3-6 months
- Once a year
- Not applicable
- Other (please specify the time.....)

5) How often do you shop online?

- More than once a month
- Once a month
- Once every 3-6 months
- Once a year
- Never
- Other (please specify the time.....)

Section H: Demographics

Lastly, please answer the following questions regarding yourself

1) Gender

- Male
- Female

2) Age range

- 18-25
- 26-35
- 36-45
- 45-55
- 56-65
- 66-75
- 76 and over

3) Please indicate whether English is your first language

- Yes
- No

4) Do you have any comments regarding this survey?

.....

Thank you very much for your time in completing this survey.

Appendix 2: Research questionnaire for Study 2

Explanatory Statement
Same as study 1
Section A: General Questions
<p>In this section, you will be asked several questions related to holiday bookings. In particular, we are interested in how people book short holidays (< 1 week). Please answer the questions by checking the option that best represents your answer.</p> <p>1) How often do you have weekend away type of short holidays?</p> <ul style="list-style-type: none">• At least once a month• A few times per year• About once a year• Once every few years• Never <p>2) When did you have your last weekend away holiday?</p> <ul style="list-style-type: none">• In last month• 1-3 months ago• 4-6 months ago• 7-12 months ago• Over a year ago• No applicable <p>3) How did you book your last weekend away holiday?</p> <ul style="list-style-type: none">• Online• Offline• Not applicable <p>4) How often do you shop online?</p> <ul style="list-style-type: none">• More than once a month• Once a month• Once every 3-6 months• Once a year• Never• Other (please specify the time.....)
Task-related information
<p>The purchasing exercise begins with a background story.</p> <p>A proper understanding of the background story is essential for completing the survey.</p> <p>Therefore, <u>please read the story and instructions carefully.</u></p>

Section B: Describing the need to purchase a holiday

Imagine that you and your partner are in the following situation.

YOU NEED A BREAK!!

The last couple of months were very exhausting for you and your partner due to overwhelming workload. You did not have any time out together, even on weekends. So, both of you have decided to go for a weekend-away holiday to have a relaxing weekend together.

- 1) Which of the following type of holiday you would like to select as a weekend-away holiday?
 - Beach holiday
 - Nature holiday
 - Outdoor holiday with exercise (hike, golf etc.)
- 2) Please write down at least three reasons of choosing the type of holiday you have just selected.

.....

You have selected the type of holiday you are looking for. You now need to find the holiday package (e.g. accommodation, transport, sightseeing) and book the holiday.

You conduct an online search and find two online travel providers offering holidays of the type you are looking for. In the next screens you will be able to see information about each of them. **Only relevant information are extracted and presented in a condensed format.** Later you will have to select one of these two providers for booking your weekend holiday.

Section C: Experimental Scenario [Randomized in a between-subject full factorial design]

It may take a while for you to view the information of the travel provider depending on your internet connection.

Condition 1:

Responsibility: Provider

Expectation: High

Information search: High

[Home](#) | [About](#) | [Package](#) | [Pricing](#) | [Contact Us](#) | [FAQ](#)

	VIBRANTHOLIDAY.COM
Reputation status	Award-winning
Recommendation status	Highly recommended
Quality rating	High
Price	High

Important Links:[Login](#)
[Sign Up](#)
[Package](#)
[Pricing](#)
[FAQ](#)
[Site Map](#)****Free welcome drinks are included within each package.***VIBRANTHOLIDAY.COM***You will feel every minute here*[Home](#) | [About](#) | [Package](#) | [Pricing](#) | [Contact Us](#) | [FAQ](#)**FANTASYTOUR.COM***Real fantasy begins here*

	FANTASYTOUR.COM
Reputation status	Award-winning
Recommendation status	Highly recommended
Quality rating	High
Price	High

Important Links:[Login](#)
[Sign Up](#)
[Package](#)
[Pricing](#)
[FAQ](#)

You have browsed the information of the travel providers. Now please select the travel provider with whom you want to book your weekend away holiday.

- I want to book my holiday with Fantasytour.com
- I want to book my holiday with Vibrantholiday.com

Upon clicking either Fantasytour.com or Vibrantholiday.com the following information appears on the screen

Before booking and payment do you want to know more about Fantasytour.com?/Vibrantholiday.com?
If so please click 'Yes' or else click 'No'

Upon clicking 'Yes' the following information appears on the screen and upon clicking 'No' the information regarding finalizing the choice of provider appears on the screen. It is implied that 'Yes' would be selected by all in this condition.

You have decided to search more information about Fantasytour.com/ Vibrantholiday.com. Which of the following information you want to search?

(You can search only one combination of information from the following)

- a. Company perspectives and company history
- b. Milestones and memberships
- c. Company values and work values

Upon selecting one bunch of information, the screen showing that information appears. When finished reading the information the following screen appear.

You have browsed the information of Vibrantholiday.com/ Fantasytour.com.

FINALISE THE CHOICE OF PROVIDER

Now if you want to continue booking with Fantasytour.com/ Vibrantholiday.com and make payment please choose 'Yes'. If you want to change your decision and select other travel provider please select 'No'.

Upon clicking 'Yes' the following information appears

BOOKING THE HOLIDAY

You book a weekend-away holiday package including 4 **** accommodation with Vibrantholiday.com/Fantasrytour.com (award-winning provider) and make payment.

- 3) What would your level of expectation regarding the holiday you have just booked with this travel provider?

Low | 1 | 2 | 3 | 4 | 5 | High

- 4) Please write down the reasons of your level of expectation regarding the holiday you have just booked with this travel provider.

.....

THE HOLIDAY EXPERIENCE

You arrive at the holiday destination. Later you discover that the hotel is not like the 4**** hotel that you have stayed before. This hotel barely meets 3*** criteria. You return from the holiday without feeling refreshed and relaxed.

5) To what extent was the holiday worse than your expectation?

Not at all worse | 1 | 2 | 3 | 4 | 5 | Much more worse

6) What would be your level of disappointment regarding the holiday purchase from this travel provider?

Low | 1 | 2 | 3 | 4 | 5 | High

REFLECTING ON THE HOLIDAY EXPERIENCE

You search for more information online and find that the pictures of the hotel do not match the pictures posted in the *travel provider's website*. You also come across a recent media report that indicates *online travel providers often* make misleading claims.

Condition 2:

Responsibility: Provider

Expectation: High

Information search: Low

Respondents do not get any additional information about the provider other than the information provided in the mock-up website.

[Manipulation of responsibility and expectation; the questions asked: Same as condition 1]

Condition 3:

Responsibility: Provider

Expectation: Low

Information search: High

FANTASYHOLIDAY.COM Home | About | Package | Pricing | Contact Us | FAQ

Feel it all the way

	FANTASYHOLIDAY.COM
Reputation status	New
Recommendation status	Not yet available
Quality rating	Not yet available
Price	Low

***Free welcome drinks are included within each package.

Important Links:

- Login
- Sign Up
- Package
- Pricing
- FAQ
- Site Map

Important Links:

Login | Sign Up | Package | Pricing | FAQ | Site Map

	HEAVENTOUR.COM
Reputation status	New
Recommendation status	Not yet available
Quality rating	Not yet available
Price	Low

HEAVENTOUR.COM

Heavenly experience is a reality here

Home | About | Package | Pricing | Contact Us | FAQ

[Manipulation of responsibility attribution and information search; the questions asked:
Same as condition 1]

Condition 4:

Responsibility: Provider

Expectation: Low

Information search: Low

[Manipulation of responsibility attribution: Same as condition 1; Manipulation of expectation: Same as condition 3; Manipulation of information search: Same as condition 2; and the questions asked: Same as condition 1]

Condition 5:

Responsibility: Customer

Expectation: High

Information search: High

REFLECTING ON THE HOLIDAY EXPERIENCE

Upon reflection you realize that *you forgot to check* the details of the hotel before making your final booking with the travel provider. You also come across a recent media report that indicates *consumers' failure to invest adequate time often* results in online purchase failure.

[Manipulation of expectation and information search; the questions asked: Same as condition 1]

Condition 6:

Responsibility: Customer

Expectation: High

Information search: Low

[Manipulation of responsibility: Same as condition 5; Manipulation of expectation: Same as condition 1; Manipulation of information search: Same as condition 2; and the questions asked: Same as condition 1]

Condition 7:

Responsibility: Customer

Expectation: Low

Information search: High

[Manipulation of responsibility: Same as condition 5; Manipulation of expectation: Same as condition 3; Manipulation of information search: Same as condition 1; and the questions asked: Same as condition 1]

Condition 8:

Responsibility: Customer

Expectation: Low

Information search: Low

Manipulation of responsibility: Same as condition 5; Manipulation of expectation: Same as condition 3; Manipulation of information search: Same as condition 2; and the questions asked: Same as condition 1]

Section D: Dependent variables
Regret and repurchase intentions
The questions asked are same as study 1. However, where applicable the word ‘couple’ is replaced with ‘you’.
Section E: Manipulation checks
The responsibility manipulation check questions are same as study 1. However, where applicable the word ‘couple’ is replaced with ‘you’.
Section F: Dependent variables
Outcome regret dimension: regret due to forgone alternatives
The questions asked are same as study 1. However, where applicable the word ‘the couple/they’ is replaced with ‘I’.
Outcome regret dimension: regret due to change in significance
The questions asked are same as study 1. However, where applicable the word ‘the couple/they’ is replaced with ‘I’.
Process regret dimension: regret due to under-consideration
The questions asked are same as study 1. However, where applicable the word ‘the couple/they’ is replaced with ‘I’.
Process regret dimension: regret due to under-consideration
The questions asked are same as study 1. However, where applicable the word ‘the couple/they’ is replaced with ‘I’.
Process regret dimension: regret due to over-consideration
The questions asked are same as study 1. However, where applicable the word ‘the couple/they’ is replaced with ‘I’.
Coping intentions: Vindictive nWOM, Vindictive complaining, Support-seeking nWOM and Problem-solving complaining
The questions asked are same as study 1. However, where applicable the word ‘the couple/they’ is replaced with ‘I’.
Section G: Task checks & Demographics
Same as study 1.

Appendix 3: Research questionnaire for Study 3

Explanatory Statement
Same as study 1.
Section A: General Questions
Same as study 2.
Task-related information
Same as study 2.
Section B: Describing the need to purchase a holiday
Same as study 2.
Section C: Experimental Scenario [Randomized in a between-subject full factorial design]
It may take a while for you to view the information of the travel provider depending on your internet connection.
Condition 1: Responsibility: Provider Expectation: Stated
Similar to condition 1 of study 2 two travel providers mock-up webpage are provided. Similarly further information search opportunity about the provider is also provided. After choosing the provider the respondents are asked to state their expectation about the holiday choice from this travel provider which is similar to study 2.
The actual holiday experience as depicted in the scenario is also similar to study 3 as well as the questions those asked their level of disappointment.
The manipulation of responsibility attribution: Same as condition 1, study 2.
Condition 2: Responsibility: Provider Expectation: Unstated
<i>The respondents are not asked to state their expectation about the holiday choice from this travel provider.</i>
The manipulation of responsibility attribution and disappointment-related questions: Same as condition 1, study 2.

Condition 3:

Responsibility: Situation

Expectation: Stated

REFLECTING ON THE HOLIDAY EXPERIENCE

You search for more information online and find that the company responsible to update the travel provider website had a *computer problem due to extreme weather conditions including lightning*. This resulted in displaying inaccurate pictures and information on the travel provider website on the day you made your holiday booking.

The manipulation of expectation as well as questions asked: Same as condition 1.

Condition 4:

Responsibility: Situation

Expectation: Unstated

The manipulation of responsibility attribution: Same as condition 3; the manipulation of expectation: Same as condition 2; questions asked relating to disappointment: Same as condition 1, study 2.

Section D: Dependent variables**Disappointment types, regret and repurchase intentions**

Please rate your agreement with the following items, considering your bad holiday experience

- 1) My disappointment is primarily related to online travel provider.

Strongly disagree | 1 | 2 | 3 | 4 | 5 | Strongly agree

- 2) My disappointment is primarily related to the circumstances that is beyond the control of the travel provider.

Strongly disagree | 1 | 2 | 3 | 4 | 5 | Strongly agree

Regret and re-patronage related questions are same as study 2.

Section E: Manipulation checks

The following statements and questions concern the **cause(s) of the bad holiday experience**. Please think about your holiday experience and select the option that most closely corresponds to how you feel about it.

1) The bad holiday experience is:

Not at all caused by the online travel provider	1	2	3	4	5	Very much caused by the online travel provider
--	---	---	---	---	---	---

2) The bad holiday experience is:

Not at all caused by the circumstances beyond the control of the travel provider	1	2	3	4	5	Very much caused by the circumstances beyond the control of the travel provider
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3) Please write down the reasons behind your ratings to the previous statements.

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Section F: Dependent variables

Outcome regret, process regret, vindictive nWOM, vindictive complaining, support-seeking nWOM and problem-solving complaining

Same as study 2.

Section G: Task checks & Demographics

Same as study 1.