PERCEIVED JUSTICE AND CONSUMER POST SERVICE FAILURE BEHAVIOUR: THE MODERATING ROLE OF FAILURE SEVERITY, ATTACHMENT STYLES, AND BRAND AUTHENTICITY

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ABSTRACT

This study aims to investigate the role of failure severity, attachment styles and brand authenticity within the failure and recovery framework, which is widely recognised as fundamental in the body of research for service failure and recovery. Failure severity is a critical factor influencing consumers' perceived justice of recovery efforts and corresponding satisfaction. However, most studies tend to address failure severity at one level even though it can be of low and high levels, which consequently impacts recovery satisfaction and behavioural responses differently. Past studies have also found mixed findings on the impact that recovery satisfaction can have on positive behavioural responses, and the extant literature indicates that personality traits and brand-related factors can better explain consumer behaviours.

This study firstly examines the direct and indirect relationship between perceived justice and behavioural responses and the impact of failure severity on the relationship between perceived justice and consumers' recovery satisfaction through the tenets of justice theory and regulatory focus theory. Secondly, this study tests the moderating role of attachment styles and brand authenticity on the relationship between recovery satisfaction and behavioural responses based on the proponents of attachment theory and semiotics theory respectively. The inclusion of failure severity, attachment styles, and brand authenticity offers an integrated framework of service failure and recovery. This study applies an experimental design and employs scenario-based survey questionnaires are used to collect responses from Malaysian mobile phone users. Three scenario-based experimental studies are conducted to examine the research objectives. Constructs are tested for their reliability and validity through confirmatory factor analysis (CFA) and scale reliabilities. The dataset is subjected to manipulation checks and tested for main and interaction effects of the independent and control variables on

the dependent variables through multivariate analysis of covariance (MANCOVA). Mediation and moderated mediation analyses are conducted by using Hayes' PROCESS macro.

The results of analyses indicate that failure severity moderates the relationship between perceived justice of recovery efforts and recovery satisfaction when failure severity is high. It also finds that highly anxious consumers, rather than lowly anxious consumers, will continue to repurchase when they are satisfied with the recovery efforts. The brand-related construct of brand authenticity is found to display a moderating role, but instead of promoting it reduces the positive behavioural responses. The findings of this study advance theoretical understanding by highlighting the need to consider service failure severity, individual and brand-related factors to understand the complex and dynamic behaviour of consumers in the context of service failure and recovery. Furthermore, the theories support and reflect the robustness of the framework. Managers, on the other hand, can gain an understanding of how failure severity of low and high levels influences recovery satisfaction. The understanding would allow managers to allocate resources effectively in their service recovery design and implementation. Managers stand to gain by segmenting consumers by their attachment styles as it can impact behaviours. In addition, the insight on consumers' perception of a brand's authenticity and how it impacts behaviours will lead managers to consider building and promoting consumers' perception of their brand authenticity according to how consumers evaluate and perceive authenticity. This study contributes from a methodological perspective by testing the nomological validity of constructs through the three scenario-based experimental studies and the systematic presentation of the findings of the hypotheses tested using Hayes' PROCESS macro.

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The oft quoted “it’s the journey rather than the destination that matters in the end” is what I associate my PhD journey to - and what a journey it’s been. It has been oftentimes been accompanied by tears of frustration, sleepless nights, time stolen from life, which at times seemed almost too much to be bear. However, the journey was also sprinkled with hope and with light at the end of the tunnel leading to opportunities. Upon reaching the end and looking back, it seems it was the journey that matters most. All the setbacks, challenges, learning, unlearning, and relearning again was part of the journey that mattered. That there was a bigger purpose to it. And all this would not have been possible without paying homage to all the wonderful souls – my dearest and those that mattered- and those that did not mind while I pursued what mattered.

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CHAPTER 1: INTRODUCTION

Chapter 1 introduces the background of this study and the problem statements. Research objectives, research questions, and an overview of research methodology are then outlined. The theoretical and managerial contributions are also discussed. The chapter is concluded by presenting the organisation of the chapters.

1.1 Introduction

Businesses in the services industry depend on satisfied customers besides attracting new customers as it is widely acknowledged that building customer relationship is important for survival. Therefore, service providers pay attention to aspects of service creation, delivery, and post-service delivery to ensure consumer satisfaction and patronage. These aspects of services are generally characterised by intangibility, simultaneous production, consumption, and involvement by consumers (Singh, 1991; Duffy, Miller and Bexley, 2006). Due to these characteristics, transgressions such as service failures are inevitable within a service setting (Parasuraman, Berry and Zeithaml, 1991). Service failures are "service mishaps that result in customer dissatisfaction" (Jung and Seock, 2017, p.23). Additionally, service failure can also negatively affect the brand reputation of the service providers. To lessen the impact of these negative consequences on both service providers and consumers, a good recovery effort is required. Recovery efforts represent the measures adopted by service

providers to reduce the dissatisfaction experienced by consumers (Maxham III and Netemeyer, 2002a). Service recovery paradox (McCollough, Berry and Yadav, 2000), a situation whereby the post-recovery satisfaction exceeds the pre-failure satisfaction level, is possible upon a successful recovery effort and it can lead to satisfaction and restoration of consumer-brand relationships (Sparks and McColl-Kennedy, 2001). Therefore, successful recovery would ensure existing consumers can be maintained, as this is much cheaper than incurring high expenditure in the acquisition of new ones (Ganesh, Arnold and Reynolds, 2000).

Recovery strategy can entail various efforts such as compensation, apology, explanation, and others, which are evaluated on three dimensions of justice, namely distributive, procedural, and interactional (Smith, Bolton and Wagner, 1999). As consumers experience a sense of loss and dissatisfaction following service failures, recovery strategies implemented by service providers are to reduce the loss and dissatisfaction experienced (Kim, Kim and Kim, 2009) by serving justice to the wrongdoing. Thus, consumers form a perception of fairness of the recovery implemented by the service providers. A well-executed recovery strategy can lead consumers to perceive a high level of justice (Gohary, Hamzelu and Alizadeh, 2016; Mohd-Any et al., 2019). Consequently, the level of consumer satisfaction will be high and this will lead to an increased level of sustaining behaviours in terms of repurchase intentions and positive word-of-mouth (Kim, Kim and Kim, 2009; Gohary, Hamzelu and Alizadeh, 2016). Recovery satisfaction is indeed a vital construct in the link between perceived justice and positive behavioural responses (Smith, Bolton and Wagner, 1999;

Kim, Kim and Kim, 2009; Mohd-Any et al., 2019). However, it has been found that higher satisfaction with recovery is contingent on the level of failure severity (Weun, Beatty and Jones, 2004; Chuang et al., 2012; Balaji and Sarkar, 2013). This suggests that the level of failure severity is a vital construct that affects the outcome of service recovery efforts; but most studies tend to hold the severity of failure constant or at one level in the majority of service failure and recovery studies (Sreejesh, Anusree and Abhilash, 2019; Khamitov, Grégoire and Suri, 2020).

Studies that investigate the low and high level of failure severity have found that a higher level of severity is associated with higher dissatisfaction (Sengupta, Balaji and Krishnan, 2015), higher assignment of attribution of failure to service providers (Hsu et al., 2019) and intentions of negative behaviours such as revenge (Zourrig, Chebat and Toffoli, 2015; Walsh et al., 2019). Service recovery has been indicated as the means to mitigate the negative repercussions of failure (Dewitt, Nguyen and Marshall, 2008; Grégoire et al., 2018; Le and Ho, 2020). However, the findings have been conflicting in terms of the effect of recovery on consumer satisfaction at the low and high level of failure severity (Weun, Beatty and Jones, 2004; Chuang et al., 2012; Balaji and Sarkar, 2013; Bambauer-Sachse and Rabeson 2015a, 2015b; Liu et al., 2019). Therefore, further studies are required to clarify the inconsistencies found in the extant literature.

As discussed, recovery efforts upon service failure are vital in restoring consumers' satisfaction and confidence to continue the relationship with the

service provider. However, some studies have found that satisfaction with recovery efforts do not necessarily lead to consumer retention (Tax and Chandrashekaran, 1992, cited in Fayos-Gardó et al., 2017, p.5; Jones and Sasser, 1995; Weun, Beatty and Jones, 2004; Forbes, Kelley and Hoffman, 2005; Chen et al., 2018). Thus, it is suggested that the relationship between service recovery and consumer behaviours may not necessarily be linear (Weun, Beatty and Jones, 2004). Moderating factors, such as individual traits and brand-related constructs have been found to better explain the outcomes such as narcissistic entitlement on the relationship between brand hate and word-of-mouth (Jain and Sharma, 2019), brand attachment on the relationship between failure attribution and emotions (Torres, Rawal and Bagherzadeh, 2020) corporate reputation and silent endurance on the relationship between anger induced by service failure and revenge intention (Walsh et al., 2019) and self-construal on the relationship between recovery and satisfaction (Sharifi and Spassova, 2020).

However, rather than the examination of the direct effects of service failure and recovery efforts in consumer response (Baron and Kenny, 1986), it has also been advocated that the investigation of moderating factors such as consumer traits (Dabholkar and Bagozzi, 2002) are more meaningful in explaining consumer intentions. Differences in individual traits were found to better capture the underlying motivations and influence on consumer behaviour (Dabholkar and Bagozzi, 2002; Bodey and Grace, 2006). Therefore, individual traits are gaining greater attention within consumer behaviour research (Park et al., 2010; Mende and Bolton, 2011; Cheng, White and Chaplin, 2012; Mende, Bolton and Bitner, 2013; Jiménez and Voss, 2014; Trump, 2014; Sinha and Lu, 2016; Sreejesh et

al., 2018). The literature also indicates that “narrowly defined traits” (Buss, 1989, p.1384), such as attachment styles, are more relevant in predicting behaviour as opposed to broadly, defined traits such as the big five personality trait (Buss, 1989; Hampson, 1989). Narrow individual traits are more relevant as they are more homogeneous by nature and therefore, better indicators of consumer behaviour (Buss, 1989; Hampson, 1989).

Individual traits may have received much attention within other consumer behaviour studies such as differentiating between complainers and non-complainers (Bodey and Grace, 2006; Ekinci, Calderon and Siala, 2016), consumers’ decisions on self-serving technologies (Dabholkar and Bagozzi, 2002; Zhu et al., 2007) and satisfaction of consumers (Sreejesh et al., 2018; Choi and Hwang, 2019) but not much within service failure and recovery studies. Recently, a call has been made to explore the role of "individual differences and their moderating impact on customers responses to both failure and recovery" (Khamitov, Grégoire and Suri, 2018, p. 63). One such individual trait that is yet to be examined is attachment styles (Khamitov, Grégoire and Suri, 2018; Khamitov, Grégoire and Suri, 2020). Attachment styles has been evident to successfully explain an individual's interrelationship tendencies in social psychology (Edelstein and Shaver, 2004; Mikulincer and Shaver, 2007) and capture differences in consumer responses in some studies within consumer behaviour (Swaminathan, Stilley and Ahluwalia, 2009; Thomson, Whelan and Johnson, 2012; Mende et al., 2019). Therefore, this study intends to investigate the effect that consumers’ attachment may have on behavioural responses upon satisfaction with recovery efforts.

In addition to individual traits, several studies have also focused on brand-related factors to examine their impact on consumer behaviour (Albrecht et al., 2013; Konuk, 2018). Constructs such as brand loyalty (Yeh, Wang and Yieh, 2016), brand relationship quality (Nyffenegger et al., 2015), brand reputation (Sengupta, Balaji and Krishnan, 2015), brand love (Sakulsinlapakorn and Zhang, 2019), brand trust (DeWitt, Nguyen and Marshall, 2008), brand attachment (Thomson, MacInnis and Park, 2005; Park et al., 2010) and brand authenticity (Ilicic and Webster, 2014; Morhart et al., 2015; Fritz, Schoenmueller and Bruhn, 2017; Oh et al., 2019; Shuqair, Pinto and Mattila, 2019) have been examined in various studies in how these constructs predict consumers' evaluations and behaviours towards service providers. Perceived brand authenticity has emerged as the better predictor of behavioural responses compared to the more established construct of brand attachment (Ilicic and Webster, 2014). Brand authenticity has been introduced as a brand-related factor (Bruhn et al., 2012), and has emerged to be a vital factor for brand success as authenticity corresponds to human aspirations and this has been identified as a "contemporary marketing issue" (Arya et al., 2019, p. 87). Hence, brand authenticity has gained much attention more recently within the consumer behaviour literature especially with studies empirically justifying its positive association to pro-brand behaviours (Arya et al., 2019; Lee et al., 2019; Jiménez-Barreto et al., 2020). The positive association between brand authenticity and behaviours can be attributed to the fact that consumers increasingly seek and value authenticity in the interaction with their service providers (Bruhn et al., 2012). Therefore, brand authenticity is proposed in this study as it is expected to better explain the relationship between

recovery satisfaction and behavioural intentions based on its predictability in influencing consumer behaviour, especially in comparison to a more established construct and in its significance to consumers.

For that reason, this study proposes an integrated framework to understand how consumers respond to service failures, recovery efforts, and recovery satisfaction. More specifically, this study examines the direct and indirect relationship between perceived justice and behavioural responses, the impact of failure severity level, the underexplored individual trait of attachment styles, and brand authenticity as a brand-related factor on consumers' response to recovery efforts post service failure. This study applies the justice theory, regulatory focus theory, attachment theory, and semiotics theory.

1.2 Background of the Study

Service delivery is aimed to meet consumers' expectations so that they remain and continue to be satisfied with the service provider. While a failure in the delivery of the service is undesirable, it is sometimes unavoidable due to service characteristics. These failures represent losses as the service is not delivered up to expectations and cause consumers to experience outcomes such as dissatisfaction (Sengupta, Balaji and Krishnan, 2015). Therefore, intervention by service providers in the form of recoveries is necessary as it can reduce the negative outcomes (Dewitt, Nguyen and Marshall, 2008; Grégoire et al., 2018). Recoveries that are perceived as fair can lead to positive outcomes such as satisfaction with the recovery efforts (Tax, Brown and Chandrashekaran, 1998;

Kau and Loh, 2006; Jung and Seock, 2017). The impact of the recovery efforts on satisfaction is of interest to the brand managers as it leads to insights on consumers' behavioural responses, which is vital to the brands' long-term survival. Studies, however, indicate that recovery efforts do not always lead to recovery satisfaction (Chuang et al., 2012; Balaji and Sarkar, 2013).

The conflicting outcomes of recovery efforts on consumer satisfaction could be attributed to the severity of the service failure. Severity refers to the magnitude or intensity of the service failure (Weun, Beatty and Jones, 2004). Past studies have found that consumers who experience severe failure perceive a greater loss, indicate dissatisfaction (Weun, Beatty and Jones, 2004; Balaji and Sarkar, 2013; Sengupta, Balaji and Krishnan, 2015) and engage in anti-brand behavioural responses (Kalamas, Laroche and Makdessian, 2008; del Río-Lanza, Vázquez-Casielles and Díaz-Martín, 2009; Gregoire et al., 2018). Most studies tend to investigate the relationship between recovery efforts and recovery satisfaction for service failure at constant or at one level (Sreejesh, Anusree and Abhilash, 2019). There have also been studies that found that a high level of severity impacts recovery satisfaction negatively (Liao, 2007; McCollough, 2009; Chuang et al., 2012; Balaji and Sarkar, 2013). On the other hand, Bambauer-Sachse and Rabeson (2015a, 2015b) established that service recovery leads to an increased satisfaction level at a high level of severity. Thus, further investigation is required to clarify the conflicting findings on the impact of low and high levels of failure severity on recovery satisfaction. This study examines the impact of low and high levels of failure severity on recovery satisfaction.

Recovery satisfaction, as discussed, plays a vital role when recovery efforts are implemented as consumers' consequent behavioural responses rely on the level of recovery satisfaction. The extant literature provides that satisfaction acts as a mediator between perceived justice of recovery efforts and consumers' post-recovery behavioural response (Karatepe, 2006; Jung and Seock, 2017), such that when consumers are satisfied, they would repurchase and engage in positive word-of-mouth (De Ruyter and Wetzels, 2000; Maxham III, 2001; Maxham III and Netemeyer, 2002a; Kim, Kim and Kim, 2009; Cambra-Fierro et al., 2013; Gohary, Hamzelu and Alizadeh, 2016; Jung and Seock, 2017; Yoo, 2020). However, several studies have found that satisfaction in the recovery efforts is not always linked to pro-brand behavioural responses (Weun, Beatty and Jones, 2004; Forbes, Kelley and Hoffman, 2005; Chen et al., 2018). Therefore, the contrasting results found in the literature suggest that the influence of a third variable could explain the relationship between recovery satisfaction and behavioural response. This study attempts to provide a better understanding of service failure, recovery satisfaction, and consumer behaviour by considering individual traits of attachment styles and brand-related factors of brand authenticity as moderators.

The individual trait of attachment styles is derived from attachment theory. Attachment theory proposes two manifestations - anxiety (view of self) and avoidance (view of others) (Brennan, Clark and Shaver, 1998). Attachment anxiety is the extent to which a person worries that relationship partners might not be available in times of need, has an excessive need for approval, and fears rejection and abandonment, whereas attachment avoidance is the extent to which

a person has an excessive need for self-reliance, fears depending on others, distrust relationship partners' goodwill, and strives for emotional and cognitive distance from partners (Mende, Bolton and Bitner, 2013). In psychology, these dimensions have been linked to consistent and profound differences in close relationships (Simpson, 1990). Studies also suggest that people become attached to an array of objects including pets, places, and brands (Sable, 1995; Schouten and McAlexander, 1995). While it is established in psychology that attachment influences individuals' relationship with objects and people, little is known about how it influences consumer relationship with brands following a brand's service failure and recovery.

While attachment styles may capture the role of consumer traits on service failure, recovery and behaviour, factors of brand authenticity which is seen from the consumers' perspective is vital as it could also influence the relationship among the constructs. Brand authenticity as a brand-related factor draws its roots from psychology where according to Heidegger (1962) authenticity is related to being oneself. It has then evolved conceptually to be a socially constructed interpretation, or an assessment made by an evaluator on an object (Grayson and Martinec, 2004; Beverland, 2005, 2006; Rose and Wood, 2005; Thompson, Rindfleisch and Arsel, 2006). Some consumers may evaluate an object or consumption experience to be fabricated or fake, and others may observe genuine, real or true elements (Rose and Wood, 2005; Beverland and Farrely, 2010; Beverland, Farrelly and Quester, 2010). This suggests that the evaluation of authenticity is specific to the experience of the individual consumers;

however, its influence on the consumer-brand relationship within the context of service failure and recovery is yet to be explored.

1.2.1 The Underpinning Theories

Previous studies have examined single relationships within the predominant justice framework, and therefore, a single theory was robust and sufficient to explain the underlying mechanism. The behaviour of a consumer, however, is often not straightforward and depends on the interplay of several factors. Therefore, this study proposes three moderators - failure severity, attachment styles, and brand authenticity to investigate consumers' varying responses in the event of service failure and service recovery. This then necessitates the inclusion of four theories – justice theory, regulatory focus theory, attachment theory, and semiotics theory to capture the intricate mechanisms of consumers' responses.

Justice theory has its foundations in social psychology and has been widely and successfully employed to explain individuals' reactions to a variety of conflicting situations. This theory proposes three dimensions of perceived justice that influence how people evaluate exchanges: distributive justice, which involves resource allocation and the perceived outcome of exchange (Adams, 1965; Deutsch, 1975), procedural justice, which involves how decisions are made and conflicts are resolved (Leventhal, 1980; Lind and Tyler, 1988), and interactional justice, which involves how information is exchanged and outcomes are communicated (Bies and Shapiro 1987). The combined evaluation of these dimensions leads to a perception of justice (Clemmer and Schneider, 1996, cited

in Blodgett, Hill and Tax, 1997, p.188). Justice theory has been applied in a variety of context including pay raises (Folger and Konovsky, 1989), employee intentions (Choi, 2011), labour relations (Greenberg and McCarty, 1990), and then in buyer/seller transactions (Oliver and Swan, 1989; Blodgett, Hill and Tax, 1997). These studies have demonstrated that justice has both psychological evaluations (e.g., satisfaction, loyalty, trust) and behavioural responses (e.g., employee turnover, legal appeals, repurchase intentions). Thus, justice theory has been widely applied in almost three decades of studies that investigate the perception of justice of recovery efforts implemented when failures occur to determine its effect on consumers' evaluations and behaviours (Blodget, Granbois and Walters, 1993; Smith, Bolton and Wagner, 1999; Kau and Loh, 2006; Kuo and Wu, 2012; Migacz, Zou and Petrick, 2017; Mohd-Any et al., 2019). Consistent with prior studies, justice theory is applied in this study, which also aims to investigate consumers' evaluations of the fairness of the recovery efforts and the resulting satisfaction and behavioural responses.

Justice theory can account for the evaluation of the fairness of the recovery efforts implemented through its three dimensions. However, justice theory does not incorporate the impact of service failure, which is examined in this study at low and high severity levels as it can impact recovery satisfaction differently. The differing levels of severity represent losses of differing magnitude. Thus, it leads consumers to evaluate the recovery effort against the level of losses experienced because these losses are seen as a threat by the consumers. Therefore, regulatory focus theory (Higgins, 1997) is called upon as it provides an explanation of how consumers seek to reduce the threat that the loss

represents and how the motivation to reduce the threat increases when the magnitude of the loss increases. Regulatory focus theory has been applied in the context of service recovery to explain consumers' motivations to obtain gain to reduce the threat in terms of loss experienced through service failure (Bambauer-Sachse and Rabeson, 2015a, 2015b). Hence, regulatory focus theory would be able to account for the impact of low and high levels of failure severity against consumers' evaluation of recovery efforts and the resulting satisfaction.

Justice theory and regulatory focus theory allow the explanation of recovery efforts and failure severity level and the impact on consumer evaluations and behaviours. As attachment styles are introduced as a moderator on the relationship between recovery satisfaction and consumers' behavioural responses, the application of attachment theory is necessary. "Attachment theory is one of the most comprehensive and leading theoretical frameworks" (Liu and Hogg, 2018, p.198) to explain attachment styles. Attachment theory has been used by scholars in not only examining interpersonal relationships (Cohen, 2004) but also in prior studies of marketing and consumer behaviour (Thomson and Johnson, 2006; Mende, Bolton and Bitner, 2013; Bidmon, 2016; Sreejesh et al., 2018). Thus, this theory is vital to explain the impact of service failure on consumer-brand relationships and how attachment styles moderate the relationship.

In addition to attachment styles, the brand-related construct of perceived brand authenticity is also expected to affect the relationship between recovery satisfaction and behavioural responses. As this is a relatively new construct, with

slightly differing views on its conceptualisation, several studies rely on the foundational theoretical tenets of semiotics theory (Peirce, 1931-1958, cited in Mick, 1986, pp.198-199), upon which perception of brand authenticity is formed (Grayson and Martinec, 2004; Morhart et al., 2015; Portal, Abratt and Bendixen, 2019). Semiotics proposes objective (indexical), subjective (iconic) and symbolic (existential) semantic relations (Peirce, 1931-1958, cited in Mick, 1986, p.199). The indexical, iconic, and existential semantic relations translate into objective, subjective, and symbolical evaluation based on cues that consumers obtain through their relationship with the brand (Grayson and Martinec, 2004; Morhart et al., 2015). These semantic relations have been applied in studies of products and services such as cosmetic products (Lee et al., 2019), and airline services (Portal, Abratt and Bendixen, 2019), through which it is evident that the perception of brand authenticity formed affects the behavioural responses. Therefore, the semantic relations in semiotics theory are applied in this study in defining brand authenticity and consequently, this aids in understanding the moderating role of brand authenticity on the consumer-brand relationship.

1.3 Problem Statements

Past studies have indicated that the severity of failures can vary from low to high (De Matos et al., 2009; Gelbrich, 2010; Grégoire, Laufer and Tripp, 2010). Failure of higher severity represents higher losses for the consumers leading to dissatisfaction (McCollough, Berry and Yadav, 2000), a sense of injustice (Maxham III, 2001), and a higher level of negative emotions such as anger and

frustration (Strizhakova, Tsarenko and Ruth, 2012; Zourrig, Chebat and Toffoli, 2015; Harrison-Walker, 2019). Service failure of higher severity can also cause negative repercussions for service providers, such as consumer revenge (Grégoire, Laufer and Tripp, 2010; Grégoire et al., 2018; Walsh et al., 2019). Recovery efforts by service providers have been found to mitigate the negative consequences of service failure (Bonifield and Cole, 2007; Gregoire et al., 2018), but most of these studies have examined failure at a single level or by keeping it constant (Sreejesh, Anusree and Abhilash, 2019). Thus, the severity of failure has not received much attention in the service failure and recovery literature (Khamitov, Grégoire and Suri, 2020).

Past studies that have focused on failure severity levels have found inconclusive outcomes in terms of its effect on recovery satisfaction. In the presence of highly severe failure, most studies indicate low recovery satisfaction (Weun, Beatty and Jones, 2004; Chuang et al., 2012; Jha and Balaji, 2015), but a few other studies have established recovery satisfaction to be high (Bambauer-Sachse and Rabeson, 2015a, 2015b). Based on these findings, it is still unclear if recovery efforts are effective under high failure severity conditions. Given that recovery efforts are an investment of resources for the service provider, it is therefore vital to further understand the impact that failure severity level may have on the relationship between recovery efforts and recovery satisfaction. More specifically, it would allow service providers to understand the role of failure severity in designing recovery efforts that lead to recovery satisfaction. Such an understanding is crucial for service providers to regain consumer confidence leading to positive behavioural responses. Thus, a gap is evident based on the

lack of studies investigating failure severity levels and the inconsistent findings indicated by the few studies that have examined failure severity levels. It is also important for service providers to understand the mechanism of service failure and recovery at different failure severity levels. Therefore, this study contributes by further examining the impact that failure severity levels have on satisfaction with recovery efforts.

The extant literature indicates that satisfaction with the recovery efforts is fundamental as it determines the behavioural outcomes such as repurchase intention and positive word-of-mouth (Cambra-Fierro et al., 2013; Petzer, De Meyer-Heydenrych and Svensson, 2017). Repurchase intention and positive word-of-mouth are widely investigated as two positive outcomes of recovery satisfaction. A few studies, however, have found that recovery satisfaction does not lead to positive behavioural responses (Weun, Beatty and Jones, 2004; Forbes, Kelley and Hoffman, 2005; Chen et al., 2018). As most studies have indicated recovery satisfaction as vital in eliciting positive consumer behaviours, studies that highlight a negative relationship indicate a gap in the literature. The negative relationship between recovery satisfaction and positive behaviours suggests that a third variable may affect this relationship. It is thus essential to understand which variables they are and how they affect behaviours post-recovery satisfaction. Past studies have found that individual traits better predict consumers' behaviours as these traits explain the underlying motivations for the behaviours (Dabholkar and Bagozzi, 2002; Bodey and Grace, 2006). Attachment styles is a trait that is inherent in every individual (Kordrostami and Kordrostami, 2019) and have been suggested to predict consumer's evaluations

and behavioural outcomes (Thomson and Johnson, 2006; Swaminathan, Stilley and Ahluwalia, 2009; Vlachos et al., 2010; Vlachos and Vrechopoulos, 2012; Mende, Bolton and Bitner, 2013; Japutra, Ekinci and Simkin, 2018; Japutra, 2020). Given the propensity of attachment styles to impact behavioural responses, this study contributes to the literature of service failure and recovery context by investigating consumer attachment styles in the context of recovery satisfaction leading to behavioural responses.

Although consumer attachment styles may be expected to impact behaviour from the personality trait perspective, it alone may not fully capture the complex nature of service failure, recovery and consumers' behavioural responses. Therefore, with the introduction of a brand-related factor, the complexity and dynamism of the relationship between recovery satisfaction and behavioural responses can be fully understood. Other consumer behaviour studies have included individual traits and brand-related factors in proposing an integrated framework (Konuk, 2018; Hassey, 2019; Jain and Sharma, 2019). The brand-related factor of brand authenticity is introduced into the framework as it has been evidenced to be relevant and contemporary (Arya et al., 2019). Brand authenticity means the extent to which consumers perceive a brand to be faithful toward itself, true to its consumers, motivated to be caring and responsible, and able to support consumers in being true to themselves (Morhart et al., 2015). Authenticity has gained importance as consumers increasingly seek product or services that allow them to self-authenticate (Arnould and Price, 2000) as evidenced by the higher positive behavioural responses when brand authenticity is high (Ilicic and Webster, 2014; Fritz, Schoenmueller and Bruhn, 2017; Oh et

al., 2019; Portal, Abratt and Bendixen, 2019; Shuqair, Pinto and Mattila, 2019; Jiménez-Barreto et al., 2020). However, it is yet to be examined within the service failure and recovery satisfaction literature. Therefore, this study contributes by examining the impact of brand authenticity on the relationship between recovery satisfaction and consumers' behavioural responses.

In summary, this study attempts to address the gaps that lead to two problem statements. Firstly, failure severity levels have not received much attention in the literature and when it is included, conflicting findings were evidenced by the impact of low and high levels of service failure severity on consumers' satisfaction with recovery efforts. As recovery efforts are important in sustaining the consumer-brand relationship, it is vital to examine the impact of failure severity levels on recovery satisfaction. Thus, this study examines failure severity levels in the widely accepted service failure and recovery framework to further understand the effect that failure severity levels have on the relationship between perceived justice and recovery satisfaction.

The second problem statement is on the probable presence of a third variable on the relationship between recovery satisfaction and positive behavioural responses, as past studies have indicated that satisfied consumers do not engage in positive behaviours. Thus, a gap is evident as recovery satisfaction is an important indicator of positive behaviours to sustain the consumer-brand relationship. As such, this study introduces the personality trait of attachment styles and a brand-related construct of brand authenticity to capture the complexity and dynamism in consumers' behaviour in the event of service

failure and recovery within the prevalent framework of service failure and recovery.

1.4 Research Aims and Objectives

Taking into view the problem statements, the research objectives are as follows:

1. To examine failure severity levels as a moderator role on the relationship between perceived justice and recovery satisfaction within the widely accepted service failure and recovery framework.
2. To examine the role of a third variable in the form of an individual trait and brand-related variables on the relationship between recovery satisfaction and consumers' behavioural intentions within the widely accepted service failure and recovery framework.

1.5 Research Questions

Based on the research objectives, four specific research questions are identified for this study and presented below:

1. What is the direct and indirect relationship between the perceived justice of recovery efforts and consumers' behavioural responses of repurchase and positive word-of-mouth intentions?
2. Do different levels of service failure severity moderate the relationship between perceived justice and recovery satisfaction differently?
3. Do individual traits of consumer attachment styles moderate consumer behavioural responses of repurchase and positive word-of-mouth intentions in the event of service failure and recovery?

4. Does the brand-related construct of perceived brand authenticity moderate consumer behavioural responses of repurchase and positive word-of-mouth intentions in the event of service failure and recovery?

1.6 Overview of Methodology

This study utilises scenario-based experiments, a method that is adopted in service research (Umashankar, Ward and Dahl, 2017; Borah, Prakhya and Sharma, 2019) and is suited to exploring service failures which are considered negative consumption experience (Liu et al., 2019). This study is experimental based on the research objectives which aims to examine the effect on the outcome variable based on the levels of the predictor variable(s) (Atzmüller and Steiner, 2010).

Three scenario-based experimental studies are proposed to address the research questions developed in line with the research objectives. Study 1 addresses the first two research questions, which are to test for the direct and indirect relationship between perceived justice and behavioural responses through recovery satisfaction; and to test for the moderating role of failure severity on the relationship between perceived justice and recovery satisfaction. Study 1 will thus address the research objective of examining failure severity levels as a moderator on the relationship between perceived justice and recovery satisfaction within the prevalent framework of service failure and recovery. Study 2 addresses the third research question on testing for the moderating role of attachment styles on the relationship between recovery satisfaction and

behavioural responses, while Study 3 addresses the final question for the moderating role of brand authenticity on the relationship between recovery satisfaction and behavioural responses. Study 2 and 3 are aimed to address the research objective of examining individual traits and brand-related variables as moderators on the relationship between recovery satisfaction and behavioural intentions within the prevalent framework of service failure and recovery. The methods, findings, and discussion for the three studies are presented in Chapter 5.

The use of three studies is necessary as different predictor variables at different levels are examined in each study for their effect on the outcome variables. Furthermore, it also provides the advantage of using different population of samples and procedures for each study which then allows the testing of nomological validity of the constructs (Carrillo, Svenson and Otero-Neira, 2019). Additionally, the use of several studies to examine the effect of separate independent variables on outcome variables are a common approach within service failure and recovery research (Wan and Wyer, 2019).

Studies 1-3 will collect data from Malaysian mobile phone users subscribing to services offered by local telecommunication service providers. The context of the study is described further in Chapter 2. Data is collected through survey questionnaires that present scenarios depicting service failure and recovery, and participants respond to the measures of the study upon reading the scenario. The scenarios that are presented in the survey questionnaire are pretested before the main study. Scenarios are created to reflect failures that could occur within the

service failure categories as reported in the official consumer forum report (The Communications and Multimedia Consumer Forum of Malaysia, 2019a). Pretesting then aims to ensure that respondents perceive the manipulated level of the predictor variables at the level intended and that the realism and comprehension of the scenario are high (DeWitt, Nguyen and Marshall, 2008; Sengupta, Balaji and Krishnan, 2015; Hassey, 2019). The pretests are conducted to develop and determine the scenarios are presented in Chapter 4.

1.7 Contributions of the Study

Theoretically, this study makes several important contributions. This study will provide for the effect of low and high levels of service failure severity on recovery satisfaction and the need to include failure severity levels as past studies have mostly examined failure severity at one level (Sreejesh, Anusree and Abhilash, 2019; Khamitov, Grégoire and Suri, 2020). Additionally, this study introduces the individual trait of attachment styles and brand-related construct of brand authenticity to examine its effect on the relationship between recovery satisfaction and consumers positive behavioural intentions. This will enrich the understanding of the complex and dynamic nature of consumer behaviour as prior studies have demonstrated that consumers do not engage in positive behaviours despite being satisfied with the recovery efforts (Weun, Beatty and Jones, 2004; Forbes, Kelley and Hoffman, 2005; Chen et al., 2018). The application of the four underpinning theories, namely, justice theory, regulatory focus theory, attachment theory, and semiotics theory is vital to

elucidate the complex relationship between the constructs of this study and offer an integrated framework for future studies.

This study identifies three contributions to the industry. Firstly, brand managers would understand if consumers' perception of low and high levels of failure severity affects satisfaction with the recovery efforts differently. This understanding is crucial to the design and implementation of recovery efforts to satisfy and retain consumers (Smith, Bolton and Wagner, 1999; Liao, 2007; Bambauer-Sachse and Rabeson, 2015a, 2015b). Secondly, brand managers may be able to capitalise on consumers by understanding their attachment styles (Mende, Bolton and Bitner, 2013), especially if it could explain why some consumers following satisfaction repurchase tend to propagate word-of-mouth while others are less inclined to do so. Thirdly, brand managers may understand how consumers perceive the authenticity of their brand and if it positively affects consumers' behavioural responses on post-recovery satisfaction, as indicated in prior studies (Carsana and Jolibert, 2018; Oh et al., 2019). This offers brand managers an opportunity to further build and extend the perception of brand authenticity.

This study also provides contributions from a methodological perspective. Nomological validity (Carrillo, Svenson and Otero-Neira, 2019) of the constructs will be tested in this study as different samples and sampling procedures will be utilised in the three scenario-based experiments being proposed. Besides, this study will utilise mediation and moderated mediation analyses in testing the hypotheses. The results of the hypotheses testing will be

interpreted systematically as advocated by Hayes (2018) and Borau et al. (2015), thus providing for robust findings and in-depth discussion.

1.8 Outline of the Study

This study consists of six chapters. Chapter 1 provides an overview and background of this research. This chapter also identifies the research problems by delineating the gaps found in the literature of perceived justice of recovery efforts, recovery satisfaction, and behavioural responses in terms of repurchase and positive word-of-mouth intentions, failure severity, attachment styles, and perceived brand authenticity. This is followed by research objectives, research questions, and an overview of the research methodology. The chapter then ends with a brief discussion on the theoretical, managerial, and methodological contributions of the study.

Chapter 2 presents the literature review related to constructs chosen for this study. The underpinning theories concerning the constructs of this study are also discussed. The chapter then presents the background information on the telecommunication service industry in Malaysia and mobile phone users as it serves as the study context.

In Chapter 3, research hypotheses for the identified research questions and research objectives are developed based on prior empirical studies and theories. The chapter also presents the research framework and constructs definition.

Chapter 4 begins by providing an overview of the pretests conducted to develop and validate scenarios for the three scenario-based experimental studies. The chapter then presents the method, data analysis and findings, and discussion of findings of all three pretests to determine and qualify the three scenarios.

Consequently, Chapter 5 also begins by first presenting the overview of the three scenario-based experimental studies in how each study relates to the research questions and research objectives. Then, the method, findings, and discussion are presented in order of the three scenario-based experimental studies conducted. The chapter concludes by summarising the findings of the three studies.

Finally, Chapter 6 presents the summary of the three scenario-based experimental studies, and a general discussion of the findings by drawing upon the research questions, objectives, and problem statements. The contributions of the overall study from the theoretical, managerial, and methodological perspective will also be presented. Limitations of the study and recommendations for future studies will also be discussed in this chapter.

CHAPTER 2: LITERATURE REVIEW

This chapter reviews the extant literature of the constructs prevalent with the service failure and recovery framework as they are investigated in this study. These constructs are service failure, perceived justice, recovery satisfaction, and the behavioural outcomes of repurchase and positive word-of-mouth intentions. In addition, the literature on the individual traits of attachment styles and brand-related factors of brand authenticity is also presented as these constructs will be investigated as moderators in this study. This chapter will also present the underpinning theories. The literature will provide towards understanding the constructs, their interrelationships and the findings that lead to the problem statements, research objectives, and research questions that this study will address. Consequently, it will also provide the basis for the hypotheses that will be developed in the subsequent chapter. Chapter 2 also presents the background information on the telecommunication industry in Malaysia as this provides the context of the study. The chapter thus concludes by summarising the key literature that contributes towards the problem statements and how the research objectives and research questions developed aim to provide clarification to the research problems.

2.1 Literature Review on Constructs of Service Failure and Recovery

2.1.1 Service Failure

Service failure is a form of transgression. Transgression is the umbrella term and has been defined as a perceived violation of the rules guiding relationship

performance and evaluation (Metts, 1994, cited in Aaker, Fournier and Brasel, 2004, p.2). Scholars refer to these violations in several ways such as critical incidents (van Doorn and Verhoef, 2008), service failures (Choi and Mattila, 2008; Sinha and Lu, 2016), product failures (Cheng, White and Chaplin, 2012; Trump, 2014), brand transgression (Trump, 2014), and brand misconduct (Huber et al., 2010). Although all the terms are related, Zeithaml et al. (2006, p. 175) suggest that transgressions can be conceptualised as a broader notion that encompasses "all the ways a seller can hurt the process of relationship development." This current study adopts the term service failure as it aims to investigate failures that occur within the context of service delivery that directly affects the consumer (Trump, 2014). Service failure is also the generally accepted term within studies investigating failures of service delivery (Kalamas, Laroche and Makdessian, 2008; Mattila, Cho and Ro, 2009; Sembada, Tsarenko and Tojib, 2016).

Consequences of Service Failure

Service failures undeniably occur within the service industry with negative consequences to both consumers and service providers. Generally, it has been found that service failures can severely impair the consumer-brand relationship (Aaker, Fournier and Brasel, 2004) as it violates the norms of the relationship (Aggarwal, 2004). As a consequence, relationship decline occurs (Maxham III and Netemeyer, 2002a) which draws scholars to investigate this phenomenon to understand how consumers perceive the failures and their impact on both consumers and service providers.

Many studies have investigated the impact service provider failures can have on consumers before recovery is implemented. Failures that occur lead consumers to experience losses which can be classified as economic or social type (Van Vaerenberg, Larivière and Vermeir, 2012). Past studies have found that when service failures occur, consumers display cognitive and emotive responses (Smith and Bolton, 2002). Along the cognitive route, consumers experience dissatisfaction and a sense of injustice when failures occur. The expectancy-disconfirmation paradigm (Oliver, 1980; Oliver and Burke, 1999) is the mechanism that explains the effect that service failures can have on consumers satisfaction. According to this paradigm, consumers form an expectation out of the service performance before purchase (Oliver and Swan, 1989). When the service fails, a negative disconfirmation arises as the expectation failed to be met, thus providing the basis for the consumer's sense of dissatisfaction (McCollough, Berry and Yadav, 2000; Jung and Seock, 2017; You et al., 2020). On the other hand, injustice arises out of the inequity experienced through service failures. Inequity arises as consumers experience a loss through the failure and it is against what they have invested in the relationship with the service provider (McCollough, Berry and Yadav, 2000; Maxham III, 2001). The dissatisfaction and injustice ultimately evoke emotional reactions (Smith and Bolton, 2002; Balaji, Roy and Quazi, 2017).

Studies thus have examined the impact that service failures can have on emotions and have found that failure leads to negative emotions (Bonifield and Cole, 2007; Balaji, Roy and Quazi, 2017; Sakulsinlapakorn and Huazhong, 2019). Anger is the most prominently investigated emotion arising out of failures and

it was found that consumers engage in coping behaviours such as revenge, switching and negative word-of-mouth using the theoretical framework of stress-and-coping and cognitive-appraisal theories (Bougie, Pieters and Zielenberg, 2003; Bonifeld and Cole, 2007; Strizhakova, Tsarenko and Ruth, 2012; Zourrig, Chebat and Toffoli, 2015; Walsh, 2019). More recent studies began to incorporate other emotions including frustration, regret, and irritation (Harrison-Walker, 2019; Le and Ho, 2020).

As it has been demonstrated that other emotions can be evoked as a result of service failure, studies then sought to understand how the emotions lead to different coping behaviours and thus apply attribution theory (Folkes, 1984; Weiner, 1985). Attribution theory provides the framework to understand how consumers assign responsibility for service failures (Van Vaerenbergh et al., 2014). The theory identifies that consumers assign failures along the lines of stability (consistency), controllability (prevention) and causality (responsibility) (Weiner, 1985). The most investigated dimension is causality and studies have demonstrated its impact on emotions and subsequent coping behaviours (Gelbrich, 2010; Zourrig, Chebat and Toffoli, 2015; Sakulsinlapakorn and Zhang, 2019). Drawing upon attribution theory, studies have found that when a service provider is seen as responsible for the failure, anger is a strong motivator for negative behaviours such as revenge (Zourrig, Chebat and Toffoli, 2015; Hsu et al., 2019). However, when the consumer attributes the failure to themselves as they see the failure occurring due to their decision in engaging with the service provider, then regret is the prominent emotion evoked and that leads to negative word-of-mouth and switching (Harrison-Walker, 2019; Le and Ho, 2020).

Therefore, consumers experience various negative emotions due to service failure which then consequently leads to various coping behaviours which are detrimental to both service providers and consumers. It can lead to serious repercussions if it is not addressed. For instance, the airline company United Airlines in the USA failed to address a consumer's complaint when the airline broke his guitar. The incident received worldwide attention after a song that he composed on the incident that was uploaded on YouTube became viral (Li, Juric and Brodie, 2017). Furthermore, within the Malaysian context, a telecommunication service provider, Maxis Berhad, received negative publicity when a consumer complained about unfair and preferential treatment of "tailored plans" granted to certain consumers (Surendran, 2016). The consumer's narration of the incident was shared on Facebook, where it instantly became viral. Maxis Berhad, rather than addressing the matter, made a statement that denied their practice of preferential treatment. It created another backlash of consumer fury on social media and when they finally came forth to apologise, it was already too late as many consumers indicated through their social media posts that they had already switched to other providers or expressively stating their intention to switch (Khor, 2016). Even though service providers strive to ensure that their consumers remain satisfied, they need to be vigilant at all times in detecting service failures and acknowledging them when it occurs.

Addressing Service Failures

The negative consequences of service failures, while being detrimental to both consumers and service providers alike, could be inhibited if service providers

engaged in recovery efforts. It has been found that through an increasing level of compensation, the effect of negative emotions decreases and consequently reduces the negative behaviours (Bonifield and Cole, 2007; Grégoire et al., 2018; Le and Ho, 2020). This was attributed to the perception of fairness of the recovery efforts which reduces the negative emotions experienced (Smith and Bolton, 2002; Grégoire et al., 2018) and increases the positive emotions, loyalty and satisfaction (Dewitt, Nguyen and Marshall, 2008; Xu, Liu and Gursoy, 2019). However, the positive effects of recovery can be impeded by higher failure severity levels, as it has been found that the level of blame, negative emotions, and consequent negative coping behaviours increase (Hsu et al., 2019; Sakulsinlapakorn and Zhang, 2019; Le and Ho, 2020). The higher levels of negative outcomes could be due to fact that consumers tend to assign the responsibility of failures more to the service provider when failures are perceived as severe (Chang et al., 2015; Sengupta, Balaji and Krishnan, 2015; Hsu et al., 2019). Thus, several studies have shown that when failure is severe, recovery efforts do not yield positive outcomes (Weun, Beatty and Jones, 2004; Chuang et al., 2012). Thus, the levels of failure severity then emerge as a vital factor that can impede the effectiveness of the recovery efforts.

Failure Severity

The severity of the failure, as discussed in Chapter 1, refers to the magnitude of the loss suffered by consumers because of the service failure (Weun, Beatty and Jones, 2004). Thus, at high levels of severity, the losses experienced are much higher as well (Chuang et al., 2012). As discussed above, severity also increases the level of blame towards the service provider and consumers experience a

higher level of dissatisfaction and negative emotions (Hsu et al., 2019; Sakulsinlapakorn and Zhang, 2019; Le and Ho, 2020). If service providers do not intervene, consumers would engage in negative coping behaviours (Grégoire, Laufer and Tripp, 2010). Recovery efforts are strategies to overcome the negative consequences (Dewitt, Nguyen and Marshall, 2008; Grégoire et al., 2018) and retain the relationship with the consumers. Studies have then sought to examine if recovery efforts at low and high levels of failure severity could lead to satisfactory evaluations and behavioural outcomes (Weun, Beatty and Jones, 2004; Sengupta, Balaji and Krishnan, 2015). Table 2.1 provides the findings of past studies that have investigated failure severity within a recovery context. As indicated in Table 2.1, the studies that have included low and high levels of failure severity have been conducted across various contexts such as in the airline (McCollough, 2009; Roggeveen, Tsiros and Grewal, 2012; Barakat et al., 2015), and telecommunication industries (Liao, 2007; Cambra-Fierro et al., 2013; Jha and Balaji, 2015) but most are within the hospitality service sector (Smith, Bolton and Wagner, 1999; Sparks and Fredline, 2007; Chuang et al., 2012; Kim and Ulgado, 2012; Bambauer-Sachse and Rabeson, 2015a, 2015b; Liu et al, 2019).

Furthermore, it is also evident in the studies presented in Table 2.1, that failure severity has been investigated as an independent variable for its direct relationship with satisfaction (De Matos et al., 2009; Wang et al., 2011; Cambra-Fierro et al., 2013; Barakat et al., 2015) and it has been found to negatively impair the satisfaction at increasing levels of severity. Other studies, on the other hand, have examined failure severity as a moderator between the perceived

justice/recovery performance and satisfaction link (Smith and Bolton, 1998; Smith, Bolton and Wagner, 1999; Mattila, 2001; Liao, 2007; Magnini et al., 2007; Sparks and Fredline, 2007; McCollough, 2009; Chuang et al., 2012; Kim and Ulgado, 2012; Roggeveen, Tsiros and Grewal, 2012; Bambauer-Sachse and Rabeson, 2015a, 2015b; Jha and Balaji, 2015; Liu et al., 2019). Except for the studies by Cambra-Fierro et al. (2013) and Kim and Ulgado (2012), other studies have found that both low and high levels of failure severity impact recovery satisfaction differently. More specifically, the impact of the interaction of low and high levels of severity and perceived justice/recovery performance on the outcome variable of satisfaction has been found to be conflicting across these studies.

Table 2.1 indicates several studies that found a well-executed recovery effort has a positive impact on recovery satisfaction when failure severity is low (Liao, 2007; McCollough, 2009; Chuang et al., 2012). These studies mostly drew upon mental accounting principles (Thaler, 1985) and prospect theory (Kahneman and Tversky, 1979) to explain how losses from a highly severe failure cannot offset the gain even from the best of recovery effort as the losses loomed much larger compared to the gains received from the recovery, and that the gains received through the recovery are dissimilar to the losses experienced through the failure. Very few studies set out to specifically investigate the recovery conditions under which a recovery satisfaction can be attained in the presence of a highly severe failure (Bambauer-Sachse and Rabeson, 2015a, 2015b). As presented in Table 2.1, these authors have found that high compensation can lead to high satisfaction, even when failure is of high severity. Bambauer-Sachse and

Rabeson (2015a, 2015b) drew upon regulatory focus theory (Higgins, 1997) to explain that motivation to obtain gain increases with levels of failure severity and because of that, a well-implemented recovery is able to offset the losses and satisfaction resulted.

A few other studies, as indicated in Table 2.1, have also found a positive effect of perceived justice on recovery satisfaction when severity is high, even though it is not hypothesised as such (Smith, Bolton and Wagner, 1999; Roggeveen, Tsiros and Grewal, 2012; Liu et al., 2019). The findings of these studies then indicate that it is possible to recover from a highly severe failure. This would also suggest that service providers investment in recovery efforts are necessary especially when the failure is of high severity. Other studies have also found that recovery does not lead to satisfaction when severity is high (Weun, Beatty and Jones, 2004, Chuang et al., 2012).

The findings indicate that severity needs further investigation given limited studies conducted and the conflicting outcomes evident thus far. Furthermore, the investigation of severity needs to be expanded into other service contexts and economies as the impact of severity on the outcomes may differ.

Table 2.1 Studies Investigating Service Failure Severity within Service Recovery Context

Author	Justice Conceptualisation / Alternative Construct	Failure severity Measure / Study Type / Theory	Study Context	Key Findings
Smith, Bolton, and Wagner (1999)	3-Dimensional	Experimental Direct and Moderating effect of failure severity manipulated at low and high levels Mental accounting principles, Prospect theory	Restaurant and hotel patrons	Hotel context: Compensation had a greater effect on fairness evaluation when severity was low Restaurant context: Compensation had a greater effect on fairness evaluation when severity was high
Mattila (2001)	3-Dimensional	Experimental Failure as moderator, respondents categorised into low and high failure groups based on the rating of the failure severity scale Equity theory	Restaurants, Hairstyling and dry-cleaning services	High recovery efforts led to high recovery satisfaction, regardless of the severity evaluation
Weun, Beatty, and Jones (2004)	Distributive, Interactional	Experimental Moderating role of failure severity manipulated at low and high levels Prospect theory, mental accounting principles	Hotel and mail order services	Severity moderated the relationship of only distributive justice on satisfaction, where the higher the severity, the influence of distributive justice on recovery satisfaction decreased

Author	Justice Conceptualisation / Alternative Construct	Failure severity Measure / Study Type / Theory	Study Context	Key Findings
Liao (2007)	Recovery performance	Experimental Moderating role of failure severity manipulated at low and high levels Mental accounting principles	Telecommunication Service	The positive effect of recovery performance on recovery satisfaction reduced when failure severity was high.
Magnini et al. (2007)	Excellent recovery (determined through pretesting)	Experimental Moderating role of failure severity manipulated at low and high levels Prospect theory	Hotel	Recovery paradox occurred when failure severity was low
Sparks and Fredline (2007)	Interactional (Referential vs. justification)	Experimental Moderating role of failure severity manipulated at a low, medium and high level	Hotel	Referential explanation (a type of interactional justice) had a greater impact on satisfaction when failure severity was high.
Michel (2008)	Recovery effort experienced	Survey actual customers of bank, retrospective, failures rated as highly severe	Bank	Recover paradox occurred when comparing customers who experienced no failure to customers who experienced a severe failure and received a recovery much better than expected.
De Matos et al. (2009)	Uni-dimensional	Retrospective recall of failures Direct Effect	Multiple service categories	Found that severity is negatively related to satisfaction

Author	Justice Conceptualisation / Alternative Construct	Failure severity Measure / Study Type / Theory	Study Context	Key Findings
McCollough (2009)	Recovery performance	Experimental Moderating role of Harm (Severity) manipulated at a low, mid and high level	Airline	Recovery paradox (post-recovery satisfaction higher than pre-failure level) occurred when superior recovery effort interacted with a low severity level.
Chuang et al. (2012)	Distributive	Experimental Moderating role of failure severity manipulated at low and high levels Mental accounting principle and prospect theory	Restaurant	When severity was low, distributive justice led to greater recovery satisfaction. Distributive justice did not affect recovery satisfaction when the service failure was severe.
Kim and Ulgado (2012)	Compensation (Distributive)	Experimental Moderating role of failure severity manipulated at low and high levels Prospect theory	Hotel and Restaurant	Severity did not moderate on the relationship between compensation (distributive justice) and satisfaction for both hotel and restaurant context
Roggeveen, Tsiros and Grewal (2012)	Distributive (compensation)	Experimental Moderating role of failure severity manipulated at low and high levels	Airline	When severity was high, compensation improved recovery satisfaction. When severity was low, compensation did not affect recovery satisfaction.

Author	Justice Conceptualisation / Alternative Construct	Failure severity Measure / Study Type / Theory	Study Context	Key Findings
Balaji and Sarkar (2013)	Recovery effort	Experimental Direct and Interaction effect Failure Severity manipulated at low and high levels Expectancy-disconfirmation paradigm	Electrical Product	Direct effect: failure severity was negatively related to satisfaction. Interaction of failure severity and recovery efforts on satisfaction was significant only when failure severity was low.
Cambra-Fierro et al. (2013)	Uni-dimensional	Retrospective recall of failures Direct Effect	Telecommunication	Failed to find a direct relationship between failure severity and recovery satisfaction.
Bambauer-Sachse and Rabeson (2015a)	Compensation	Experimental Moderating role of failure severity manipulated at low and high levels Regulatory focus theory	Restaurant	For highly severe failures, high recovery levels led to high satisfaction for Swiss customers, but not for Malagasy customers

Author	Justice Conceptualisation / Alternative Construct	Failure severity Measure / Study Type / Theory	Study Context	Key Findings
Bambauer-Sachse and Rabeson (2015b)	Compensation	Experimental Moderating role of failure Severity manipulated at low and high levels Regulatory focus theory, Attribution theory	Restaurant	High involvement service: For highly severe failures, high compensation levels led to high satisfaction, regardless of consumer or restaurant caused failure. Moderate involvement service: For highly severe failures, high recovery levels led to high satisfaction, when the consumer caused the failure.
Barakat et al. (2015) (replication of Weun et al. (2004) study)	3-dimensional Perceived Justice as moderator	Retrospective recall of failures Direct effect	Airline	High failure severity negatively related to recovery satisfaction
Jha and Balaji (2015)	3-dimensional	Retrospective recall of failures Moderating role of failure severity Mental accounting principles	Telecommunication	Severity moderated the relationship of only procedural justice on recovery satisfaction, where the lower the severity, the greater the effect of procedural justice on recovery satisfaction
Liu et al. (2019)	Distributive Procedural	Experimental Moderating role of failure severity manipulated at low and high levels, Prospect theory, Mental accounting principles	Hotel	Distributive justice had a positive effect on recovery satisfaction when severity was low, procedural justice had a positive effect on recovery satisfaction when severity was high

2.1.2 Perceived Justice

In the studies within service failure and recovery, the widely investigated model consists of the perception of the justice or fairness of the recovery efforts, leading to an evaluation in terms of satisfaction of the recovery efforts and consequently behavioural responses (Tax, Brown and Chandrashekaran, 1998; Kau and Loh, 2006; Jung and Seock, 2017; Mohd-Any et al., 2019). Thus, the construct of perceived justice has been the predominant antecedent investigated within service failure and recovery studies (Smith, Bolton and Wagner, 1999; McCollough, Berry and Yadav, 2000; Del Río-Lanza, Vázquez-Casielles and Díaz-Martín, 2009; Nikbin et al., 2012; Choi, 2014; Migacz, Zou and Petrick, 2017; La and Choi, 2019).

Perceived justice of recovery efforts specifically refers to the perception of fairness that consumers form based on the recovery implemented by the service providers in the event of service failures (Migacz, Zou and Petrick, 2017). Recovery efforts are usually implemented by considering the outcome, the process and the interaction component of a recovery strategy (Alexander and Ruderman, 1987). These three aspects are derived from the three-dimensional proponents of justice theory (Blodgett, Hill and Tax, 1997), which is the predominant theory applied within studies investigating the perceived justice of recovery efforts. According to justice theory, distributive, procedural and interactional justice form the three-dimensional conceptualisation to respectively investigate the outcome, process, and the interaction aspect of a recovery strategy (Blodgett, Hill and Tax, 1997; Tax, Brown and Chandrashekaran, 1998; Maxham III and Netemeyer, 2002b; Kim, Kim and

Kim, 2009; Mohd-Any et al., 2019). Perceived justice is, therefore, derived from a strong theoretical framework that is fundamental in many studies (Smith, Bolton and Wagner, 1999; Kim, Kim and Kim, 2009; Jung and Seock, 2017; Mohd-Any et al., 2019; Yoo, 2020).

Some studies took a slightly different approach and investigated the composition of recovery efforts and based them upon the types of failures experienced. The main outcomes of such studies are to examine if consumers would prefer to receive a recovery that matches the failure type, based on the tenets of resource exchange theory (Foa and Foa, 1980). Failures can be classified as either outcome which means failures of core service delivery or process type which refers to unsatisfactory service delivery (Mohr and Bitner, 1995; Borah, Prakhya and Sharma, 2019). Outcome failures are linked to economic losses and process failures are associated with losses that are social in nature (Dimitriou, 2017; Borah, Prakhya and Sharma, 2019). Thus, according to resource exchange theory (Foa and Foa, 1980), recovery effort should comprise of economic resources such as discounts for outcome failures (Hur and Jang, 2016; Borah, Prakhya and Sharma, 2019), and social recovery such as apology for process failure (Smith, Bolton and Wagner, 1999). Thus, the levels of these recovery efforts lead to a determination of the satisfaction, which is a similar outcome out of the evaluation of the perceived fairness of the recovery efforts. However, satisfaction with recovery efforts can be affected regardless of the failure types (Jeon and Kim, 2016). Hence, ensuring that the recovery sufficiently addresses both the economic and social elements should be able to offset the losses experienced and restore satisfaction. Perceived justice, comprising of

distributive, procedural and interactional elements does not only include the economic and social elements, but also the timeliness. Therefore, perceived justice encapsulates all aspects critical to consumers evaluation of recovery efforts and this has been evidenced by decades of studies conducted within service failure and recovery (Smith, Bolton and Wagner, 1999; Kim, Kim and Kim, 2009; Mohd-Any et al., 2019).

Three-Dimensional vs Unidimensional Conceptualisation

The three dimensions of perceived justice as mentioned above, are distributive, procedural, and interactional justice. Smith, Bolton, and Wagner (1999, p.358), define distributive justice as "the allocation of costs and benefits in achieving equitable exchange relationships." Distributive justice has generally dealt with the outcomes given to the customers during recovery, which include monetary rewards such as refunds for failed service or product, discounts, coupons, and free-of-charge commodity replacement (Mattila, 2001; Sparks and McColl-Kennedy, 2001; Wang et al., 2011), as well as adjustment and substitution (Lewis and McCann, 2004). While distributive justice refers to the compensatory aspect, procedural justice, on the other hand, refers to ‘‘the perceived fairness of policies, procedures, and criteria used by decision-makers to arrive at the outcome of a dispute or negotiation’’ (Blodgett, Hill and Tax, 1997, p.189). This form of justice generally includes formal policies and structural considerations related to service recovery, such as waiting time, responsiveness, and flexibility during the recovery process (McColl-Kennedy and Sparks, 2003). Interactional justice, as its name suggests, refers to instances of interpersonal sensitivity, treating people with dignity and respect, or providing appropriate explanations

for the service failure (Ha and Jang, 2009). Tax, Brown and Chandrashekaran (1998, p.62), therefore conceptualise interactional justice as the perceived "fairness of interpersonal treatment that people receive during the enactment of procedures".

Studies mostly adopt the three-dimensional conceptualisation, in that each aspect of recovery such as compensation provided, recovery procedures implemented, and the way the consumer is treated during the recovery process is investigated for its consequent impact on the corresponding justice dimensions and outcomes such as satisfaction (Del Río-Lanza, Vázquez-Casielles and Díaz-Martín, 2009; Migacz, Zou and Petrick, 2017). There is, however, no conclusive findings on which dimension appear to have a more pronounced effect on the consequent satisfaction evaluation, as the results vary from one study to another, even within a single context such as hospitality (Smith, Bolton and Wagner, 1999; Wirtz and Mattila, 2004; Karatepe, 2006; Kim, Kim and Kim, 2009).

In view that there is no agreement on the acceptance of a three-dimensional model, several studies have analysed the overall perception of justice, combining all three dimensions, as an evaluation of the overall fairness of the recovery efforts (Blodgett, Granbois and Walters, 1993; Liao, 2007; DeWitt, Nguyen and Marshall, 2008; Roschk and Gelbrich, 2017; Balaji et al., 2018). It is stated that consumers evaluating a recovery effort do not tend to consider dimensions of distributive, procedural, and interactional in piecemeal fashion but do rather form a holistic impression (Balaji et al., 2018). Other studies within service failure and recovery have also tended to adopt the unidimensional approach (De

Matos et al., 2009; Roshk and Gelbrich, 2017; Yani-de-Sariano et al., 2019). Furthermore, it has been evident in prior studies that there is a strong correlation among the three dimensions of justice (Tax, Brown and Chandrashekaran, 1998; Balaji et al., 2018), giving empirical support to the adoption of the unidimensional construct of perceived justice.

Outcomes of Perceived Justice

Perceived justice in recovery efforts has been studied mostly as an independent variable leading to satisfactory evaluation of the recovery efforts. The relationship between perceived justice and recovery satisfaction was found to be positive, whereby a higher perception of justice leads to a higher recovery satisfaction (Singh and Crisafulli, 2016; Mohd-Any et al., 2019; Yani-de-Soriano et al., 2019).

Some studies extend the relationship to include emotions experienced by the consumer during the recovery efforts to indicate how emotions regulate the relationship between perceived justice and recovery satisfaction. It has been found that negative emotions impair satisfaction when injustice is perceived through recovery efforts (Del Río-Lanza, Vázquez-Casielles and Díaz-Martín, 2009; Nikbin and Hyun, 2015). Thus, it is vital that consumers perceive fairness in the recovery efforts as studies have found that as a consequence of failed recovery, consumers can engage in revenge behaviours such as spreading negative publicity (Grégoire, Laufer and Tripp, 2010). This phenomenon is known as double deviation, as consumers experience a failed recovery after a service failure (Bitner, Booms and Tetreault, 1990). Therefore, as discussed

earlier, while failures are inevitable occurrences due to the nature and characteristics of services, service providers need to ensure that the recovery is in place to sufficiently address the grievances to avoid a situation of double deviation, which could lead to far more damaging repercussions (Grégoire, Laufer and Tripp, 2010; Sembada, Tsarenko and Tojib, 2016; Grégoire et al., 2018). The perception of fairness of recovery efforts thus plays a vital role in ensuring that recovery sufficiently addresses the failures and satisfies the consumers.

2.1.3 Recovery Satisfaction

In the event of a service failure, service providers initiate recovery efforts which leads to the evaluation of the fairness of the efforts. The evaluation can involve a cognitive evaluation in terms of satisfaction of the recovery efforts (Wirtz and Mattila, 2004). Recovery satisfaction is defined as "the degree to which a customer is satisfied with a firm's transaction-specific service recovery effort following a service failure" (Boshoff, 1999, p. 237). Recovery satisfaction, as a transaction-specific construct, differs from the overall satisfaction construct as the latter is conceptualised as a cumulative evaluation (Shankar, Smith and Rangaswamy, 2003; Yi and La, 2004). The most prevalent conceptualisation that is applied within service recovery studies is the transaction-specific satisfaction after a service recovery (Boshoff, 1999; McCollough, Berry and Yadav, 2000; Kau and Loh, 2006; Holloway, Wang and Beatty, 2009; Petzer, De Meyer-Heydenrych and Svensson, 2017). The rationale behind the transaction-specific recovery satisfaction is that recovery efforts are directed at a specific service

failure, which may not happen regularly. This is a different set of transactions that consumers experience in comparison to the normal consumer-brand relationship transactions which are broad-based and general (Smith and Bolton, 1998; Gelbrich and Roschk, 2011).

Studies have demonstrated that an overall evaluation of satisfaction and transaction-specific satisfaction are distinct (Smith and Bolton, 1998; Jones and Suh, 2000; Maxham III and Netemeyer, 2002a). Recovery satisfaction is measured as it is seen as an outcome of recovery efforts implemented by service providers when service failures occur (Gelbrich and Roschk, 2011). Consumers can either be satisfied or dissatisfied with the recovery efforts implemented by the service providers, which is determined by their perception of fairness/ justice (Gohary, Hamzelu and Pourazizi, 2016). Thus, most studies have adopted the tenets of justice theory to determine the perception of fairness of the recovery (Smith, Bolton and Wagner, 1999; Sparks and McColl-Kennedy, 2001; Kau and Loh, 2006; Nikbin et al., 2012; Migacz, Zou and Petrick, 2017; Mohd-Any et al., 2019). Other studies have also investigated the effect of recovery using single dimensions such as levels of compensation, the presence or absence of apology, and the time taken on recovery satisfaction (Mattila, 2001; Jung and Seock, 2017; Grégoire et al., 2018). However, the perception of fairness which is based on justice remains the foundation for consumer's evaluation of these recovery efforts and their satisfaction (Mattila, 2001; Jung and Seock, 2017; Grégoire et al., 2018).

Outcomes of Recovery Satisfaction

The satisfaction of the recovery efforts is a mechanism that serves as a measure of the fairness of the recovery efforts. It is also an indicator of consumer's continued positive intentions towards the service provider (Maxham III, 2001; Kim, Kim and Kim, 2009; Kuo and Wu, 2012). Studies have also suggested that perceived justice impact behavioural responses through recovery satisfaction (Singh and Crisafulli, 2016; Lee, Siu and Zhang, 2018) as it has been found that not all the dimensions of perceived justice directly influence the behaviours (Lin, Wang and Chang, 2011). Thus, the mediating role of recovery satisfaction is well established, and the link between perceived justice to behavioural responses via recovery satisfaction is recognised and accepted within the service failure and recovery framework (Maxham III and Netemeyer, 2002b; Wirtz and Mattila, 2004; Kau and Loh, 2006; Kim, Kim and Kim, 2009; Kuo and Wu, 2012; Cambra-Fierro et al., 2013; Gohary, Hamzelu and Alizadeh, 2016).

Past studies have viewed recovery satisfaction as an indicator that determines the consequent behavioural responses towards the service provider. If the recovery satisfaction is high, positive behaviours such as repurchase intention and positive word-of-mouth are also high (Maxham III and Netemeyer, 2002a; Kim, Kim and Kim, 2009; Gohary, Hamzelu and Alizadeh, 2016). However, if recovery satisfaction is low, consumers tend to engage in negative behaviours such as brand switching (Singh and Crisafulli, 2016). Some studies have even indicated a situation of service recovery paradox, whereby the satisfaction with the recovery efforts lead to a higher overall satisfaction compared to a situation of no failure (Smith and Bolton, 1998; Hocutt, Bowers and Donovan, 2006).

Even if the positive relationship between recovery satisfaction and pro-brand behavioural responses are prevalent in literature, a few studies have found to refute this positive relationship. For example, Chen et al. (2018) found that high recovery satisfaction does not lead to repurchase intention even if it does reduce negative word-of-mouth intention among consumers with high moral judgment. Additionally, when Weun, Beatty, and Jones (2004) studied consumers within the hotel and mail order industry, they found that there is a strong positive relationship between recovery efforts and satisfaction. However, despite that, consumers still engaged in negative word-of-mouth. Furthermore, the conflicting findings are not only limited to physical businesses but online as well, whereby Forbes, Kelley and Hoffman (2005) found that customers that are satisfied with the recovery effort of an e-retailer still have high intention to switch brands.

The conflicting findings of the effect of recovery satisfaction on behavioural responses indicate that other factors may be impacting the relationship. Thus, as discussed in Chapter 1 that the relationship among constructs may not be necessarily linear (Weun, Beatty and Jones, 2004), a third variable may influence the relationship between recovery satisfaction and behavioural intentions of repurchase and positive word-of-mouth intentions. Since recovery satisfaction does not necessarily lead to positive outcomes, this study introduces a third variable of attachment styles and brand authenticity to investigate the relationship between recovery satisfaction and behavioural outcome to provide a more in-depth understanding of this relationship.

2.1.4 Behavioural Responses

Behavioural responses of consumers are the outcome of the recovery efforts and recovery satisfaction. These responses can be either positive such as repurchase intention, or negative such as negative word-of-mouth. Most past research has concentrated on positive outcomes of recovery satisfaction which tend to be the repurchase and positive word-of-mouth intentions (Maxham III, 2001; Maxham III and Netemeyer, 2002a; Maxham III and Netemeyer, 2003; De Matos et al., 2009; Ha and Jang, 2009; Kim, Kim and Kim, 2009; Huang, 2011; Wen and Chi, 2013; Gohary, Hamzelu and Alizadeh, 2016).

2.1.4.1 Repurchase Intention

Repurchase intentions refer to a customer's judgment to repeat the purchase of a designated service from a service provider (Hellier et al., 2003; Li, 2015). Repeat purchase is vital to service providers as it ensures the continuation of the consumer-brand relationship. Existing consumers who continue to purchase display loyalty, which also means they would be resistant to switching (Iglesias, Varela-Neira and Vázquez-Casielles, 2015). Repurchase intention is classified as behavioural/conative loyalty (Wang, 2011; Umashankar, Ward and Dahl, 2017). Thus, repurchase intention has been the focus of many previous studies within consumer behaviour (Kim and Son, 2009; Zhang et al., 2011), especially as an outcome of brand trust (Bhandari and Rodgers, 2018), brand attachment (Kumar and Nayak, 2019), brand relationship quality (Ilicic and Webster, 2014), brand authenticity (Fritz, Schoenmueller and Bruhn, 2017); and brand

involvement (Gohary, Hamzelu and Alizadeh, 2016).

Repurchase intention has also been investigated as an outcome of incidents such as transgressions that negatively impair consumer's purchase behaviours (Kaltcheva, Winsor and Parasuraman, 2013). As brands make efforts to recover from the transgressions, the consequent impact on repurchase intention has been examined, especially as a consequence of the satisfaction with the recovery (Maxham III and Netemeyer, 2002b; De Matos et al., 2009; Kwon and Jang, 2012; Chang, Lai and Hsu, 2012; Siu, Zhang and Yau, 2013; Wen, 2013; Gohary, Hamzelu and Alizadeh, 2016; Mohd-Any et al., 2019). Repurchase intention occurs when consumers are satisfied with the recovery efforts (Maxham III, 2001; Ok, Back and Shanklin, 2005; Kuo and Wu, 2012; Siu, Zhang and Yau, 2013). Therefore, the outcome of repurchase intention through satisfaction is a measure of the effectiveness of the recovery efforts. The level of repurchase intention thus could serve as a benchmark to which service providers can gauge the effectiveness of their recovery efforts. Financially, for service providers, a repurchase decision from consumers translates into revenues and lowers acquisition cost for new consumers (Ganesh, Arnold and Reynolds, 2000).

2.1.4.2 Word-of-mouth

Arndt's (1967) seminal study defines word of mouth as "oral, person-to-person communication between a perceived non-commercial communicator and a receiver concerning a brand, a product, or a service offered for sale" (p. 190). In

the marketing context, the definition of word-of-mouth evolved into "informal communications directed at other consumers about the ownership, usage, or characteristics of particular goods and services and/or their sellers" (Westbrook 1987, p. 261). It is an important construct as empirical studies have found that customers are even more likely to rely on these interpersonal communications, known as word-of-mouth, in the service context because of the intangibility and experiential nature of services (Murray 1991; Zeithaml, Berry and Parasuraman, 1993).

Word-of-mouth was initially investigated for its effect on new product diffusion, the effectiveness of advertising, and its influence on consumers' decision-making process (Herr, Kardes and Kim, 1991). Studies later evolved into the identification of characteristics and motivations for individuals to engage in word-of-mouth (Chang, Feick and Mittal, 2014), and the influencing characteristics of its sources (Bansal and Voyer, 2000; De Bruyn and Lilien, 2008). Concurrently, another stream of research began to investigate word-of-mouth on the Internet focusing on how consumer's motivation to engage in electronic word-of-mouth differs from the conventional word-of-mouth (Eisingerich et al., 2015), the motives and antecedents for electronic word-of-mouth (Sen and Lerman, 2007; Chu and Kim, 2011; Hussain et al., 2018), and the consequent impact of both positive and negative electronic word-of-mouth to brands (Lee, Rodgers and Kim, 2009; Bambauer-Sachse and Mangold, 2011; Chih, Hsu and Ortiz, 2020). No other construct has undergone such an evolution as word-of-mouth has and yet remain a vital factor for a brand's continued growth and success.

Word-of-mouth has been discussed in the consumer behaviour literature with aspects to its antecedents (satisfaction, loyalty, trust), valence (positive, negative), and as being either an activity (outcome) or an intention (De Matos and Rossi, 2008). Most studies within service failure and recovery have conceptualised word-of-mouth as an intention as these studies focus on the consequent intention of consumers to engage in word-of-mouth. Thus, service failure and recovery studies identify word-of-mouth as attitudinal loyalty (Umashankar, Ward and Dahl, 2017). Studies have also investigated the intention of consumers to engage in positive word-of-mouth as an outcome of recovery satisfaction (Maxham III and Netemeyer, 2002b, 2003). Thus, positive word-of-mouth is defined as the consumer's intention to spread favourable information such as endorsing the service provider and its services (Maxham III and Netemeyer, 2003). Negative word-of-mouth, on the other hand, is an outcome of service failure, failed recovery, and inferior recovery effort as consumers turn to express dissatisfaction, and vengeance as a result of anger and frustration (Singh, 1990; Sundaram, Mitra and Webster, 1998; Zeelenberg and Pieters, 2004; Strizhakova, Tsarenko and Ruth, 2012; Le and Ho, 2020).

Service providers are dependent on consumers spreading positive word-of-mouth in a regular transaction as it is beneficial for the service providers. However, in the event of a negative experience, service providers hope to reduce the occurrence of negative word-of-mouth. Negative word-of-mouth can lead to severe detrimental consequences for the brand such as brand equity dilution (Dessart, Veloutsou and Morgan-Thomas, 2015; Li, Juric and Brodie, 2017).

Therefore, service providers need to ensure that when service failure happens, a recovery effort is launched to earn consumers' satisfaction back and which would consequently lead them to speak about the service provider positively (Kau and Loh 2006; Jung and Seock, 2017). Word-of-mouth is also vital to service providers as it can lead to the acquisition of new consumers without leveraging heavy marketing expenditure (Harrison-Walker, 2001).

2.2 Moderating Factors that affect Consumer Responses in Service Failure

2.2.1 Individual Traits

Individual traits continue to receive a lot of attention especially within the studies of consumer behaviour to explain the outcomes due to the differences of these traits within individual consumers. Behaviours of impulse buying are explained by traits of impulsivity, sensation seeking, and self-identity (Iyer et al., 2020). In the area of consumer complaining behaviour, the self-monitoring trait, which is a socially desirable presentation of one-self in the presence of others, was found to distinguish between complainers and non-complainers (Bodey and Grace, 2006). Furthermore, traits of perceived self-importance (Kim and Chen, 2010) and higher locus of control (Gursoy, McCleary and Lepsito, 2007) was found to increase complaining tendency. Thus, individual traits can be used to classify and explain consumers' behaviour better.

Surprisingly, individual personality traits have been very rarely included in the studies of service failure and recovery, even though most scholars have called for the study of personality traits in future studies (Nikbin et al, 2015; Romani

et al., 2015). However, there are recent studies investigating service failure and recovery that are beginning to include personality traits. For instance, one study found that high consumer cynicism negatively affects the relationship between perceived justice and recovery satisfaction (Balaji et al., 2018), increased self-esteem leads to higher post-recovery satisfaction (You et al., 2020), and low self-esteem reduces the tendency to switch between brands in the presence of poor service (Consiglio and Osselaer, 2019). In addition, customer power was found to reduce the negative effects of failure and lower intentions of revenge in face-to-face service failure encounters (Sembada, Tsarenko and Tojib, 2016). Based on these studies, individual traits are found to capture consumers' evaluations and behaviours upon service failure and recovery.

Attachment styles, as discussed in Chapter 1, have received consistent calls by scholars to be investigated as a moderator within the service failure and recovery context (Khamitov, Grégoire and Suri, 2018; Khamitov, Grégoire and Suri, 2020). Attachment styles can distinguish and predict consumers' evaluations and behaviour (Ball and Tasaki, 1992; Schouten and McAlexander, 1995; Thomson, MacInnis and Park, 2005; Thomson and Johnson, 2006; Park et al., 2010; Mende, Bolton and Bitner, 2013; Japutra, Ekinci and Simkin, 2018; Kordrostami and Kordrostomi, 2019; Japutra, 2020). Additionally, attachment style is based on the theoretical framework of attachment theory (Bowlby, 1973, cited in Simpson, 1990, p.971), which provides a strong theoretical framework for attachment styles (Liu and Hogg, 2018). Therefore, consumers' attachment styles are examined in this study.

2.2.2 Attachment Styles

In the field of psychology, attachment style is defined as the systematic pattern of relational expectations, needs, emotions, and social behaviours that results from the internalisation of a particular history of attachment experiences (Mikulincer and Shaver, 2007). Based on the studies of psychology, the individuals' attachment to the primary caregiver, which is also referred to as an attachment figure, is based on two dimensions: anxiety (view of self) and avoidance (view of others) (Brennan, Clark and Shaver, 1998). Attachment styles, through an interplay of these two dimensions, therefore functions to explain the differences in romantic relationships (Simpson, 1990), and the reaction to separation and loss of attachment figures (Cohen, 2004). As discussed in Chapter 1, individuals can also show relational tendencies towards objects such as products (Belk, 1988; Sable, 1995; Schouten and McAlexander, 1995; Ahuvia, 2005). Thus, attachment styles, a construct used to capture nuances within interpersonal relationships, is seen as a relevant and fundamental factor to explain tendencies within the consumer-brand relationship (Mende, Bolton and Bitner, 2013; Bidmon, 2016; Whelan et al., 2016; Sreejesh et al., 2018). This has been evident even to the point of product anthropomorphic tendencies (Whelan, Hingston and Thomson, 2019).

Attachment Styles Definition and Conceptualisation

In the studies of consumer behaviour, attachment styles have been defined as "a trait variable that reflects a persons' thoughts, feelings, and behavioural tendencies" (Thomson, Whelan and Johnson, 2012, p.289). Furthermore, it has

been termed that “everyone has an attachment style” (Thomson, Whelan and Johnson, 2012, p.289) and they are seen as “enduring characteristics of individuals” (Kordrostami and Kordrostami, 2019, p.680). The benefits of attachment styles are that it can be used to define a group of individuals rather than just a single individual, as it applies to all individuals, varying in the level of the trait (Allport, 1937, cited in Tice, 1989, p.194). This is made possible as every individual would inherently be characterised along the dimensions of anxiety (view of self) and avoidance (view of others) (Brennan, Clark and Shaver, 1998).

Studies that examine attachment styles within the marketing and consumer behaviour discipline have focused on the dimensions of anxiety and avoidance separately (Japutra, Ekinci and Simkin, 2018; Japutra, 2020) or the interaction of both the dimensions, at low and high levels (Thomson, Whelan and Johnson, 2012; Moussa and Touzani, 2017; Kordrostami and Kordrostami, 2019). The interaction of the dimensions leads to four distinct categories of attachment styles namely secure (low on both dimensions), fearful-avoidant (high on both dimensions) and dismissing-avoidant (low on anxiety, high on avoidance) and preoccupied (high on anxiety, low on avoidance) (Bartholomew and Horowitz, 1991). Investigating attachment anxiety and avoidance independently of its interaction allows the observation and interpretation of behaviours based on the characteristics of each dimension as Mende, Bolton and Bitner (2013) highlight that these dimensions function as "quasi-opposing effects" (p. 128) and therefore, will "have distinctive effects in commercial relationships" (p. 127).

Outcomes of Attachment Styles

Initial studies within the general marketing field have investigated the impact of the four categories of attachment styles and have found encouraging support in them to predict responses. For instance, a secure attachment style was found to influence satisfaction, trust, and the repurchase intention of business-to-business customers (Paulssen, 2009). It was also found that low levels of anxiety and avoidance accounted for ethical judgments of consumers and managers (Albert and Horowitz, 2009).

The study of attachment styles is not only limited in examining their effect on business consumer's decisions and ethical beliefs, as they were also found to predict consumer's behaviours such as risk-taking in the consumption of products (Li et al., 2019). Attachment styles have also been found to affect the more conventional outcomes of general satisfaction with product and services (Thomson and Johnson, 2006; Mende and Bolton, 2011; Japutra, 2020), loyalty (Swaminathan, Stilley and Ahluwalia, 2009; Mende et al., 2019), and trust (Kordrostami and Kordrostami, 2019). These past studies thus indicate the direct impact of attachment styles on consumer's evaluations and behaviours.

In addition, attachment styles have a significant moderating role in several other studies, whereby these studies have examined the impact of the dimensions of anxiety and avoidance on behaviours independently. Attachment anxiety has been found to moderate the relationship between satisfaction and brand love (Sreejesh et al., 2018), satisfaction and revisit intention (Kim et al., 2018), attributes of products and social projection (David, 2018), and emotional

attachment and word-of-mouth (Vlachos et al., 2010). Attachment avoidance significantly moderates the relationship between the use of social media and social capital bonding (Kim, Preis and Lee, 2019), brand attachment predisposition and brand attachment (Bidmon, 2016), satisfaction and brand love (Sreejesh et al., 2018), brand attachment and negative behavioural outcomes (Japutra, Ekinci and Simkin, 2018), and brand love and purchase intention (Vlachos and Vrechopoulos, 2012).

Attachment styles, thus, can affect consumers evaluations and behaviours. More specifically, it was found that fearful consumers (high on both dimensions of attachment anxiety and attachment avoidance) engage in anti-brand behaviours upon the termination of the relationship with a brand (Thomson, Whelan and Johnson, 2012). The study by Japutra, Ekinci and Simkin (2018) indicate that only high avoidance significantly moderates the relationship between brand attachment and anti-brand behaviours, while anxiety was found to be insignificant in its impact on the relationship between brand attachment and loyalty. Vlachos et al. (2010) found that anxiety moderates the relationship between emotional attachment and word-of-mouth. In another study, Vlachos and Vrechepoulos (2012) highlight that avoidance negatively affects the relationship between consumers' retailer love and their purchase intention. In the research conducted by Sreejesh et al. (2018), it was discovered that high anxiety moderates the relationship between satisfaction and brand love positively, while avoidance moderates the relationship between satisfaction and brand love negatively. Hence, it can be inferred from the past studies that the dimensions of anxiety and avoidance impact evaluations and behaviours. Furthermore, studies

that have examined anxiety and avoidance separately of its interaction, found that these dimensions impact both positive and negative behavioural outcomes differently.

Researchers have also investigated attachment styles in a service failure study within the hospitality context. Kordrostami and Kordrostami (2019) found that fearful consumers (high on the interaction of both anxiety and avoidance dimensions) tend to avoid the brand more than satisfied consumers (low on anxiety and avoidance dimensions). The study by Kordrostami and Kordrostami (2019) is notable in the fact that attachment styles explain the variation in the reactions to service failure. However, recovery efforts form a vital strategy, thus it is vital to understand how attachment styles influence behaviour after recovery as they are vital indicators in sustaining the consumer-brand relationship. Furthermore, the study by Kordrostami and Kordrostami (2019) only explores secure and fearful attachment styles of consumers and not investigate them independently as other studies have shown that these dimensions can lead to very distinct outcomes (Mende, Bolton and Bitner, 2013; Japutra, Ekinci and Simkin, 2018; Sreejesh et al., 2018). Therefore, further investigation is warranted to understand how the dimensions of anxiety and avoidance capture the differences in various consumer reactions after service failure and recovery.

2.2.3 Brand-Related Factors

Brand related constructs of brand trust, brand image, brand credibility, and brand attachment have received much attention in consumer behaviour studies (Yi and

La, 2004; Zboja and Voorhees, 2006; Park et al., 2010; Lien et al., 2015). Brand constructs such as logos have been studied for their impact on brand trust upon negative publicity (Folse, Burton and Netemeyer, 2013) and brand authenticity on consumer repurchase intention in the event of a product crisis (Roy, Tata and Parsad, 2018). Hence, to enrich the studies within service failure and recovery, brand-related factors such as brand attachment (Torres, Rawal and Bagherzadeh, 2020), brand trust (Sajtos, Brodie and Whittome, 2010), and brand reputation (Sengupta, Balaji and Krishnan, 2015; Gelbrich, Gäthke and Grégoire, 2016; Walsh et al., 2019) have been investigated within the context of service failure to understand how these constructs buffer the effects of failure on consequent negative evaluations and behaviours of consumers. Studies that have examined the effect of recovery upon failure, found that higher levels of self-brand connection increase satisfaction with recovery efforts (Wolter et al, 2019) while higher brand equity was found to lead to higher repurchase and word-of-mouth intention (Huang, 2011).

Most of the brand related constructs in service failure and recovery studies have been examined by drawing upon other studies within the field of marketing and consumer behaviour. Brand authenticity is one such construct, however, its relevance in this study, as discussed earlier, is due to its ability to be a better predictor than brand attachment despite its relative newness (Ilicic and Webster, 2014). Brand authenticity also shows much promise in its capability to determine brand evaluations and consumer behavioural outcomes as indicated by the surge of research in brand authenticity (Fritz, Schoenmueller and Bruhn, 2017; Carsana and Jolibert, 2018; Arya et al., 2019; Lehman, O'Connor and Carroll,

2019; Oh et al., 2019; Matthews et al., 2020; Jiménez-Barreto et al., 2020; Srivastava, Dey and Balaji, 2020). This construct is especially relevant to consumers as individuals who seek and desire authenticity in consumption reward brands that provide them with an avenue to be authentic (Arnould and Price, 2000). Therefore, brand authenticity is introduced in this study to examine its effect on the relationship between recovery satisfaction and behavioural outcomes.

2.2.4 Brand Authenticity

Authenticity is a construct that has been investigated within the fields of sociology, psychology, management, and marketing. In psychology, an authentic person is one whose behaviour represents their true selves and values (Kernis and Goldman, 2006). Kovács (2019) suggests that individuals attach authenticity to various objects including brands. Thus, individuals desire authenticity not only out of their interaction with other individuals but also out of their consumption with products, brands, and experiences (Lehman, O'Connor and Carroll, 2019). Bruhn et al. (2012) suggest that authenticity is important, as consumers need to consume brands that are perceived as authentic as it gives them some control in an uncertain world due to events such as increasing political instability, financial, and economic crisis. Furthermore, consumers of the current digital age require consistency and authenticity of their brands and are less willing to accept brands oriented towards an economic agenda rather than its inherent values (Holt, 2002). Consumers also demand authenticity out of the brand as a way to self-represent and differentiate among

the brands based on its authenticity (Brown, Kozinets and Sherry, 2003; Beverland, 2005; Gilmore and Pine, 2007).

Initial studies on authenticity perceptions were qualitative in nature (Rose and Wood, 2005; Beverland, 2006; Leigh, Peters and Shelton, 2006; Beverland and Farrelly, 2010). However, Bruhn et al. (2012) paved the way for quantitative investigation of brand authenticity when they developed a scale to measure brand authenticity. Thus, the number of studies conducted to investigate brand authenticity has increased with further efforts being made to refine the measures, and understand the antecedents and outcomes (Napoli et al., 2014; Morhart et al., 2015; Napoli, Dickinson-Delaporte and Beverland, 2016; Fritz, Schoenmueller and Bruhn, 2017; Pecot et al., 2018; Oh et al., 2019; Matthews et al., 2020; Srivastava, Dey and Balaji, 2020). In addition, the extant literature also demonstrates that individuals desire authenticity in their consumption of products and services as it provides an avenue for them to self-authenticate (Arnould and Price, 2000); and as a means to enrich, entice and enable themselves (Oh et al., 2019). Based on these studies, authenticity has been demonstrated as a valued but elusive construct as much remains to be studied to understand it better (Hicks, Schlegel and Newman, 2019).

Brand Authenticity Conceptualisation and Operationalisation

Most scholars agree that the conceptualisation of authenticity is yet to reach a definite consensus (Becker, Wiegand and Reinartz, 2019). The different conceptualisations to date drew upon various dimensions that lead to an impression of brand authenticity. Bruhn et al. (2012) began by conceptualising

authenticity along the dimensions that captures stability and consistency (i.e. continuity), uniqueness (i.e. originality), ability to keep its promises (i.e. reliability) and unaffectedness (i.e. naturalness). Napoli et al. (2014) conceptualise authenticity along four dimensions namely quality, commitment, heritage, and sincerity, and define brand authenticity as a subjective evaluation of genuineness ascribed to a brand by consumers. Morhart et al. (2015) conceptualise authenticity with the factors of continuity, credibility, integrity, and symbolism and establish brand authenticity as the extent to which consumers perceive a brand to be faithful toward itself, true to its consumers, motivated to be caring and responsible, and able to support consumers in being true to themselves. On the other hand, taking on a socio-psychological approach, Schallehn, Burmann and Riley (2014) propose that brands' behaviour that allows consumers to be true to themselves captures the brand authenticity perception and define authenticity as the degree to which the personal identity is causally linked to individual behaviour.

Scales to measure brand authenticity were then developed based on the various conceptualisations proposed. The operationalisation of these scales demonstrates substantial similarities, insofar as they all cover the aspects of consistency (i.e., continuity, heritage), honesty (i.e. reliability, quality commitment, credibility) and genuineness (i.e. naturalness, sincerity, integrity). However, the corresponding scales display some deviations such as the consumer's support of being true to themselves is only captured by Morhart et al. (2015) and Schallehn, Burmann and Riley (2014). Despite the deviations, the scale developed by Morhart et al. (2015) has been widely accepted (Guèvremont,

2018) and adopted in several studies (Carsana and Jolibert, 2018; Portal, Abratt and Bendixen, 2019; Chen et al., 2020; Cinelli and LeBoeuf, 2020) which highlights the reliability of this scale.

The dimensions of the existing operationalisation of brand authenticity can be evaluated to form semantic relations, which are made via indexical, iconic, and existential cues as provided by the framework of semiotics theory (Mick, 1986; Mick et al., 2004). Indexical, iconic and symbolic cues are relevant as they lead to brand authenticity perception from the viewpoint of consumers (Leigh, Peters and Shelton, 2006; Morhart et al., 2015; Guèvremont, 2018). Indexical cues refer to objective facts, iconic to subjective mental associations and symbolic to existential motives connected to a brand (Mick et al., 2004; Morhart et al., 2015). Other studies also propose that the evaluations of brand authenticity are based upon indexical and iconic cues (Ewing, Allen and Ewing, 2012; Grayson and Martinec, 2004; Carsana and Jolibert, 2018), and on symbolic cues (Wang, 1999; Morhart, et al., 2015; Jiménez-Barreto et al., 2020). While these studies form the perception of brand authenticity based on some of these cues, Morhart et al. (2015) propose that brand authenticity perceptions are influenced by continuity, credibility, integrity, and symbolism and each can be interpreted by the three cues. They propose that each dimension capture all three cues depending upon the consumer's evaluations. For instance, the dimension of continuity ascertains that the brand is stable and will persist into the future, and one such aspect that can fall under this dimension is the number of years that the brand has been in existence (Morhart et al. 2015). Thus, the brand establishment date can serve as an indexical cue when consumers are provided with this information in a news

report, and as an iconic cue when consumers form a subjective impression if the information on the brands' existence is conveyed through an image or design. Symbolic cue would be conferred when consumers refer to feelings of nostalgia and emotions evoked by the information or imagery.

The semantic relationship cues that consumers utilise to form a perception of brand authenticity are dependent upon various factors. Studies have identified factors such as brand marketing communications of service providers (Dwivedi and McDonald, 2018) that consistently portray its brand image (Ewing, Allen and Ewing, 2012; Schallehn, Burmann and Riley, 2014; Lee et al., 2019) to convey value, mission and norms (Fritz, Schoenmueller and Bruhn, 2017; Guèvremont, 2018), and perceived as transparent (Busser and Shulga, 2019) can lead to a perception of brand authenticity. As a frontline service employee forms a vital touchpoint as well, the authenticity of the employees also contributes to the consumers' perception of brand authenticity (Matthews et al., 2020). Negative information such as scandals can be evaluated by consumers as an indexical cue that can impair the perception of brand authenticity (Morhart et al., 2015; Rodrigues and Borges, 2020). While prior factors discussed provide consumers with a reference point to form a perception of authenticity, other individual-level factors can also influence the authenticity perception process. Brand-self connectedness (Oh et al., 2019) and actual-self congruence (Fritz, Schoenmueller and Bruhn, 2017) are seen as factors that affect brand authenticity perception.

Outcomes of Brand Authenticity

Perceived brand authenticity has been found to positively influence evaluations such as brand attitude (Ilicic and Webster, 2014), brand trust (Busser and Shulga, 2019), brand choice (Morhart et al., 2015) and product quality (Cinelli and LeBoeuf, 2020). Along with the cognitive and emotive evaluations, perceptions of brand authenticity have been found to influence the satisfaction of consumers (Baker and Kim, 2018) and brand forgiveness (Fritz, Schoenmueller and Bruhn, 2017). In terms of behaviours, it has been established that brand authenticity functions as a predictor of behavioural responses of purchase intentions (Fritz, Schoenmueller and Bruhn, 2017; Oh et al., 2019) much better as compared to brand attachment (Ilicic and Webster, 2014). Brand authenticity has also predicted actual consumption (Morhart et al., 2015) and word-of-mouth (Oh et al., 2019). Most of the evidence is drawn upon studies that have been carried out within the Western context, however, a study conducted within the emerging economy of India found that brand authenticity positively influences brand credibility for domestic brands across various product and service categories (Srivastava, Dey and Balaji, 2020).

As past studies have indicated a significant role of brand authenticity as an independent (Oh et al., 2019, Srivastava, Dey and Balaji, 2020) and mediating variable (Baker and Kim, 2018; Carsana and Jolibert, 2018; Cinelli and LeBoeuf, 2020), brand authenticity has also been examined as a moderator in several studies. Guèvremont and Grohmann (2017) established that the perception of brand authenticity lessens the negative consequences of a brand scandal on consumer's willingness to pay. In addition, Matthews et al. (2020) found that perception of brand authenticity moderates the relationship of frontline service

employee authenticity on purchase intention. Thus, brand authenticity can moderate the consumer-brand relationships, however, more studies are required to further understand its moderating role.

Perceived brand authenticity has been investigated within products categories such as cosmetics (Lee et al., 2019), fast-moving consumer goods (Pecot et al., 2018) and hospitality services such as restaurants (Baker and Kim, 2018; Kim, Song and Youn, 2020); tourism such as destination choice (Jiménez-Barreto et al., 2020); accommodation choice (Shuqair, Pinto and Mattila, 2019); and airlines (Portal, Abratt and Bendixen, 2019). Most of these studies highlight direct positive associations of brand authenticity to attitudes, evaluations, and behaviours, mostly across the various hedonic services and products services. Positive outcomes of brand authenticity were even evident within a service failure and recovery context as Shuqair, Pinto and Mattila (2019) found that consumers continued to be loyal to their Airbnb hosts as their perception of the authenticity increased the effectiveness of the recovery efforts. The study by Shuqair, Pinto and Mattila (2019) is instrumental in investigating the role of perceived brand authenticity in eliciting loyalty when recovery is implemented. To further understand the role of brand authenticity, these authors suggest brand authenticity to be examined within the prevalent service failure and recovery framework consisting of satisfaction and downstream variables of repurchase and word-of-mouth intentions.

It can be concluded that despite the surge in research, service providers still have little indication of how brand authenticity affects consumer behaviour (Fritz,

Schoenmueller and Bruhn, 2017), especially from the perspective of utilitarian service categories as prior studies have investigated brand authenticity mostly for hedonic products and services (Baker and Kim, 2018; Lee et al., 2019; Oh et al., 2019, Jiménez-Barreto et al., 2020). Furthermore, the investigation of brand authenticity for its moderating role is necessary to understand how it impacts consumer behaviours upon service failure and recovery.

2.3 Theoretical Background

This study draws upon the key proponents of justice theory, regulatory focus theory, attachment theory, and semiotics theory in developing a conceptual framework of consumers' cognitive and behavioural responses when a service failure occurs. As discussed in Chapter 1, these theories are proposed based on the extant literature within the context of the constructs being investigated. Justice theory (Adams, 1965) is applied in this study as it captures the perception of fairness of the recovery effort and its relationship to recovery satisfaction, while regulatory focus theory (Higgins, 1997) is applied as it provides the motivational basis for consumers to evaluate recovery efforts against the losses experienced due to the level of failure severity. The theoretical framework of attachment theory is the predominant theory to explain attachment styles and their impact on behaviours (Liu and Hogg, 2018). Semiotics theory (Peirce, 1931-1958, cited in Mick, 1986, pp.198-199) is necessary as it aids in understanding how consumers form a perception of brand authenticity that consequently impacts behaviours. Thus, these four theories explain the relationships among the constructs being proposed within an integrated service

failure and recovery framework. The literature on the theories and their relevance in this study are discussed next.

2.3.1 Justice Theory

Justice theory draws its roots from Festinger's (1957) theory of cognitive dissonance, which explains the tendency of people to justify decisions after the event (Kopalle and Lehmann, 2001) and Adams's (1963) equity theory, which hypothesises that judgments of equity and inequity are the result of comparison between oneself and others based on inputs (i.e., what a person perceives to contribute) and outcomes (i.e., what a person gets out of an exchange) (Bahri-Ammari and Bilgihan, 2017). Drawing upon the earlier works, Adams (1965) describes that a person would react to outcome allocations by comparing their ratio of outcomes to inputs to some other relevant comparison. The person would only perceive a sense of equity or fairness when the ratio of output/input matches (Colquitt et al., 2006).

Earlier justice theories are limited in scope as they deal only with the allocation or distribution of reward without considering the system that regulates the process of reward distribution (Leventhal, 1980). As such Blodgett, Granbois and Walters (1993) introduced a unifying concept of this theory. They state that individuals who are involved in a conflict or dispute would base the perception of justice on three factors, namely, distributive justice which is the perceived fairness of the tangible decision (Homans, 1961, cited in Blodgett, Granbois and Walters, 1993, p.404), procedural justice which is the perceived fairness of the

procedures used in arriving at that outcome (Lind and Tyler, 1988), and interactional justice which is the perceived fairness of how they were treated throughout the conflict resolution process (Bies and Shapiro, 1987).

Justice theory is suited to determine the outcomes in several contexts such as employee job satisfaction (Kim and Leung, 2007), pay raises (Folger and Konovsky, 1989) and also in conflict resolution of service failure (Smith, Bolton and Wagner, 1999; Kau and Loh, 2006; Kuo and Wu, 2012; Migacz, Zou and Petrick, 2017). Consumer experience inequity due to the failure, and thus recovery efforts are seen as a means to restore the inequity felt (Boshoff, 1999). The application of this theory within this context is based on the assumption that consumers evaluate the recovery based on a perception of justice or fairness (Wetsch, 2006). Therefore, in accordance with justice theory, the economic and social interactions inherent in the recovery process would result in consumer evaluations of justice along the three dimensions, which are procedural, distributive, and interactional justice (Blodgett, Granbois and Walters, 1993; Blodgett, Hill and Tax, 1997). Recovery is a process carried out through the distribution of compensation or reward such as discounts, coupons, or replacement, which represents distributive justice (Mattila, 2001). The distribution of compensation cannot be carried out without some procedures or processes in place, which then represents the procedural justice element (McColl-Kennedy and Sparks, 2003). The interactional justice demands that the communication between the service provider and consumers during the recovery process is sincere and appropriate (Ha and Jang, 2009). Thus, consumers evaluate the fairness of recovery efforts based on the gestalt of the three

dimensions of distributive, procedural and interactional justice leading to a perception of justice (Blodgett, Granbois and Walters, 1993; Mattila and Cranage, 2005; Wen and Chi, 2013; Migacz, Zou and Petrick, 2017; Mohd-Any et al., 2019).

Justice theory, as such, remains the most prevalent theory applied in studies of service recovery in the past three decades, as it has been vital in understanding and capturing fundamental elements of service delivery, its failure and recovery. Specifically, justice theory functions to not only understand consumer's perception of fairness in service recovery but also to assist service providers in developing protection strategies or fail-safe mechanisms in the event of service failure. This also leads to the improvement of future service delivery. Justice theory offers a comprehensive framework that encapsulates the recovery process (Blodgett, Granbois and Walters, 1993; Smith, Bolton and Wagner, 1999; Ha and Jang, 2009; Wen and Chi, 2013; Migacz, Zou and Petrick, 2017; Cantor and Li, 2019; Mohd-Any et al., 2019). Therefore, justice theory is relevant in this study as it provides the framework to investigate the perception of fairness formed through the recovery efforts and its effect on recovery satisfaction.

2.3.2 Regulatory Focus Theory

Regulatory focus theory draws its roots from psychology, especially from Freud's pleasure and pain principle. Regulatory focus theory is introduced by Higgins (1997) as a way to explain the motivation of seeking pleasure and avoiding pain beyond the Freudian principle, especially in its motivational

consequences. According to Higgins (1997), the main proponents of regulatory focus theory are that individuals seek pleasure in the form of promotion/well-being and avoid pain as prevention. This theory sees an individual as having a promotion and prevention focus. The objective of promotion focus is naturally to maximise gains and that of prevention focus is to minimise losses. These aims can lead individuals to seek or avoid a certain situation depending upon different motivations arising out of their promotion or prevention focus. These two foci explain the motivation in many aspects of life including people's value-seeking, pursuance of goals, display of emotions to situational contexts, and evaluations.

This theory has been applied in the studies of consumer behaviour, as the regulatory focus can be induced temporarily in momentary situations (Higgins, 1997) such as in evaluations of service failure and recovery (Bambauer-Sachse and Rabeson, 2015a, 2015b). Studies show that the promotion and prevention focus of consumers lead to specific emotional outcomes in the event of service failure (Romani et al., 2015). These studies are, however, specific to studying individual differences. Regulatory focus theory has also been applied in evaluating how service failures, which represent a situation of loss, motivates an individual to either focus on obtaining gains or avoiding a loss by expecting a recovery in return (Bambauer-Sachse and Rabeson, 2015a). Recovery efforts, therefore, explain how the consumers' motivation to reach the desired end-state could be met. This desired end-state could be attained either with the focus on promotion to achieve a goal or prevention to safeguard oneself against a loss. The promotion and prevention focus motivation are expected to increase with increasing failure severity, which represents a higher loss. Recovery efforts

implemented are then evaluated against the motivation of gain and prevention. If the recovery effort is more than enough to meet the need of the promotion focus (obtaining gain) and the prevention focus (reducing loss), then it would naturally be enough to lead to a satisfactory evaluation of the recovery efforts (Bambauer-Sachse and Rabeson, 2015b). This satisfactory evaluation would then be higher in the presence of higher severity (higher promotion/prevention motivation) and good recovery (reaching the desired end-state). Within the context of this study, regulatory focus theory is suitable especially in terms of explaining how the best of recovery efforts can offset the negative consequences of a highly severe service failure and thus lead to higher recovery satisfaction.

2.3.3 Attachment Theory

In studying the effect of separation of children from their caregiver, Bowlby (1973) laid the foundation for attachment theory (cited in Bartholomew and Horowitz, 1991, p.226). Its initial empirical support (Ainsworth et al., 1978, cited in Hazan and Shaver, 1994, p.5) is based on observations of differences in how infants respond to separation and loss from their caregivers. Children with secure attachments were found to trust their caregivers enough to gradually move away to play and explore, whereas infants with anxious attachments tended to cling to their caregivers (Cohen, 2004). On the other hand, avoidant children feigned disinterest in their caregivers but showed little interest in the exploration of their surroundings (Cohen, 2004).

The main proposition of attachment theory is that interactions with caregivers

throughout childhood form an internal working model, or schema of relationships (Bartholomew and Horowitz, 1991; Hazan and Shaver, 1994). The relationship 'style'— or tendencies and expectations—that results is manifested in two aspects, attachment anxiety and attachment avoidance (Brennan, Clark and Shaver, 1998). Attachment anxiety is the extent to which hyper-activation of their attachment system (view of self) occurs while attachment avoidance is the level to which a deactivation of their attachment system (view of others) occurs (Brennan, Clark and Shaver 1998). Higher attachment anxiety leads to individuals who desire a high level of relational intimacy, display greater care-seeking, and require an elevated level of responsiveness and emotional rapport in a partnership (Hazan and Shaver 1994). Thus, highly anxious individuals focus in the search for being appreciated and valued by a partner, while vigilantly screening for potential threats to the relationship (Mikulincer and Shaver, 2007). To cope with their hypersensitivity to relationship threats, these individuals seek interdependence and constant reassurance (Wei et al., 2007). In contrast, higher attachment avoidance leads to individuals who fear the potentially negative consequences of closeness and reliance on others (Mikulincer and Shaver, 2007). Highly avoidant individuals deny or dismiss their attachment needs (Zhang and Hazan, 2002; Wei et al., 2007) which leads them to maximise cognitive, emotional, and physical distance from others, thus inhibiting the formation of close relationships (Edelstein and Shaver, 2004). Therefore, these individuals bypass the risk of closeness and reliance through avoidance (Mikulincer and Shaver, 2007).

While research in psychology has concentrated on people's attachments to individuals (Weiss, 1988; Simpson, 1990), other work suggests that people also become attached to an array of objects including pets, places, and brands (Sable, 1995; Schouten and McAlexander, 1995) as it serves basic human needs and can bolster a person's general well-being (Berman and Sperling, 1994). It is proposed that the internal working model or schema developed from childhood leads to tendencies and expectations within consumer-brand interaction as well (Bidmon, 2016; Liu and Hogg, 2018). These tendencies and expectations manifest into attachment styles, which can affect consumers' relationships with brands (Thomson and Johnson, 2006; Thomson, Whelan and Johnson, 2012; Mende, Bolton and Bitner, 2013). The effect that attachment styles can have on the relationship with the brand is dependent upon the levels of attachment anxiety and attachment avoidance. Higher anxiety in consumers might lead them to desire a closer relationship with the service provider while at the same time, seeking appreciation and constant reassurance that the service provider will not abandon them in times of need (Mende, Bolton and Bitner, 2013). Higher avoidance in consumers might lead them to reject their attachment needs and this inhibits relationship building with the service provider (Mende, Bolton and Bitner, 2013). Several studies have found that attachment styles predict consumer's pro-brand behaviour such as repurchase intentions (Mende, Bolton and Bitner, 2013; Mende et al., 2019), loyalty (Japutra, Ekinci and Simkin, 2018) and word-of-mouth (Vlachos et al., 2010). Based upon the extant literature, it is thus expected in this study that consumers will display behavioural responses of varying levels depending on their attachment orientations.

2.3.4 Semiotics Theory

Semiotics theory aid in understanding how consumers perceive brand authenticity. Semiotics doctrine focuses on the morphology of signs, symbols, and meanings (Peirce, 1931-1958, cited in Mick, 1986, p.198-199). Its application as a whole and within marketing and consumer research began through two dominant paradigms. The first paradigm advocated by Saussure (1986 [1916]) (cited in Mick et al., 2004, p.5) has its foundation in linguistics, and the second paradigm with close ties to philosophy and physical science was pioneered by Peirce (1931-1958) (cited in Mick et al., 2004, p.6). Peirce's paradigm was adopted in earlier studies that investigated authenticity in consumption (Grayson and Shulman 2000; Grayson and Martinec, 2004; Rose and Wood, 2005). Peirce's framework incorporates a three-part model of signification, the representation (sign), the object (to which the sign refers), and the interpretant (the response or interpretation of the observer/communicator) (Mick et al., 2004). Peirce characterised semantics as the relation of sign to object, with the latter capable of being any physical or non-physical entity. Therefore, in essence, semantics encompasses three primary categories of meaning in terms of (1) similarity between sign and object (iconic relations), (2) causality between sign and object (indexical relations), and (3) arbitrary cultural rules connecting sign and object (symbolic relations) (Mick, 1986; Mick et al., 2004).

Peirce's framework proposes that for each of the categories of meaning there are links between certain types of cues (or "signs") and certain kinds of phenomenological experiences (Grayson and Shulman, 2000). Pierce's concept

of cues/signs and its associated phenomenological experiences (Mick, 1986; Mick et al., 2004) has been applied to propose a framework consisting of three indicators that leads to a perception of authenticity – indexical, iconic, and symbolic (Wang, 1999; Grayson and Martinec, 2004; Morhart et al., 2015). These indicators or semantic relations would lead to an understanding of how consumers assess the authenticity of market offerings.

Indexical indicators, according to Peirce (1931-1958) (cited in Mick, 1986, p.199) refer to cues that are believed to have a corresponding factual link to an object. In the context of a brand, indexical cues could refer to attributes that provide consumers with evidence for what a brand claims to be, such as objective information about a brand (e.g., age, country of origin, and method of production) (Morhart et al., 2015). On the other hand, iconic indicators, according to Peirce (1931-1958) (cited in Mick, 1986, p.199), are cues that relate to the object by way of imitation or resemblance. Peirce explained that to view something as an icon, perceivers must have some pre-existing knowledge or expectations, which create a “composite photograph” in their mind. Put within a branding context, iconic authenticity is the result of the consumer’s feeling and imagination rather than an evaluation based on evidence (Grayson and Martinec, 2004), such as the packaging of a product in a cardboard box can be perceived by consumers as being "green" and thus, serve as an iconic cue (Ewing, Allen and Ewing, 2012). Symbolic cues, according to Peirce (1931-1958) (cited in Mick, 1986, p.199), are present when the interpreter makes a connection with the object. Thus, symbolic authenticity can also be attributed to an object for instance when it evokes a sense of nostalgia (Morhart et al, 2015). Therefore, in

the literature there are three indicators of authenticity; objective facts (indexical relations), subjective mental associations (iconic relations), and existential motives connected to a brand (symbolic relations) (Wang, 1999; Grayson and Martinec, 2004; Mick et al., 2004; Morhart et al., 2015). The perception of authenticity is, however, highly influenced by "personal predilections and perceptual imperfections" (Grayson and Martinec, 2004, p. 299).

Semiotics theory is thus vital in this study to explain the underlying mechanisms to brand authenticity perception. Prior studies have demonstrated that brand authenticity perception influences favourable brand evaluations and behaviours (Carsana and Jolibert, 2018; Oh et al., 2019; Jiménez-Barreto et al., 2020). Thus, it is expected that the consumers' perception of brand authenticity would also influence their behavioural responses within a service failure and recovery context.

2.4 Malaysian Telecommunication Industry Background

Telecommunication service provides the context on which this study is based upon. A few studies have examined service failure and recovery within the telecommunication context and found that levels of failure severity impact recovery satisfaction (Liao, 2007; Jha and Balaji, 2015). The study by Nikbin and colleagues (2012) which was conducted within the telecommunication sector of Malaysia found that switching intention among Malaysian prepaid handphone users is low when recovery efforts, measured through the three dimensions of justice, are perceived as fair. Thus, Nikbin et al. (2012) suggest

that recovery efforts are vital in retaining consumers. Studies investigating service failure severity within other service sectors in Malaysia such as airlines (Nikbin and Hyun, 2015) suggest that failure of higher severity affects the recovery satisfaction negatively. Therefore, based on the extant literature, there are limited studies on service failure severity within the telecommunication industry in Malaysia, even when it has been found to affect recovery satisfaction within other service sectors in Malaysia. It is important to understand the factors that can affect the recovery process in this service sector given the vital role that telecommunication service has in the nations' economic and infrastructure development.

In Malaysia, the telecommunication industry itself is characterised as an oligopoly market, with several well-established providers, such as Maxis Berhad, Celcom Axiata Berhad, Digi Telecommunications Sdn Bhd, and several others such as U Mobile Sdn Bhd, and YTL Communications Sdn Bhd. From an economic perspective, the telecommunication industry falls under the Information and Communication Technology (ICT) sector and is classified under ICT services (Department of Statistics Malaysia, 2018b). The telecommunication sub-sector remains among the biggest contributor to Malaysia's gross output (Department of Statistics Malaysia, 2018a). Based on the latest statistic in the fourth quarter of 2019, it recorded an overall increase in revenue of about 6.9% to its service sector, amounting to RM2.4 billion (Department of Statistics Malaysia, 2019).

This sub-sector remains vital in its link between the infrastructure and the service to the masses. However, it is not without its challenges. While the acquisition may not be an issue, maintaining consumers' loyalty and avoiding their switching behaviour is a challenge, given the ability of consumers to port between service providers, while maintaining their numbers (Nikbin et al., 2012). Statistics on Mobile Number Portability show an extremely high request for porting with 1,071,300 requests and about 448,800 being successfully ported (Malaysian Communications and Multimedia Commission, 2018). Coupled with the fact that the telecommunication industry in Malaysia is overly saturated with consumers' penetration rate at 135 per 100 inhabitants (Malaysian Communications and Multimedia Commission, 2019), it makes this industry even more competitive.

From the perspective of service quality, there lies another challenge. The Consumer Forum of Malaysia (CFM), the body that is under the governance of the Malaysian Communications and Multimedia Commission (MCMC), published statistics on the number of consumers complaints received on telecommunication service providers. In 2017 there were 4,746 complaints. In 2018 it increased by 33% to 6, 330 complaints, and in only the first half of 2019, 4,635 complaints were already made (The Communications and Multimedia Consumer Forum of Malaysia, 2019b). The yearly increase points out that service failure within the telecommunication industry remains an issue of contention among the consumers and that service providers face an even higher challenge to face more discerning consumers in the event of failures. This challenge also poses a financial burden as MCMC recently imposed compounds

or fines amounting to RM4.6 million to the telecommunication service providers in Malaysia, for the first half of the year 2020 (The Malaysian Communications and Multimedia Commission, 2020). The fine was issued for offences of non-compliance with MCMC's billing-complain resolution and consumer-hotline management standards.

The statistics provide evidence of the importance of this service industry to the economic and telecommunication infrastructure development in Malaysia. However, it is fraught with challenges especially relating to growing consumer expectations and services that fall under par. Therefore, understanding consumer's behaviours upon service failure and recovery are vital to ensure the continued growth of the service providers within this industry.

2.5 Summary

The review of the literature discusses the constructs of this study, its inter-relationship and also the findings that lead to the problem statements that this study attempts to address. The service failure and recovery framework, consisting of perceived justice of recovery efforts, recovery satisfaction, and behavioural responses, is prevalent in the literature. Service failure can vary in severity levels, and it has been indicated to affect satisfaction with the recovery efforts differently. However, not much empirical evidence exists to understand the effect of failure severity levels on recovery satisfaction better. Most studies have also found that satisfaction with the recovery efforts is vital as it is an indication of consumers continued favourable behaviours towards the service

provider. However, some studies suggest that consumers are reluctant to engage in positive behaviours despite satisfactory evaluation of the recovery efforts. Thus, the presence of a third variable is suggested.

To address the gaps leading to the problem statement, as provided in Chapter 1, this study sets the objectives to firstly incorporate failure severity of low and high levels, and secondly to include attachment styles and brand authenticity within the service failure and recovery framework. Justice theory, regulatory focus theory, attachment theory, and semiotics theory aid in understanding the nature and inter-relationship between these constructs and answer the research questions through the hypotheses testing. The hypotheses will be tested within a telecommunication service industry by obtaining responses from mobile phone users. The telecommunication service context is chosen based on the importance of this industry and the challenges it faces in terms of the growing number of consumer complaint. In addition, this service context is yet to be examined within the integrated service failure and recovery framework proposed.

The following chapter, Chapter 3, will see the development of the hypotheses by drawing upon the extant literature and theories to answer the research questions that aim to meet the research objectives. The resulting research framework will also be presented, along with a definition of the constructs.

CHAPTER 3: HYPOTHESES DEVELOPMENT AND RESEARCH FRAMEWORK

This chapter will draw upon the extant literature on the relationships between the constructs and theories to present the hypotheses. These hypotheses are developed to address the research questions that are formulated based on the research objectives, as presented in Chapter 1. This current chapter will also provide the research framework and the definition of the constructs relevant to the literature and those that this study examines.

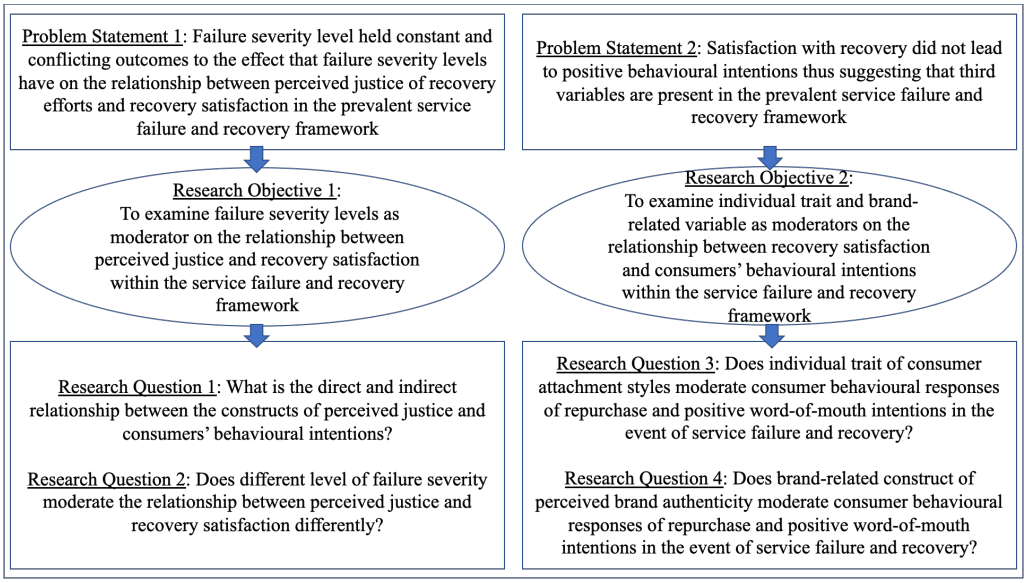
3.1 Hypotheses Development

The hypotheses will be developed by drawing upon the relevant literature from Chapter 2 and in reference to the research questions and research objectives as discussed in Chapter 1. The research objectives are identified through the problem statements that are also presented in Chapter 1. Figure 3.1 presents the flow of the problem statement to research objectives and research questions. Firstly, the research question on the direct and indirect relationship between the constructs of perceived justice and consumers' behavioural responses will be addressed by hypothesising the relationships in sections 3.1.1 to 3.1.3. Next, the research question on the effect that failure severity levels have on the relationship between perceived justice and recovery satisfaction will be presented in section 3.1.4 by hypothesising on the moderating role of failure severity on the relationship between perceived justice and recovery satisfaction. The research questions presented so far are to address the research objective on

examining the effect that failure severity levels have on the relationship between perceived justice and recovery satisfaction within the widely investigated service failure and recovery framework. Thus, the relationships among the prevalent constructs of service failure and recovery framework are also hypothesised to be tested.

Thereafter, the hypotheses presented in section 3.1.5 are to address the research question if the individual trait of attachment styles moderate consumers' behavioural responses upon satisfaction with recovery efforts. This is followed by hypotheses in section 3.1.6 which serve to answer the question if brand authenticity as a brand-related construct moderates the relationship between recovery satisfaction and behavioural responses. The hypothesised roles of attachment styles and brand authenticity aim to address the research objective of examining individual trait and brand-related construct as moderators on the relationship between recovery satisfaction and behavioural intentions. The following sections thus present all the hypothesised relationships.

Figure 3.1 Overview of Problem Statements, Research Objectives and Research Questions



3.1.1 Relationship between Perceived Justice and Recovery Satisfaction

Service failure results in a perception of loss and a sense of injustice due to the imbalance created in the consumer-brand relationship. Recovery efforts implemented by service providers are seen as an effort to alleviate or reduce the loss experienced and to restore the relationship with consumers. Therefore, recovery management is considered to have a significant impact on consumers who experience service failures because they are usually more emotionally involved and observant of service recovery efforts (Smith, Bolton, and Wagner, 1999).

The relevance of justice theory (Adams, 1965) in the context of service recovery begins upon a service failure as it mandates that brands should provide a reward that is relative to what the consumer has invested in the relationship with the

brand (Colquitt et al., 2006). Consumers evaluate the fairness of how the failures are handled by comparing actual and tangible outcomes with inputs, such as gaining an economic benefit, by evaluating the manner and speed in which service failures are dealt with and the quality and level of interaction with the service provider (McColl-Kennedy and Sparks, 2003; Grewal, Roggeveen and Tsiros, 2008).

Consumers' perceptions of these rewards and their administration as fair or unfair can influence the customer's subsequent attitudes and behaviours (La and Choi, 2019). Consumers who feel that they are treated fairly, and that justice is served through the distribution and administration of reward would feel satisfied as a result (Murphy et al., 2015). This is further evidenced by Kim, Yoo and Lee (2012, p.4) who have specifically suggested that justice theory serves as an "effective evaluative tool and a powerful predictor of service recovery satisfaction among consumers."

Perceived justice is therefore a significant antecedent of consumer recovery satisfaction. Most studies do support this relationship between perceived justice and recovery satisfaction with results indicating that customers who perceive higher levels of fairness during a service recovery process tend to exhibit higher satisfaction evaluations (Voorhees and Brady, 2005; Karande, Magnini and Tam, 2007; Petzer, De Meyer-Heydenrych and Svensson, 2017; Yani-de-Soriano et al., 2019).

Therefore, taking into consideration the findings of prior studies and the tenets

of justice theory, this study also posits that the higher the consumers' perception of justice, the higher the recovery satisfaction will be. Therefore, the following hypothesis is proposed:

H1: There is a positive relationship between perceived justice and recovery satisfaction.

3.1.2 Relationship between Recovery Satisfaction and Behavioural Responses

The behavioural responses included in this study are repurchase and positive word-of-mouth intention. These behaviours are the most commonly investigated constructs within the consumer behaviour literature including those within service failure and recovery context.

Previous studies within service failure and recovery context have found that successful service recovery can result in satisfaction, which in turn can bring the favourable outcome of repeat purchases (Harris et al., 2006; Bhandari, Tsarenko and Polonsky, 2007; Johnston and Michel, 2008; Bijmolt, Huizingh and Krawczyk, 2014; Wang, Hsu and Chih, 2014; Gohary, Hamzelu and Alizadeh, 2016). This would mean that consumers would continue to repurchase at a similar rate before the service failure. This postulation is in line with the findings of other studies within service recovery, where repurchase intention is an outcome of recovery satisfaction (Tarofder et al., 2016; Hazée, Van Vaerenbergh and Armirotto, 2017; La and Choi, 2019).

The extant literature also indicates that besides repurchase intention, consumers who are satisfied with the recovery efforts engage in positive word-of-mouth (Ha and Jang, 2009; De Matos, Luiz-Henrique and De Rosa, 2013; Choi and Choi, 2014; Singh and Crisafulli, 2016; Jung and Seock, 2017). Satisfaction with the recovery efforts leads consumers to share their positive experience with family and friends due to the salience and recency of the recovery experience (Maxham III and Netemeyer, 2002b). Therefore, the following hypotheses are postulated in describing the relationship between recovery satisfaction and behavioural responses:

H2: There is a positive relationship between recovery satisfaction and repurchase intention.

H3: There is a positive relationship between recovery satisfaction and positive word-of-mouth intention.

3.1.3 Mediating Role of Recovery Satisfaction

Within the context of this study, service recovery is a means to convert consumer's initial dissatisfaction with the service failure into satisfaction. In line with the theory of justice, successful recovery would lead to greater satisfaction. A similar relationship is expected in this study where consumers with a higher level of fairness perception of the recovery efforts would display higher satisfaction (Kimes and Wirtz, 2003; Cheung and To, 2016). The satisfaction of recovery efforts then determines consumers' post-recovery behavioural responses that have an impact on service providers. It has been evident that consumers satisfied with recovery efforts will repurchase and indulge in positive

word-of-mouth (Maxham III, 2001; Kim, Kim and Kim, 2009; Kuo and Wu, 2012; Chen and Kim, 2019). This is consistent with most studies within service recovery which have found that recovery satisfaction acts as the central mediator linking perceptions of justice to consumers' post-recovery behavioural responses (Maxham III and Netemeyer, 2002b; Wirtz and Mattila, 2004; Karatepe, 2006; Kau and Loh, 2006; Gohary, Hamzelu and Alizadeh, 2016; Jung and Seock, 2017). Therefore, this study also proposes that the perception of justice is linked to consumer's behavioural responses through recovery satisfaction. Hence, it is hypothesised that:

H4a: Recovery satisfaction will mediate the relationship between perceived justice and repurchase intention.

H4b: Recovery satisfaction will mediate the relationship between perceived justice and word-of-mouth intention.

3.1.4 Moderating Effect of Service Failure Severity

Service failure severity leads consumers to experience higher losses and negative emotions which manifest into negative coping responses (Hsu et al., 2019; Sakulsinlapakorn and Zhang, 2019; Le and Ho, 2020). A failure of higher severity can lead to actions with higher negative repercussions for the service provider such as revenge and avoidance (Kalamas, Laroche and Makdessian, 2008; Del Río-Lanza, Vázquez-Casielles and Díaz-Martín, 2009). Therefore, it would be of utmost interest to the service providers to be able to recover especially from a highly severe failure.

As discussed in Chapter 2, the importance of investigating failure severity within the service failure and recovery framework is fundamental. This is firstly due to the conflicting findings of the effect of low and high levels of failure severity on recovery satisfaction (Chuang et al., 2012; Bambauer-Sachse and Rabeson, 2015a, 2015b) and limited studies on how levels of failure severity impact recovery satisfaction (Sreejesh, Anusree and Abhilash, 2019; Khamitov, Grégoire and Suri, 2020). In addition, it is also essential for service providers to recover from failures especially of higher severity (Grégoire, Laufer and Tripp, 2010). A gap is thus evident on the impact of failure severity levels on consumers' recovery satisfaction. This study thus proposes to investigate how different levels of failure severity impacts recovery satisfaction. Furthermore, as recovery efforts represent an expansion of resources by the service provider, it is vital to know at which levels of severity are such investment of resources worthy of deployment.

This study, therefore, examines the moderating role of service failure on the relationship between perceived justice and recovery satisfaction, based on regulatory focus theory. This theory can explain the impact of low and high levels of failure severity on recovery satisfaction. According to regulatory focus theory, consumers facing a threat of loss are motivated to minimise the loss experienced, and this need increases when severity increases (Higgins, 1997; Bambauer-Sachse and Rabeson, 2015a). Recovery effort implemented then represents a situation of gain, and the motivation to obtain the gain would increase with higher severity. Therefore, a good recovery effort in the presence of high severity would match the motivation of obtaining the gain. This would

imply that once the gain is obtained, consumers will be satisfied with the recovery efforts (Bambauer-Sachse and Rabeson, 2015a, 2015b). On the other hand, failure at a lower level of severity will represent a very small loss, and therefore the motivation to minimise the loss or to seek the gain through the recovery efforts will be low if not insignificant. Therefore, a recovery implemented in the presence of low failure severity will have a lower or insignificant impact on consumers satisfaction with recovery efforts. Hence, this study postulates the following hypothesis:

H5: Failure severity will moderate the impact of perceived justice on recovery satisfaction such that for a high level of failure severity, a higher perception of justice will have a more positive effect on recovery satisfaction.

3.1.5 Moderating Effect of Consumer Attachment Styles

Prior empirical studies have found that satisfaction with recovery does not necessarily lead to pro-brand behavioural responses (Jones and Sasser, 1995; Weun, Beatty and Jones, 2004; Forbes, Kelley and Hoffman, 2005; Chen et al., 2018), which would indicate that a third variable may influence the relationship between recovery satisfaction and behavioural responses. Attachment style, which is defined as an individual level personality trait (Thomson, Whelan and Johnson, 2012; Kordrostami and Kordrostami, 2019), has been shown in previous studies to predict consumer's behavioural responses (Thomson and Johnson, 2006; Mende and Bolton, 2011; Mende, Bolton and Bitner, 2013; Japutra, Ekinci and Simkin, 2018; Mende et al., 2019; Japutra, 2020). Taking the findings of the extant literature into consideration suggests that consumers can

also display a range of behavioural responses such as trust, loyalty, risk-taking in consumption, and satisfaction as a result of their attachment styles (Mende et al., 2019; Kim et al., 2018; Li et al., 2019; Japutra, 2020), but as yet it remains to be explored within service failure and recovery context (Khamitov, Grégoire and Suri, 2018; Khamitov, Grégoire and Suri, 2020). Given that service failure and recovery efforts form a vital part of consumer's relationship with the brand, this study investigates the effect of the dimensions of attachment anxiety and attachment avoidance on consumers' behavioural responses within this context.

The impact of attachment styles on consumer's behavioural responses is expected to occur based on the proponents of attachment theory (Bowlby, 1973, cited in Bowlby, 1988). According to attachment theory, through the interaction in individuals' early years, an internal working model is formed which functions as a schema for relationships (Feeney, Cassidy and Ramos-Marcuse, 2008). Therefore, in the relationship that consumers hold with brands, the schema that manifests into attachment anxiety and attachment avoidance, will be able to account for the behavioural responses.

This study proposes that attachment anxiety and attachment avoidance will moderate the relationship between recovery satisfaction and consumer repurchase and word-of-mouth intentions in the context of service failure. The behavioural responses of consumers upon service recovery are proposed to be contingent upon a consumer's level of attachment anxiety and attachment avoidance. Attachment anxiety leads to a desire for a high level of relational intimacy (Hazan and Shaver, 1994) and that of being valued by a partner.

Therefore, upon a satisfactory evaluation of recovery efforts, consumers with high levels of attachment anxiety will wish to maintain the relationship with the service provider and continue to purchase and propagate positive word-of-mouth.

On the other hand, the attachment avoidance strategy is derived from a comprehensive denial or dismissal of the individual's attachment needs (Edelstein and Shaver, 2004). Consumers high on attachment avoidance may display a lack of commitment and unwillingness to continue the relationship with the service provider (Mende, Bolton and Bitner, 2013; Japutra, Ekinci and Simkin, 2018). Therefore, despite being satisfied with the recovery efforts, consumers with high levels of avoidance will not repurchase and indulge in positive word-of-mouth. In essence, in this study, the two dimensions are expected to work in opposing ways and therefore, the following hypotheses are proposed:

H6a: Anxiety attachment will moderate the impact of recovery satisfaction on repurchase intention such that for consumers with high (low) levels of anxiety attachment, higher (lower) recovery satisfaction will have a more (less) positive effect on repurchase intention.

H6b: Anxiety attachment will moderate the impact of recovery satisfaction on positive word-of-mouth intention such that for consumers with high (low) levels of anxiety attachment, higher (lower) recovery satisfaction will have a more (less) positive effect on positive word-of-mouth intention.

H7a: Avoidance attachment will moderate the impact of recovery satisfaction on

repurchase intention such that for consumers with low (high) levels of avoidance attachment, higher (lower) recovery satisfaction will have a more (less) positive effect on repurchase intention.

H7b: Avoidance attachment will moderate the impact of recovery satisfaction on positive word-of-mouth intention such that for consumers with low (high) levels of avoidance attachment, higher (lower) recovery satisfaction will have a more (less) positive effect on positive word-of-mouth intention.

3.1.6 Moderating Effect of Brand Authenticity

Brand authenticity as a brand-related construct is introduced into this study as it is a better predictor compared to a well-established construct (Ilicic and Webster, 2014) and is a construct not only relevant for brands but for consumers as a means to achieve self-reinforcing assets (Oh et al., 2019) and self-authenticate via consumption (Arnould and Price, 2000). Brand authenticity perception is formed through indexical, iconic, and symbolic cues that each consumer obtains through their interaction with the brand (Mick et al., 2004; Leigh, Peters and Shelton, 2006; Morhart et al., 2015). The cues are captured along the four dimensions of continuity (faithful towards itself), credibility (true to its consumers), integrity (caring and responsible), and symbolism (support consumers in being true to themselves) (Morhart et al., 2015). Therefore, each consumers' perception of brand authenticity can consequently have an impact on their behavioural responses as past studies have indicated (Fritz, Schoenmuller and Bruhn, 2017; Carsana and Jolibert, 2018; Arya et al., 2019; Lehman, O'Connor and Carroll, 2019; Oh et al., 2019; Jimenez et al., 2020). As

has been suggested earlier, consumers satisfied with service recovery do not necessarily repurchase and indulge in positive word-of-mouth (Jones and Sasser, 1995; Weun, Beatty and Jones, 2004; Forbes, Kelley and Hoffman, 2005; Chen et al., 2018) which could mean that perceived authenticity can influence this relationship as a brand-related factor. It is expected within this study that with higher satisfaction evaluation, consumers with high levels of perceived brand authenticity will continue to repurchase and indulge in positive word-of-mouth rather than those with lower levels of perceived brand authenticity. The following hypotheses are therefore postulated:

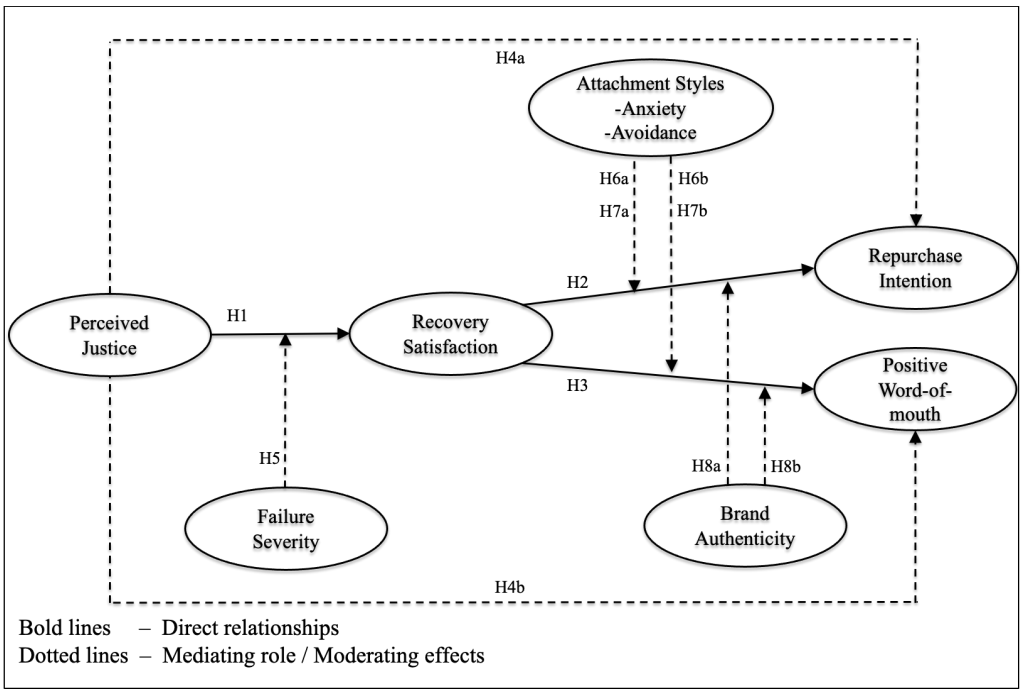
H8a: Brand authenticity will moderate the impact of recovery satisfaction on repurchase intention such that for consumers with a higher (lower) perception of brand authenticity, a higher (lower) recovery satisfaction will have a more (less) positive effect on repurchase intention.

H8b: Brand authenticity will moderate the impact of recovery satisfaction on positive word-of-mouth intention such that for consumers with a higher (lower) perception of brand authenticity, a higher (lower) recovery satisfaction will have a more (less) positive effect on positive word-of-mouth intention.

3.2 Research Framework

Based on the hypotheses formulated, a research framework along with the hypothesised paths are presented in Figure 3.2. The hypotheses will form the basis for the subsequent analysis, findings, and discussion that will be presented in Chapter 5.

Figure 3.2 Research Framework



3.3 Definition of the Study Constructs

The main constructs that are relevant in the literature on service failure and recovery including the specific variables that are applied in this study, as provided in Figure 3.2, are service failure, service failure severity, recovery satisfaction, repurchase intention, positive word-of-mouth intention, attachment styles via its dimensions of anxiety and avoidance, and brand authenticity. Table 3.1 presents these constructs and their definitions, which are adapted from prior studies of consumer behaviour.

Table 3.1 Constructs and its Definition

Constructs	Definition
Service failure	failures that occur within the context of service delivery that directly affects the consumer (Trump, 2014)
Service failure severity	customer's perception of the intensity of a service problem, the more severe the service failure, the greater the customers' perceived loss (Weun, Beatty and Jones, 2004)
Perceived justice of recovery efforts	perception of fairness that consumers form based on the recovery implemented by the service provider (Migacz, Zou and Petrick, 2017)
Recovery satisfaction	the degree to which a customer is satisfied with a service firm's transaction-specific service recovery effort following a service failure (Boshoff, 1999, p. 237)
Repurchase intention	customer's judgment to repeat purchase of a designated service from a service provider (Hellier et al., 2003)
Positive word-of-mouth intention	refers to the possibility of consumers spreading favourable information such as endorsing the service provider and its services (Maxham III and Netemeyer, 2003)
Attachment styles	a trait variable that reflects a persons' thoughts, feelings and behavioural tendencies (Thomson, Whelan and Johnson, 2012, p. 1).
Attachment anxiety	the extent to which hyper-activation of their attachment system (view of self) occurs (Brennan, Clark and Shaver 1998).
Attachment avoidance	the level to which a deactivation of their attachment system (view of others) occurs (Brennan, Clark and Shaver 1998).
Brand authenticity	the extent to which consumers perceive a brand to be faithful toward itself, true to its consumers, motivated to be caring and responsible, and able to support consumers in being true to themselves (Morhart et al., 2015)

3.4 Summary

The preceding chapter proposed hypotheses, which are developed to address the research questions derived from the research objectives. The research objectives developed addresses the problem statements that are derived from the gaps identified through the literature review, as presented and discussed in Chapter 1 and 2. A research framework and definitions of constructs are also presented in this chapter.

The following chapter, Chapter 4, will present the pretests, which will encapsulate the method, results and discussion for the scenario development and determination. As presented in Chapter 1, pretests are conducted to derive the stimuli for scenarios that will be used in the main study. As three scenario-based experimental studies are proposed, three scenarios are required. Thus, three scenarios will be pretested and presented in Chapter 4.

CHAPTER 4: SCENARIO DEVELOPMENT AND DETERMINATION

Chapter 4 presents the objective, method, results, and discussion of the pretests conducted. As presented in Chapter 1, pretests are conducted to develop and determine three separate scenarios. These three scenarios will be used in the main study, where three scenario-based experimental studies are proposed to test the hypotheses developed in Chapter 3. This will permit the study to answer the research questions that are formulated to meet the research objectives.

As the study is experimental in design, pretest is necessary to test the efficacy of stimuli on the outcome variables upon respondents' exposure. In this study, the stimuli functioned to represent the conditions of the variables that are manipulated to observe the effect that the manipulation had on the outcome variables (Atzmüller and Steiner, 2010). These stimuli are contained within the written scenarios presented to respondents within the survey instrument. However, before the stimuli contained within the scenario can be applied in the main study, it is vital that they are pretested to ensure that 1) the manipulated conditions or stimuli in the scenario work as intended, 2) the respondents believe that the stimuli depicted within the scenarios are incidents that can happen in real life and, 3) that they understand the scenarios being presented.

The stimuli presented within the scenarios are developed to closely reflect the failures that occur within the telecommunication service industry. As explained in prior chapters, this study intended to investigate the mobile phone users subscribing to services provided by the telecommunication service providers within Malaysia. The hypothetical scenarios are thus created by drawing upon the report published by The Communications and Multimedia Consumer Forum of Malaysia (2019a). The report provides the numbers of complaints from consumers against the telecommunication service providers.

The top five categories out of ten categories classified are network involving instances such as service disruption, billing and charging such as billing dispute, service delivery, pricing, and unfair practice. The scenarios are developed based on the chosen complaint category and then pretested among respondents. The data obtained through pretesting are subjected to analyses using IBM SPSS version 25 to qualify these scenarios.

4.1 Pretest 1

Pretest 1 is conducted with the purpose to validate a scenario that can be utilised in Study 1. Study 1 aims to test the hypotheses set out to answer the research questions of examining the direct and indirect relationship between perceived justice and behavioural responses, and the moderating role of failure severity on the relationship between perceived justice and recovery satisfaction. Therefore, a scenario needs to be developed that successfully depicts failure severity conditions and the perceived justice of recovery efforts at low and high levels.

Thus, referring to the category of networks that received the highest number of complaints according to the report by The Communications and Multimedia Consumer Forum of Malaysia (2019a), a failure in terms of a fall in signal strength for mobile data service is developed. Fall in signal strength was chosen as it represents service disruption, which was stated in the report by The Communications and Multimedia Consumer Forum of Malaysia (2019a) as the common grouse of consumers within this category. The level of failure severity is then manipulated by indicating that the respondent is either a light user (low severity) or a heavy user (high severity). The perceived justice condition is manipulated by indicating either that the consumer is responsible for the failure and is rudely handled (low perceived justice), or that the service provider takes responsibility for the failure, provided compensation and is polite throughout the interaction (high perceived justice). The scenario is presented in Table 4.1.

Table 4.1 Pretest 1 Scenario

Severity	
Low	Imagine that for the past week you have been experiencing a drop in the signal strength for both your mobile and data connectivity around your area. You are not a heavy user of mobile data and managed to get by through the use of free WIFI wherever available. However, it begins to cause you some inconvenience and therefore you contact the customer service centre to make a complaint.
High	Imagine that for the past week you have been experiencing a drop in the signal strength for both your mobile and data connectivity around your area. You heavily depend on your mobile and data connectivity for staying in touch with friends, family and entertainment purposes. You contact the customer service centre to make a complaint.
Perceived Justice	

Low	The service personnel inform you that the issue is not with the connectivity but must be due to your mobile phone being faulty. He asks you to check the connectivity again using a different phone or with another customer who uses services from a similar provider. He insists that you should do that before calling in to complain. He does not say anything more and you, therefore, end the conversation.
High	The service personnel apologise for the inconvenience it has caused you and politely informs you that the telecommunication towers from surrounding areas are being upgraded and it is expected to be completed by the next day. He also informs you that customers faced with this issue will receive complimentary 2GB data. He informs you to please take note and if the problem still persists the day after, to contact the customer service.

4.1.1 Method

The scenarios are presented as a paper-and-pen survey to 30 respondents, recruited through the researcher's social environment. Pretest 1 is of 2 (failure severity: low vs. high) X 2 (perceived justice: low vs. high) between-subject design. The permutations resulted in four versions of the questionnaire whereby each respondent receives a questionnaire depicting failure severity of either a low or high level and perceived justice of either a low or high level. The measures included in the pretest are three items of failure severity, 17 items of perceived justice, three items of scenario realism, and a single item of comprehension of the scenario. All items are measured on a seven-point Likert scale ranging from "1" strongly disagree to "7" strongly agree, and these measures are also applied in the main study and will be presented in detail in the following chapter.

4.1.2 Results

Firstly, multivariate analysis of variance (MANOVA) is conducted to test the effects of the severity and perceived justice manipulations on the outcome variables of failure severity and perceived justice scores. Results indicate significant main effect of severity manipulations (Wilks' Lambda = 0.650, F = 7.269, $p < 0.05$) and also of the justice manipulations (Wilks' Lambda = 0.712, F = 5.469, $p < 0.05$). The significant main effect findings suggest that manipulation of both severity and perceived justice at a low and high level is successful. The interaction effect is insignificant (Wilks' Lambda = 0.957, F= 0.611, $p > 0.05$) supporting the fact that the perception of justice is not influenced by the failure severity and vice versa. The results are presented in Table 4.2.

Table 4.2 Pretest 1 MANOVA and Between-Subject Effects Results

	Multivariate			Univariate		
Source	Wilks Lambda	F	Sig.	DV	F	Sig.
Perceived Justice Level	0.712	5.469	.010	Perceived Justice	10.807	.003
				Severity	1.564	.221
Failure Severity Level	0.650	7.269	.003	Perceived Justice	1.281	.267
				Severity	14.805	.001
Perceived Justice Level * Failure Severity Level	0.957	0.611	.550	Perceived Justice	0.179	.675
				Severity	0.925	.344

To further assess the manipulation of stimuli, analysis of variance (ANOVA) is performed with failure severity and perceived justice as fixed factors on the means of the three service failure questions (severity) (Cronbach's $\alpha = 0.748$) and 17 perceived justice questions (Cronbach's $\alpha = 0.977$) separately. Results

indicate a significant effect of service failure condition on failure severity evaluation ($F = 14.568$, $p < 0.05$). The participants in less severe condition ($M = 3.646$, $SD = 0.31$) indicate a lower level of perceived failure severity compared to those in the high severe condition ($M = 5.313$, $SD = 0.31$).

Similarly, the participants in high-perceived justice condition ($M = 4.871$, $SD = 0.338$) perceive a greater level of perceived justice than those in lower perceived justice condition ($M = 3.301$, $SD = 0.338$). Results also suggest that there is a significant main effect of perceived justice condition on perceived justice evaluation ($F = 11.005$, $p < 0.05$). These results indicate that the manipulation is perceived as intended for perceived justice levels. Not only is the perceived realism of the scenario high ($M = 5.75$, S.D. $= 0.825$) but also the comprehension of the scenario ($M = 5.438$, S.D. $= 1.014$) suggesting that participants find the scenario both believable and understandable. The ANOVA and estimated marginal mean are presented in Table 4.3 and Table 4.4 respectively.

Table 4.3 Pretest 1 ANOVA Results

DV		Sum of Squares	df	Mean Square	F	Sig.
Failure Severity	Between Groups	22.222	1	22.222	14.568	.001
	Within Groups	45.764	30	1.525		
	Total	67.986	31			
Perceived Justice	Between Groups	19.716	1	19.716	11.005	.002
	Within Groups	53.745	30	1.791		
	Total	73.46	31			

Table 4.4 Pretest 1 Estimated Marginal Means

Independent Variable (IV)	Dependent Variable (DV)	IV Level	Mean	Std. Error	95% Confidence Interval	
					Lower Bound	Upper Bound
Failure Severity Level	Failure Severity	Low	3.646	0.306	3.018	4.273
		High	5.313	0.306	4.685	5.940
	Perceived Justice	Low	4.357	0.338	3.665	5.048
		High	3.816	0.338	3.124	4.508
Perceived Justice Level	Failure Severity	Low	4.750	0.306	4.123	5.377
		High	4.208	0.306	3.581	4.836
	Perceived Justice	Low	3.301	0.338	2.610	3.993
		High	4.871	0.338	4.180	5.563

4.1.3 Discussion

The scenario within Pretest 1, which depicts a failure of service disruption occurring within the network category, is successful as the manipulations of both the low and high levels of failure severity and perceived justice are perceived as intended by the respondents. Furthermore, the realism of the scenario presented and also the comprehension of the scenario is rated high. Therefore, the scenario in this pretest meets the requirements and will be utilised in the main study, specifically in Study 1.

4.2 Pretest 2

Pretest 2 is conducted with the purpose to validate a scenario that will be utilised in Study 2. Study 2 aims to test the hypotheses set out to answer the research question of examining the moderating role of attachment styles on the relationship between recovery satisfaction and behavioural responses. In the

main study, the recovery satisfaction evaluation is proposed to be contingent on the perceived justice level. Therefore, a scenario needs to be developed that successfully depicts the perceived justice of recovery efforts at low and high levels upon encountering a service failure. Thus, referring to the category of service delivery as stated in the report by The Communications and Multimedia Consumer Forum of Malaysia (2019a), a failure in terms of unpleasant interaction of service delivery is developed. The service failure is presented at one level. The perceived justice condition is manipulated at a low level by indicating that respondents are treated rudely, and the service upgrade request is not processed, and at a high level by indicating that they are treated politely and the request for an upgrade is to be processed. The scenario is presented in Table 4.5.

Table 4.5 Pretest 2 Scenarios

Baseline failure	
	Now imagine, that you have just received an SMS from your service provider of a promotion that you can upgrade at no cost from your existing contract to another package that includes unlimited mobile, data, and SMS. You decide to take this offer and call the customer service centre. It takes you about five minutes to go through the automated responses before you connect to a customer service employee. You begin to explain your intention, but the employee interrupts and says that you have connected to the wrong department and that you will need to be transferred to the correct department. However, the line gets cut. You decide to call again but this time you select to connect to the customer service employee to complain.
Perceived Justice	
Low	You ask to speak to the manager and are put on hold for a minute before the manager comes on the line. You explain the incident. The manager interrupts you before you finish and says, “I am going to have to put you on hold please while I check.” After two minutes, he comes back on the

	line and says, “We regret to inform you that you will need to call in again and connect to the right department as we do not have the authority to process contract upgrade.”
High	You ask to speak to the manager, and you are transferred immediately. You explain the incident. The manager listens and after you finish says, “We are sorry to hear about your experience. I am going to have to put you on hold please while I check.” Within a minute, he comes back on the line and says, “We are pleased to inform that we can upgrade your contract to the new package from our end. Would you like to proceed?”

4.2.1 Method

The scenario in Pretest 2 is presented as a paper and pen survey to 30 respondents, who participated voluntarily and are recruited through the researcher’s social environment. Pretest 2 is of 1 (failure severity) x 2 (perceived justice: low vs. high) between subject design. This resulted in two versions of the questionnaire whereby one contains the scenario depicting failure and perceived justice of recovery effort at a low level. The other questionnaire version contains the scenario depicting failure and perceived justice of recovery effort at a high level. The measures included in both version of questionnaires is the same and it is similar to those in Pretest 1, being three-items of failure severity, 17 items of perceived justice, three items of scenario realism and a single item of scenario comprehension.

4.2.2 Results

Multivariate analysis of variance (MANOVA) is performed to test the effect of the perceived justice manipulations on the dependent variables of failure severity and perceived justice scores. Results indicate significant main effect of justice manipulations (Wilks' Lambda = 0.715, F = 5.378, $p < 0.05$). This finding implies that the manipulation of perceived justice conditions is successful. Furthermore, the between-subject effects indicate that the perceived justice evaluation is not influenced by the failure severity evaluation (F = 0.974, $p > 0.05$). The results are presented in Table 4.6.

Table 4.6 Pretest 2 MANOVA and Between-Subject Effects Results

	Multivariate			Between-Subject Effects		
Source	Wilks Lambda	F	Sig.	DV	F	Sig.
Perceived Justice Level	0.715	5.378	.011	Perceived Justice	11.086	.002
				Failure Severity	0.974	.332

To further assess the manipulation of conditions, analysis of variance (ANOVA) is performed with perceived justice as fixed factors on the means of the 17 perceived justice questions (Cronbach's $\alpha = 0.98$). Results indicate that there is a significant main effect of perceived justice condition on perceived justice evaluation (F = 11.086, $p < 0.05$). These results support the fact that the manipulation is perceived as intended for perceived justice conditions. Furthermore, the participants in high-perceived justice condition (M = 5.047, SD = 0.361) perceive a greater level of perceived justice than those in lower

perceived justice condition (M = 3.345, SD = 0.361). Not only is the rating of perceived realism of scenario high (M = 5.522, S.D. = 1.046) but the rating on comprehension is also high (M = 5.530, S.D. = 1.525). The findings suggest that manipulation of the conditions is successful, and the scenario is perceived as both realistic and comprehensible. The ANOVA and estimated marginal means are presented in Table 4.7 and Table 4.8 respectively.

Table 4.7 Pretest 2 ANOVA Results

DV		Sum of Squares	df	Mean Square	F	Sig.
Perceived Justice	Between Groups	21.725	1	21.725	11.086	.002
	Within Groups	54.872	28	1.96		
	Total	76.597	29			

Table 4.8 Pretest 2 Estimated Marginal Means

Independent Variable (IV)	Dependent Variable (DV)	IV Level	Mean	Std. Error	95% Confidence Interval	
					Lower Bound	Upper Bound
Perceived Justice Level	Failure Severity	Low	4.067	0.334	3.382	4.752
		High	3.600	0.334	2.915	4.285
	Perceived Justice	Low	3.345	0.361	2.605	4.086
		High	5.047	0.361	4.307	5.787

4.2.3 Discussion

The scenario within Pretest 2, presents recovery effort at low and high levels for a failure of unpleasant interaction of service delivery occurring within the service delivery category. The results indicate that the manipulation of low and

high levels of perceived justice is successful as the levels are perceived as intended by the respondents. Furthermore, the realism and comprehension rating of the scenario presented is high. Therefore, the scenario in this pretest meets the requirements and will be utilised in the main study, specifically in Study 2.

4.3 Pretest 3

Pretest 3 is conducted to validate a scenario that will be utilised in Study 3 which aims at testing the hypotheses set out to meet the research question of examining the moderating role of brand authenticity on the relationship between recovery satisfaction and behavioural responses. In the main study, the recovery satisfaction evaluation is proposed to be contingent on the perceived justice level. Therefore, a scenario is developed to successfully depict the perceived justice of recovery efforts at low and high levels upon encountering a service failure. Thus, referring to the report by The Communications and Multimedia Consumer Forum of Malaysia (2019a), a failure in terms of billing error for an unsubscribed service is developed. The service failure is presented at one level. The perceived justice condition is manipulated at a low level by indicating that respondents do not receive an apology and refund, even though the unsubscribed service is to be cancelled. The high level of recovery effort sees the respondents receiving an apology and is to be refunded upon cancellation of the unsubscribed service. The scenario is presented in Table 4.9.

Table 4.9 Pretest 3 Scenarios

Baseline failure	
	Now, imagine that you have recently received your bill for this month. You notice that there is a charge of RM3 for Caller Ringtone Service, which is a service that replaces your standard ringing tone that your callers listen to with the current top song instead. However, you did not subscribe to this service, but the amount has been debited from your account via your auto-debit arrangement with your service provider. You decide to telephone the customer service centre to complain.
Perceived Justice	
Low	You explain the incident. The employee interrupts you before you finish and says, "I am going to have to put you on hold please while I check." After two minutes, the employee comes back on the line and says, "We are pleased to inform you that the ringtone service will be cancelled effective the following month but unfortunately you will not receive a refund for the amount already charged."
High	You explain the incident. The employee listens and after you finish says, "We are sorry to hear about your experience. I am going to have to put you on hold please while I check." Within a minute he comes back on the line and says, "We are pleased to inform that the ringtone service will be cancelled effective the following month and the RM3 charged in the previous bill will be refunded."

4.3.1 Method

The scenarios are presented as a paper and pen survey to 30 respondents, who participated voluntarily and are recruited through the researcher's social environment. Pretest 3 is of 1 (failure severity) x 2 (perceived justice: low vs. high) between-subject design. This resulted in two versions of the questionnaire whereby one contains the scenario depicting failure and perceived justice of

recovery effort at a low level. The other questionnaire version contains the scenario depicting failure and perceived justice of recovery effort at a high level. The measures included in both versions of questionnaires are the same and it is similar to those in Pretests 1 and 2, being three items of failure severity, 17 items of perceived justice, three items of scenario realism, and a single item of scenario comprehension.

4.3.2 Results

Multivariate analysis of variance (MANOVA) is performed to test the effect of the perceived justice manipulations on the dependent variables of failure severity and perceived justice scores. Results indicate significant main effect of justice manipulations (Wilks' Lambda = 0.447, F = 16.674, $p < 0.05$). This finding implies that manipulation of perceived justice at a low and high level is successful. Furthermore, the between-subject effects indicate that the perceived justice evaluation is not influenced by the failure severity evaluation (F = 0.131, $p > 0.05$). The results are presented in Table 4.10.

Table 4.10 Pretest 3 MANOVA and Between-Subject Effects Results

	Multivariate			Between-Subject Effects		
Source	Wilks Lambda	F	Sig.	DV	F	Sig.
Perceived Justice Level	0.447	16.674	.000	Perceived Justice	34.585	.000
				Failure Severity	0.131	.720

To further assess the manipulation of perceived justice conditions, analysis of

variance (ANOVA) is performed with perceived justice as a fixed factor on the means of the 17 perceived justice questions (Cronbach's $\alpha = 0.984$). Results indicate that there is a significant main effect of perceived justice condition on perceived justice evaluation ($F = 34.584$, $p < 0.05$). These results imply that the manipulation is perceived as intended for perceived justice conditions. Furthermore, the participants in high-perceived justice condition ($M = 5.753$, $SD = 0.302$) perceive a greater level of perceived justice than those in lower perceived justice condition ($M = 3.243$, $SD = 0.302$). Not only is the rating of perceived realism of scenario high ($M = 5.522$, S.D. = 1.046) but also is the rating of comprehension ($M = 5.530$, S.D. = 1.525). The findings indicate the successful manipulation of the conditions, and the scenario is both realistic and comprehensible. The ANOVA and estimated marginal means are presented in Table 4.11 and Table 4.12 respectively.

Table 4.11 Pretest 3 ANOVA Results

DV		Sum of Squares	df	Mean Square	F	Sig.
Perceived Justice	Between Groups	47.243	1	47.243	34.584	.000
	Within Groups	38.250	28	1.366		
	Total	85.493	29			

Table 4.12 Pretest 3 Estimated Marginal Means

Independent Variable (IV)	Dependent Variable (DV)	IV Level	Mean	Std. Error	95% Confidence Interval	
					Lower Bound	Upper Bound
Perceived Justice Level	Failure Severity	Low	4.667	0.390	3.867	5.466
		High	4.467	0.390	3.667	5.266
	Perceived Justice	Low	3.243	0.302	2.625	3.861
		High	5.753	0.302	5.135	6.371

4.3.3 Discussion

The scenario within Pretest 3 presents recovery effort at either a low and high level for a failure of billing error for an unsubscribed service occurring within the billing and charging category. The results indicate that the manipulation of a low and high level of perceived justice is successful as the levels are perceived as intended by the respondents. Furthermore, the realism and comprehension of the scenario are rated highly. Therefore, the scenario in this pretest meets the requirements and will be used in the main study, specifically in Study 3.

4.4 Summary

In pretesting the three scenarios, the conditions or stimuli are demonstrated to be successfully manipulated. The results are also favourable in terms of scenario realism and comprehension. As such, these scenarios will be used in the main study, presented in the following chapter, Chapter 5.

Chapter 5 will thus provide an overview of the three scenario-based experimental studies that address the research questions, developed based on the proposed research objectives, before elaborating on the experimental approach selected for this study. Each study will be presented to encompass its method, findings and discussion. A summary of the findings is presented at the end of this chapter.

CHAPTER 5: MAIN STUDY: METHODS, FINDINGS AND DISCUSSION

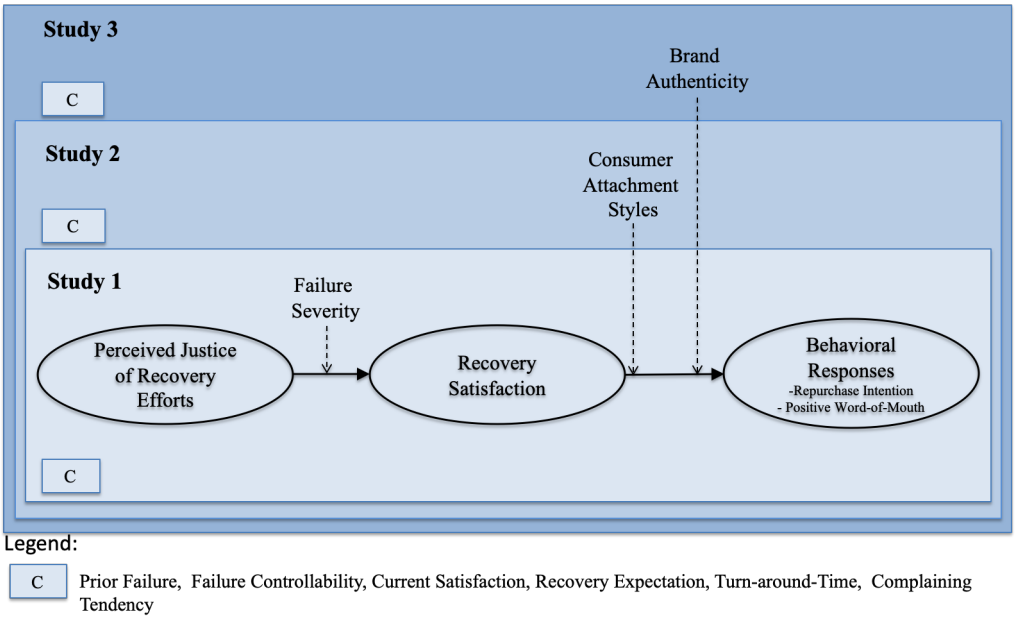
Chapter 5 presents the research conducted for this study through the three scenario-based experiments. The three scenario-based experimental studies aim to test the hypotheses to answer the research questions derived from the research objectives, as presented in Chapter 1. Thus, this chapter will begin by presenting an overview of the three scenario-based experimental studies, based on the research questions and objectives. This is then followed by a discussion on the experimental approach applied and its suitability for this study. The chapter then moves on to present all three studies, individually for their methods, findings, and discussion. The chapter concludes with a summary of the study.

Scenario-based Experimental Studies

Three scenario-based experimental studies are proposed to address the research questions presented in Chapter 1. Study 1 addresses the research questions of determining the direct and indirect relationship between perceived justice and behavioural responses, and on the moderating role of failure severity on the relationship between perceived justice and recovery satisfaction, through hypotheses H1-H5. Thus, Study 1 addresses the research objective of investigating the role of failure severity levels as a moderator on the relationship between perceived justice and recovery while also determining the relationship of the constructs within the widely accepted service failure and recovery framework. Study 2 and 3 then address the second research objective, which

manifests into two research questions, namely, to determine how individual traits and brand-related constructs affect the relationship between recovery satisfaction and behavioural intentions. Study 2 examines the moderating effect of attachment styles via its dimensions of anxiety and avoidance on the relationship between recovery satisfaction and behavioural responses via hypotheses numbered H6a-H7b, thus, addresses the research question that determines the influence of an individual trait on this relationship. Study 3 will then answer the final research question on how brand-related constructs, which is perceived brand authenticity, influence the relationship between recovery satisfaction, and behavioural responses through hypotheses H8a and H8b. An overview of the three studies conducted is presented in Figure 5.1.

Figure 5.1 Design Overview of Three Scenario-Based Experimental Studies



This chapter is hence organised by the three studies. Each study has three major sections comprising of:

1. The method, in which the sample and procedures are presented including the outcome of descriptive statistics, followed by measures employed, and analysis to be conducted.
2. Findings, where the results of the analyses conducted are presented, which includes the manipulation, reliability and validity, main and interaction effects of main variables and covariates, and hypotheses testing.
3. Discussion, in which the findings of the hypotheses testing are discussed in relation to prior studies and theories.

Scenario-based Experiment Approach

Prior to presenting the three studies, background information on the approach selected for the studies is provided. As briefly stated in Chapter 1, this study employs the scenario-based experimental approach as it allows for the control of the causal variables separately while the effect of the independent variable on the outcome variables can be observed (Atzmüller and Steiner, 2010). Three studies are conducted to test the hypotheses developed to answer the research questions and meet the research objectives. The three studies are necessary to not confound the effects that the three moderating variables, examined at different levels, can have on the outcome variables, as well as to provide a fairly complete picture of the integrated service failure and recovery framework proposed. A similar approach was adopted by Wan and Wyer (2019) in their investigation of incidental similarity and attributions for service failure.

The scenario-based experimental approach is adopted as it offers several advantages. The scenarios presented within the studies allow participants to visualise the situation, realistically project themselves into it (Lally, 1996) and respond to the variable measures upon exposure to the stimuli (Atzmüller and Steiner, 2010). The scenario-based experimental studies also address many issues associated with results based on an alternate method, which is the retrospective self-reports (Tax, Brown and Chandrashekaran, 1998; Smith, Bolton and Wagner, 1999). A retrospective self-report involves elicitation or recall of prior events. However, the recall could be subjected to biases due to memory lapses (Smith and Bolton, 2002). Participants involved in retrospective self-report studies could also display rationalisation tendencies, which means that the prior failure experienced could be framed differently at the point of data collection, causing it to be downplayed and reduced in importance (Smith, Bolton and Wagner, 1999). Another main issue with the retrospective self-report study is the consistency factor, whereby participants are expected to recall actual failures, which would greatly vary in types, severity, and context across the sample and therefore would have had an impact on the analysis (Bradley and Sparks, 2012).

A further advantage of using scenario-based experiments is that they eliminate difficulties associated with observation or enactment of service failures in the field, which may unfold over several days if not weeks (Bitner, Booms and Tetreault, 1990). It also addresses the managerial undesirability and unethicality of intentionally imposing service failure on consumers (Smith, Bolton and Wagner, 1999; Grewal, Roggeveen and Tsiros, 2008). The use of scenario-

based experiments also ensures high internal validity (Steiner, Atzmüller and Su, 2016) and reliability of measures (Wen and Chi, 2013).

The scenario-based experiments proposed in this study are consistent with previous studies investigating the effects of service failure and recovery on satisfaction and behavioural responses (Blodgett, Hill and Tax, 1997; Smith and Bolton, 1998; Hess, Ganesan and Klein, 2003; Mattila and Cranage, 2005; Holloway, Wang and Beatty, 2009; Gohary, Hamzelu and Alizadeh, 2016; Sharifi and Spassova, 2020). Therefore, this indicates that scenario-based experiments are the most suitable approach to be employed in this study.

5.1 Study 1

Study 1 addresses the research questions that aim to determine the direct and indirect relationship between perceived justice and behavioural responses, through the testing of hypotheses H1-H4b, and the moderating role of failure severity on the relationship between perceived justice and recovery satisfaction via hypotheses H5. Study 1 is a 2 (perceived justice: low vs. high) x 2 (failure severity: low vs. high), between-subjects design. The method, which encompasses the measures and analyses used in Study 1, is detailed next before the findings of the analyses and discussion are presented.

5.1.1 Method

5.1.1.1 Sample and Procedure

Respondents comprise undergraduate and postgraduate students, and convenience sampling is employed to recruit these students from various private institutions of higher education within the Federal Territory of Kuala Lumpur and the state of Selangor, after obtaining permission from these institutions. Students are approached by setting up a booth in the common area of campuses. The use of student samples is very common within service failure and recovery studies, especially in studies that have employed scenario-based experiments (Smith and Bolton, 1998; Liao, 2007; Gelbrich, 2010; Gohary, Hamzelu and Alizadeh, 2016; Harrison-Walker, 2019). Furthermore, the evaluation of recovery satisfaction by the student and non-student samples have been found to not differ (Ok, Shanklin and Back, 2008).

The respondents then receive a scenario-based paper-and-pencil questionnaire. The questionnaire utilises the scenario that has been successfully pretested under Pretest 1, as presented earlier in Chapter 4. The questionnaire begins by detailing the study objectives, questionnaire structure, right to voluntary participation and withdrawal and contact details for further information. The respondents have to check a box to indicate an agreement to participate in the study.

The respondents then move on to provide their current telecommunication service provider details such as name, length of service, type of service, current satisfaction levels, and if they have experienced a prior failure before. The

respondents next complete the measurement items that aims to determine their complaining propensity. The measures presented up to this point are for the control variables.

In the following section of the questionnaire, respondents are asked to imagine themselves being in the role of the consumer and to read the scenario detailing the failure in the form of a fall in signal strength for mobile data service. The respondents are presented with one of the failure severity scenarios, being either a light user (low severity) or a heavy user (high severity). The respondents then complete the items that measures the perception of failure severity and measurement items for the control variables of failure controllability, turn-around time, and recovery expectation.

Next, the respondents read about the recovery efforts implemented, either of low or high level. The recovery effort is manipulated at a low level by indicating that the consumer is responsible for the failure and is rudely handled. The high level of recovery sees the service provider taking the responsibility, providing compensation, and being polite in the interaction. The respondents then move on to complete the measurement scales on the perceived realism of the scenario, the comprehension of the scenario, perceived justice of the recovery efforts, the satisfaction of the recovery efforts, repurchase and positive word-of-mouth intentions. The final section requires respondents to complete basic demographic questions of gender, age, education level, and age group. The respondents are compensated with a food voucher of RM10 upon completing the questionnaire. At the end of the data collection stage, a total of 237 responses are collected and

upon eliminating incomplete and ambiguous responses, 224 responses are used for the analysis. The cell sizes range from between 46-54, which is above the suggested 20 observations for each category, and it exceeds the number of independent variables (Hair et al., 2010). Cell sizes in other studies within service failure and recovery have been indicated to range between 10-46 (Smith and Bolton, 1998), and 35-46 (Albrecht et al., 2019).

The dataset is first subjected to descriptive analysis. The results indicate that most of the student respondents are females, comprising 70%, and the students are within the 18-24 age group, as expected within a student population. Chinese students represent almost 60% of the respondents and this is so as the data is collected from private institutions of higher education in Klang Valley, where Chinese students form the majority. This is then followed by Bumiputera respondents at 25%. Table 5.1 presents the demographic profile of the students, and Table 5.2 presents their telecommunication profile.

Table 5.1 Study 1 Respondents' Demographic Profile

Demographic Variable	Dimensions	Frequency	Total	Percentage
Gender	Male	67	224	30.0
	Female	157		70.0
Age Group	18-24	203	224	90.6
	25-34	17		7.6
	35-44	3		1.3
	45-54	1		0.4
Education Level	Secondary school or below	49	224	21.1
	Certificate or Diploma	156		30.0
	Bachelor's degree	10		44.8
	Postgraduate degree	9		4.0
Ethnicity	Bumiputera	56	224	25.0
	Chinese	132		58.9
	Indian	29		12.9
	Other	7		3.1

Most students have a subscription with Maxis, at slightly above 30% closely followed by Digi. The subscription base does reflect the report on mobile phone users that states Digi and Maxis as the market leaders (Müller, 2019). Post-paid service form almost two-thirds of the subscription type. Almost 80% of students have had a subscription of six years or below with their service providers, as they are mostly between 18-24 years of age.

Table 5.2 Study 1 Respondents' Telecommunication Profile

Telecommunication Service Profile		Frequency	Total	Percent
Service Provider Name	Celcom	33	224	14.7
	Maxis	70		31.3
	Digi	68		30.4
	U-Mobile	34		15.2
	Others	18		8.5
Service Type	Prepaid	77	224	34.4
	Post-paid	147		65.6
Service Length	Less than a year	19	224	8.5
	1 - 3 years	89		39.7
	4 - 6 years	66		29.5
	7 - 9 years	24		10.7
	More than 9 years	26		11.6

5.1.1.2 Measures

The main variables of Study 1 are perceived justice, failure severity, recovery satisfaction, repurchase intention, and positive word-of-mouth intention. This study adopted the overall perception of justice as it has been noted that "customers use a compensatory model to arrive at an overall perception of justice" (DeWitt, Nguyen and Marshall, 2008, p. 240).

All the measures utilised for these variables are adapted from prior studies that have demonstrated high reliability and validity of these measures. All items are measured on a seven-point Likert scale, ranging from 1 (strongly disagree) to 7 (strongly agree) unless otherwise stated. Items that are reverse coded are indicated with an "R". The main variables measurement scale items are presented in Table 5.3.

Table 5.3 Main Variables Measurement Scales

Perceived Justice
Distributive Justice adapted from Folger and Konovsky (1989), Maxham III and Netemeyer (2002b), and Smith and Bolton (1998).
Considering the trouble caused and the time lost, the compensation I received from the service provider was acceptable
The service provider took good compensation measures to solve the problem
The service provider's efforts were sufficient to offer a satisfactory compensation
I think the service provider was quite fair when compensating me for the problem that occurred
In general, the service provider was able to compensate me adequately to solve the problems it had in the delivery of the service
Procedural Justice adapted from Blodgett, Hill and Tax (1997), Folger and Konovsky (1989), Maxham III and Netemeyer (2002b), and Smith and Bolton (1998)
I think my problem was resolved in the right way
I think the service provider has good policies and practices for dealing with problems
Despite the trouble caused by the problem, the service provider was able to respond adequately
The service provider proved flexible in solving the problem
The service provider tried to solve the problem as quickly as possible
Interactional Justice adapted from Folger and Konovsky (1989), Maxham III and Netemeyer (2002b), and Smith and Bolton (1998)
The employees of the service provider showed interest in my problem
The employees of the service provider did everything possible to solve my problem
The employees of the service provider were honest when dealing with my problem
The employees of the service provider proved able and to have enough authority to solve the problem
The employees of the service provider dealt with me courteously when solving the problem
The employees of the service provider showed interest in being fair when solving the problem

The treatment and communication with the service provider's employees to solve the problem were acceptable
Repurchase Intention adapted from Maxham III and Netemeyer (2002b)
In the future, I intend to use the services from this service provider
If you were in the market for additional service, how likely would you be to use those services from this service provider
In the near future, I will not use this service provider as my provider (R)
Positive Word-of-Mouth Intention adapted from Price and Arnould (1999)
I would recommend this brand to someone who seeks my advice
I say positive things about this brand to other people
I would recommend this brand to others
Recovery Satisfaction adapted from McCollough, Berry and Yadav (2000), Maxham III and Netemeyer (2002b)
In my opinion, the service provider provided a satisfactory resolution to my problem on this particular occasion
I am not satisfied with the service providers' handling of this particular problem (R)
Regarding this particular problem, I am satisfied with this service provider
Failure Severity adapted from Smith, Bolton, and Wagner (1999) and, Gre´goire, Laufer and Tripp (2010)
The problem with the service described above is a major problem
The problem that you have encountered with the service is only a small inconvenience in your daily life (R)
The above problem with the service is a major aggravation

In addition to the main variables, prior literature has indicated that other variables that can have an impact on the evaluation of the service failure and the consequent recovery satisfaction and behavioural responses are controllability attribution (Smith, Bolton, and Wagner, 1999) propensity to complain (Yuksel, Kilinc and Yuksel, 2006), customer satisfaction (Maxham III and Netemeyer, 2002a), service recovery expectations (McCollough, Berry and Yadav, 2000), prior failure (Liao, 2007), and turn-around-time in terms of consumers' perception to the service providers' response speed to the failure (Borah, Prakhya and Sharma, 2019). Therefore, they are used to control for its effect in the examination of the hypotheses developed in this study. More specifically,

they are used as covariates in the multivariate analysis of covariates (MANCOVA). These measures are adapted from studies that have reported high reliability and validity values. All items are measured on a seven-point Likert scale, ranging from 1 (strongly disagree) to 7 (strongly agree) unless otherwise stated. Items that are reverse coded are indicated with an "R". The control variables measurement scale is presented in Table 5.4.

Table 5.4 Control Variables Measurement Scale

Controllability Attribution adapted from Smith, Bolton and Wagner (1999)
Do you think the service provider could have prevented the problem?
Propensity to Complain adapted from Bodey and Grace (2007), (1- Strongly Agree, 7- Strongly Disagree).
If there is a service failure, I will complain to the company
If I am dissatisfied with the things I buy, I will complain about them to the shop (or other suppliers) that sold them to me
I do not hesitate to complain if I think it is warranted to do so
Based on my past purchasing experiences, I am likely to complain in the event of dissatisfaction or service failure
I am inclined to complain to the service provider if I am unhappy with a service
I am usually reluctant to complain about service regardless of how bad it is (R)
I am less likely than most people to complain about unsatisfactory service (R)
Customer satisfaction adapted from Gabbott, Tsarenko and Mok (2011) and Ok, Back and Shanklin (2007), (1- Strongly Agree, 7- Strongly Disagree).
Satisfied with the service provider
The choice to purchase this service was a wise one
Did the right thing in choosing this service
Service Recovery Expectations adapted from Hess, Ganesan and Klein (2003)
I expect the service provider to do everything in its power to solve the problem
I do not expect the service provider to exert much effort to solve the problem
I expect the service provider to try to make up for providing the poor service (R)
Turn-around-time (TAT) adapted from Tax, Brown and Chandrashekaran (1998), (1- Strongly Agree, 7- Strongly Disagree).
The service provider was quick to resolve my problem
The length of time taken to resolve my problem was longer than necessary (R)

5.1.1.3 Analyses

The analyses entailed the use of IBM SPSS and IBM SPSS AMOS, both being version 25. Upon presenting the descriptive statistics on the frequencies based on the students' demographic and telecommunication profile, the dataset is then subjected to a manipulation check through multivariate analysis of variance (MANOVA) to ensure that the variables of perceived justice and failure severity, which are manipulated at low and high levels are rated as such by the respondents. Next, confirmatory factor analysis (CFA) is carried out to assess the convergent validity of the measures, namely by measuring the factor loading, average variance extracted (AVE) and composite reliability (CR). It is followed by evaluation of discriminant validity to ensure all items are allocated according to the different variables and to be theoretically dissimilar (Hair et al., 2010; Sekaran and Bougie, 2010). This is assessed by comparing the square root of the average variance extracted (AVE) in each construct to the correlation coefficients between two constructs (Fornell and Larcker, 1981). In terms of convergent validity, the factor loading for all items within variables should be more than 0.50, and the AVE and CR for the variables should meet the threshold values of 0.50 and 0.70 respectively (Hair et al., 2010; Sekaran and Bougie, 2010).

The consequent analysis performed is to check for the main and interaction effects of both failure severity and perceived justice levels on the outcome variables, while controlling for the covariates. This is done through a multivariate analysis of covariance (MANCOVA). The most prominent benefit of the MANCOVA design over the simple MANOVA is the 'factoring out'

of noise or error that is caused by the independent variables (covariates). The covariates are assumed to be linearly related to the dependent variables and upon adjusting for the influence of covariates, MANCOVA is carried out which allows for more sensitive tests of treatment effects (Hair et al., 2010).

In testing the direct and indirect relationship, Preacher, Rucker, and Hayes's (2007) method for testing the mediation hypothesis is used. Hayes' PROCESS macro, an extension to the SPSS software, version 3.5.2, is utilised for this purpose. The mediation analysis is conducted to examine if the relationship between perceived justice and the behavioural intentions of repurchase and positive word-of-mouth is mediated by recovery satisfaction. This analysis also yields the effect size and significance of the relationship between perceived justice to recovery satisfaction, and between recovery satisfaction and the two behavioural responses of repurchase and positive word-of-mouth intentions.

Preacher, Rucker, and Hayes's (2007) method of testing the moderated mediation hypothesis is also used to analyse the conditional indirect effect. Hayes' PROCESS macro is again employed for this analysis. More specifically, this analysis allows for the examination of the indirect effect of perceived justice of recovery efforts on behavioural responses of repurchase and word-of-mouth intentions through recovery satisfaction, and if failure severity moderates the indirect relationship. Index of moderated mediation presented through the bootstrapped confidence interval levels in the analysis will allow interpretation of the conditional indirect effect. Furthermore, the analysis would also indicate the conditional indirect effect at the levels of the moderating variables. As failure

severity is a dichotomous variable with two levels, being low and high, the conditional indirect effect will be presented for these two levels.

5.1.2 Findings

5.1.2.1 Manipulation Check

Manipulation check is conducted to test that the low and high treatment conditions for failure severity and perceived justice within the scenario presented to participants are perceived as such. Multivariate analysis of variance (MANOVA) is performed to test the effects of the failure severity and perceived justice manipulations of low and high against the variables of failure severity and perceived justice scores.

The results indicate a significant main effect of failure severity manipulations (Wilks' Lambda = 0.748, F (2, 219) = 36.926, $p < 0.001$, $\eta^2_p = 0.252$) and also of the perceived justice manipulations (Wilks' Lambda = 0.801, F (2, 219) = 27.200, $p < 0.001$, $\eta^2_p = 0.199$). This finding implies that manipulation of both failure severity and perceived justice at low and high levels is successful. The results are presented in Table 5.5.

Table 5.5 Study 1 Multivariate and Between-Subject Effects for Manipulation Check

Source	Multivariate				Between-Subject Effects			
	Wilks Lambda	F (2, 219)	Sig.	Partial ETA squared	DV	F (1, 220)	Sig.	Partial ETA squared
Failure Severity Levels	0.748	36.926	.000	0.252	Failure Severity	74.039	.000	0.252
					Perceived Justice	0.003	.959	0.000
Perceived Justice Levels	0.801	27.200	.000	0.199	Failure Severity	0.138	.711	0.001
					Perceived Justice	54.090	.000	0.197

To further assess the manipulation of conditions, a one-way analysis of variance (ANOVA) is performed with the levels of failure severity (low = 0, high =1) as fixed factors on the mean of the three items of the failure severity scale. The results display a significant effect of service failure condition on failure severity evaluation ($F (1, 222) = 76.141$, $p < 0.001$). The participants in the less severe condition ($M = 3.984$, $SD = 1.078$) indicate a lower level of perceived failure severity in comparison to those in the high severe condition ($M = 5.336$, $SD = 1.227$).

ANOVA is also conducted on the fixed factor of perceived justice levels (low = 0, high = 1) against the mean of the 17 items of the perceived justice scale. Results display a significant effect of perceived justice condition on perceived justice perception ($F (1, 222) = 56.805$, $p < 0.001$). Similarly, the participants in the low perceived justice condition ($M = 4.046$, $SD = 1.211$) perceive a lower level of perceived justice than those in the high perceived justice condition ($M = 5.096$, $SD = 0.796$). The findings of ANOVA and estimated marginal means

indicate that the manipulation is significantly perceived as intended for both failure severity and perceived justice levels. Not only is the perceived realism of the scenario high (M = 5.516, S.D. = 0.894) but also the comprehension (M = 5.680, S.D. = 1.021), as the mean values are above four, being the midpoint value of the measurement scale. The findings suggest the successful manipulation of the conditions, and that the scenario is both realistic and comprehensible. The ANOVA results and estimated marginal means are presented in Table 5.6 and Table 5.7 respectively.

Table 5.6 Study 1 ANOVA Results for Manipulation Check

DV		Sum of Squares	df	Mean Square	F	Sig.
Failure Severity	Between Groups	102.122	1	102.122	76.141	.000
	Within Groups	297.751	222	1.341		
	Total	399.873	223			
Perceived Justice	Between Groups	61.368	1	61.368	56.805	.000
	Within Groups	239.830	222	1.080		
	Total	301.197	223			

Table 5.7 Study 1 Estimated Marginal Means for Manipulation Check

Independent Variable (IV)	Dependent Variable (DV)	IV Level	N	Mean	SD	Standard Error	95% Confidence Interval	
							Lower Bound	Upper Bound
FSL	Failure Severity	Low	107	3.984	1.078	0.104	3.778	4.191
		High	117	5.336	1.227	0.113	5.112	5.561
PJL	Perceived Justice	Low	120	4.046	1.211	0.111	3.827	4.265
		High	104	5.096	0.796	0.078	4.941	5.250

PJL = Perceived Justice Levels, FSL = Failure Severity Levels

An independent sample t-test is further conducted to examine if the mean of the failure severity evaluation for low and high levels of failure severity is significantly different. The findings indicate that there is a significant mean difference in failure severity evaluation depending on the failure severity levels of low and high (t (222) = -8.726), p <.001), as presented in Table 5.8.

Table 5.8 Study 1 Mean difference of the Failure Severity Levels against Failure Severity Evaluation

Group Statistics				t-test for Equality of Means				
Outcome	FSL	Mean	SD	t	Mean Difference	Std. Error Difference	95% Confidence Interval of the Difference	
							Lower	Upper
Failure Severity	L	3.984	1.078	-8.726	-1.352	0.155	-1.657	-1.046
	H	5.336	1.227					

Note: Equal variances were assumed, FSL = Failure Severity Levels, L = Low, H = High
df = 222, t-test 2 tailed p < .01

Similarly, an independent sample t-test is also performed to examine if the mean of the perceived justice evaluation for low and high levels of perceived justice is significantly different. The findings indicate that there is a significant mean difference in perceived justice evaluation depending on the perceived justice levels of low and high (t (208) = -7.754), p <.001), as presented in Table 5.9.

Table 5.9 Study 1 Mean difference of the Perceived Justice Levels against Perceived Justice Evaluation

Group Statistics				t-test for Equality of Means				
Outcome	PJL	Mean	SD	t	Mean Difference	Std. Error Difference	95% Confidence Interval of the Difference	
							Lower	Upper
Perceived Justice	L	4.046	1.211	-7.754	-1.050	0.135	-1.316	-0.783
	H	5.096	0.796					

Note: Equal variances not assumed, PJL = Perceived Justice Levels, L = Low, H = High
df = 208, t-test 2 tailed $p < .01$

5.1.2.2 Reliability and Validity

Construct Reliability

The measures used in this study are adopted from previous studies that have demonstrated high values of Cronbach alpha. The reliability value of the measures used ranges from 0.830 to 0.966, therefore meeting the recommended value of more than 0.7 (Nunnally, 1978). The control variables have Cronbach alpha values ranging from 0.742 to 0.917.

For the control measure of turn-around-time, which is a 2-item measure, the Spearman-Brown coefficient is reported as suggested by researchers (Eisinga, Grotenhuis and Pelzer, 2013; Kim and Jang, 2014), and the Spearman-Brown coefficient is 0.561. Another covariate used in the study is failure controllability, measured through one item.

Construct Validity

The measurement model is tested through confirmatory factor analysis (CFA) using AMOS 25. CFA provides an indication of overall fit and precise criteria for assessing convergent and discriminant validity. In the model run, three items each for recovery satisfaction, repurchase intention, and positive word-of-mouth intention are included. However, perceived justice and failure severity levels are not included as they are dichotomous variables and serve as the experimental conditions.

Overall Fit

Multiple indices are employed to ensure the model fit: goodness-of-fit index (GFI); incremental fit index (IFI); Tucker-Lewis index (TLI); comparative fit index (CFI), with a value close to 1.00 indicating a good model fit; root mean square error of approximation (RMSEA) less than 0.1; and the normed chi-square (chi-square/df) below 3.00 (Anderson and Gerbing, 1988; Hair et al., 2010).

Upon the model run, modification indices are examined, and all values are below 15.0, therefore constraining error terms of a particular construct is not required. Findings from the CFA indicate that the goodness of fit indices for the measurement model are within the acceptable range, chi-square = 37.641, degrees of freedom (df) = 24, chi-square/df = 1.568, GFI = 0.963, IFI = 0.992, TLI = 0.988, CFI = 0.992, RMSEA = 0.050, and SRMR = 0.021.

Next, composite reliability (CR), convergent validity, and discriminant validity are established to confirm the measurement model. In examining the convergent validity, the unstandardised factor loadings of indicators are viewed to determine that they significantly load into their respective construct. It is found that the factor loadings are significant, and it ranges from 0.717 to 0.944.

Consequently, the composite reliability (CR) and average variance extracted are calculated. According to Fornell and Larcker (1981), the CR should exceed 0.7 and the AVE should be more than 0.5, as this would then demonstrate a reasonable degree of internal consistency between the corresponding indicators (Hair et al., 2010).

Thus, in the analysis, it is found that the CR for each construct is above 0.7. The AVEs for each factor is well above 0.50. The convergent validity results indicate that the measurement variables are sufficient in their representation of the constructs (Hair et al., 2010). The CFA results are presented in Table 5.10.

Table 5.10 Study 1 Confirmatory Factor Analysis (CFA) Results

Constructs	Maximum Likelihood Estimate			t-value	CR	Alpha	AVE
	Factor Loading λ	Measurement error	Squared Factor Loading λ^2				
Recovery Satisfaction					0.795	0.883	0.740
RS1	0.903	0.345	0.815	fixed			
RS2	0.717	1.138	0.514	13.160			
RS3	0.944	0.215	0.891	21.028			
Repurchase Intention					0.780	0.875	0.702
PI1	0.871	0.480	0.759	fixed			
PI2	0.828	0.595	0.686	15.328			
PI3	0.813	0.704	0.661	14.879			
Positive Word-of-mouth Intention					0.898	0.944	0.850
WOM	0.914	0.319	0.835	fixed			
WOM	0.907	0.329	0.823	22.262			
WOM	0.944	0.220	0.891	24.765			

Note: all p values are <.001

Discriminant validity is determined by referring to the square root of AVE for each construct, which, should be higher than the inter-construct correlation (Fornell and Larcker, 1981; Ping, 2004). There is only a slightly higher inter-construct correlation among repurchase and positive word-of-mouth intentions than the square root of the AVE for repurchase intention. However, the measures of these constructs are well established and have been adapted from the literature that has shown high reliability and validity values. Therefore, it can be inferred that discriminant validity exists among the measures of the constructs. The constructs correlation is indicated in Table 5.11.

Table 5.11 Study 1 Constructs Correlation Matrix and Square Root of AVE

	Recovery Satisfaction	Repurchase Intention	Positive Word-of-Mouth Intention
Recovery Satisfaction	**0.860**		
Repurchase Intention	0.726	**0.838**	
Positive Word-of-Mouth Intention	0.717	0.842	**0.922**

Note: Diagonal entries in bold show the square root of the average variance extracted (AVE)

5.1.2.3 Main and Interaction Effect

Prior to hypotheses testing, multivariate analysis of covariance (MANCOVA) is run with failure severity levels (FSL) of low and high and perceived justice levels (PJL) of low and high as fixed factors against the outcome variables of recovery satisfaction, repurchase intention, and positive word-of-mouth intention. Covariates of the study are also included. This is to examine if there is a statistically significant difference in the dependent variables associated with perceived justice and failure severity levels after adjusting for differences in the covariates. In addition, the effect of the interaction of perceived justice and failure severity levels on the outcome variables can also be determined, while controlling for the covariates. The findings of the multivariate analysis indicate significant main effects of perceived justice levels (Wilks' Lambda = 0.898, F (3, 209) = 7.745, $p < 0.001$, $\eta^2_p = 0.010$) and a significant two-way interaction between failure severity and perceived justice levels (Wilks' Lambda = 0.927, F = 5.42, $p < 0.01$, $\eta^2_p = 0.073$). Failure severity levels do not display significant main effect (F (3,209) = 0.698, p = .554). The MANCOVA results are presented in Table 5.12.

Table 5.12 Study 1 MANCOVA Results

Source	Multivariate				Between-Subject Effects			
	Wilks Lambda	F (3, 209)	Sig.	Partial ETA squared	DV	F (1, 211)	Sig.	Partial ETA squared
Main Variables								
Failure Severity Levels (FSL)	0.990	0.698	.554	0.010	RS	0.173	.678	0.001
					PI	0.110	.741	0.001
					WOM	0.807	.370	0.004
Perceived Justice Levels (PJL)	0.898	7.745	.000	0.102	RS	21.190	.000	0.091
					PI	10.298	.002	0.047
					WOM	14.584	.000	0.065
FSL x PJL	0.927	5.42	.001	0.073	RS	6.468	.012	0.030
					PI	12.704	.000	0.057
					WOM	14.311	.000	0.064
Control Variables								
Current Satisfaction	0.918	6.225	.000	0.082	RS	6.183	.014	0.028
					PI	15.417	.000	0.068
					WOM	16.318	.000	0.072
Complaining Tendency	0.993	0.495	.686	0.007	RS	0.455	.501	0.002
					PI	0.099	.753	0.000
					WOM	0.144	.704	0.001
Recovery Expectation	0.938	4.63	.004	0.062	RS	4.895	.028	0.023
					PI	0.916	.340	0.004
					WOM	1.468	.227	0.007
Turn-Around-Time (TAT)	0.866	10.805	.000	0.134	RS	31.195	.000	0.129
					PI	12.309	.001	0.055
					WOM	6.664	.011	0.031
Prior Failure	0.982	1.265	.288	0.018	RS	0.745	.389	0.004
					PI	2.240	.136	0.011
					WOM	3.711	.055	0.017
Failure Controllability	0.954	3.381	.019	0.046	RS	0.044	.835	0.000
					PI	4.897	.028	0.023
					WOM	0.000	.986	0.000
Service Provider Name	0.991	0.661	.577	0.009	RS	0.469	.494	0.002
					PI	1.760	.186	0.008
					WOM	0.317	.574	0.002
Service Type	0.971	2.102	.101	0.029	RS	4.819	.029	0.022
					PI	1.309	.254	0.006
					WOM	4.120	.044	0.019
Service Length	0.991	0.603	.614	0.009	RS	0.297	.586	0.001
					PI	1.783	.183	0.008
					WOM	0.928	.337	0.004

Note: RS =Recovery Satisfaction, PI= Repurchase Intention, WOM =Positive word-of-mouth intention

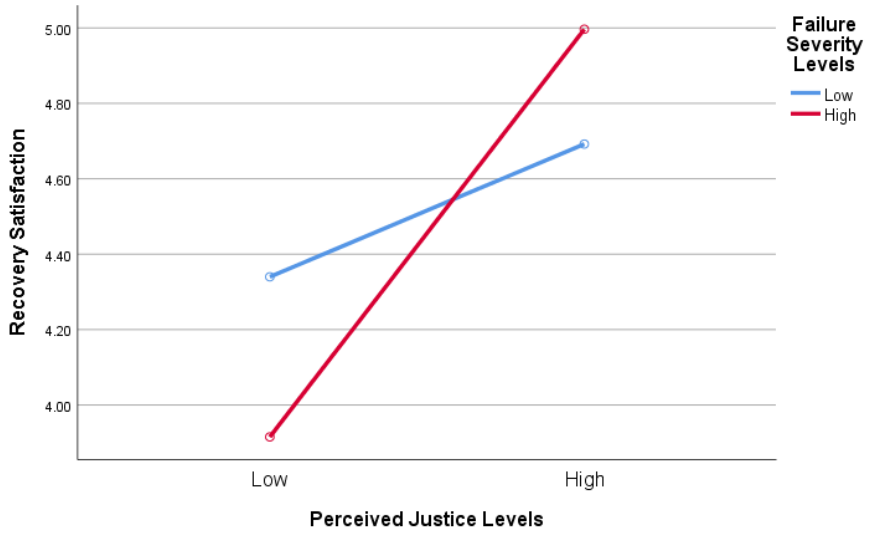
The between-subject results then indicate the significance of the independent variables and its interaction on the outcome variables. The findings indicate perceived justice levels have a significant main effect on all of the outcome variables of recovery satisfaction, repurchase intention, and positive word-of-mouth intention. More importantly, however is that the interaction of failure severity levels and perceived justice levels also has a significant effect on the variables of recovery satisfaction ($F(1,211) = 6.468$, $p < .05$, $\eta^2_p = 0.030$), repurchase intention ($F(1,211) = 12.704$, $p < .001$, $\eta^2_p = 0.057$) and positive word-of-mouth intention ($F(1,211) = 14.311$, $p < .001$, $\eta^2_p = 0.064$).

The covariates of current satisfaction (Wilks' Lambda = 0.918, $F(3,209) = 6.225$, $p < .001$, $\eta^2_p = 0.082$), recovery expectation (Wilks' Lambda = 0.938, $F(3,209) = 4.63$, $p < .01$, $\eta^2_p = 0.062$), turn-around-time (TAT) (Wilks' Lambda = 0.866, $F(3,209) = 10.805$, $p < .001$, $\eta^2_p = 0.134$), and failure controllability (Wilks' Lambda = 0.954, $F(3,209) = 3.381$, $p < .05$, $\eta^2_p = 0.046$) display significant main effects.

Upon investigating the between-subject effects, the covariates of current satisfaction and TAT have a significant effect on all three outcome variables of recovery satisfaction, repurchase and positive word-of-mouth intentions. Recovery expectation has a significant effect with only recovery satisfaction, and failure controllability has a significant relationship with only repurchase intention.

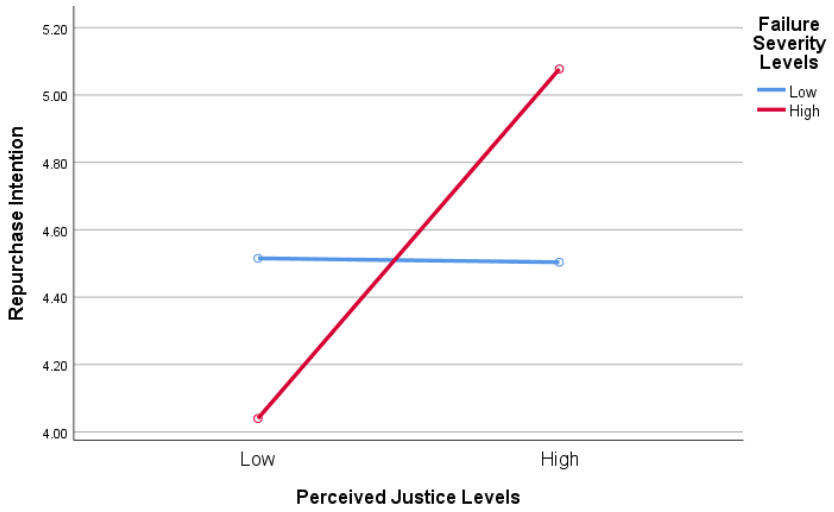
The other covariates of complaining tendency, prior failure, service provider name, service type, and service length are insignificant in their effect on the outcome variables. The effect of the interaction between perceived justice levels and failure severity levels on each of the outcome variables of recovery satisfaction, repurchase intention, and positive word-of-mouth intention are presented in Figure 5.2, Figure 5.3 and Figure 5.4 respectively.

Figure 5.2 Study 1 Interaction of Failure Severity and Perceived Justice Levels on Recovery Satisfaction



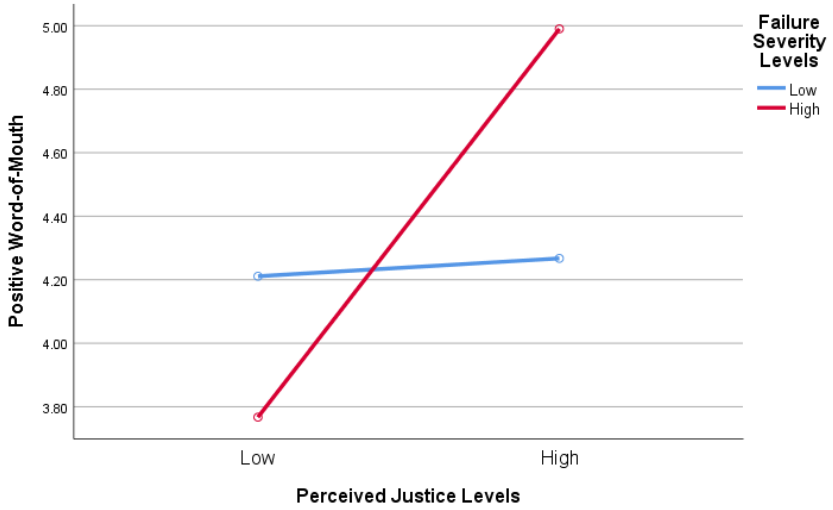
Covariates appearing in the model are evaluated at the following values: Current Satisfaction = 2.8259, Complaining Tendency = 3.4630, Recovery Expectation = 5.6086, Turn-around-Time = 3.8616, Service Provider Name = 2.63, Service Type = 1.66, Service Length = 2.77, Prior Failure = .28, Failure Controllability = 4.82

Figure 5.3 Study 1 Interaction of Failure Severity and Perceived Justice Levels on Repurchase Intention



Covariates appearing in the model are evaluated at the following values: Current Satisfaction = 2.8259, Complaining Tendency = 3.4630, Recovery Expectation = 5.6086, Turn-around-Time = 3.8616, Service Provider Name = 2.63, Service Type = 1.66, Service Length = 2.77, Prior Failure = .28, Failure Controllability = 4.82

Figure 5.4 Study 1 Interaction of Failure Severity and Perceived Justice Levels on Positive Word-of-Mouth Intention



Covariates appearing in the model are evaluated at the following values: Current Satisfaction = 2.8259, Complaining Tendency = 3.4630, Recovery Expectation = 5.6086, Turn-around-Time = 3.8616, Service Provider Name = 2.63, Service Type = 1.66, Service Length = 2.77, Prior Failure = .28, Failure Controllability = 4.82

Examination of the cell means indicates that respondents in high failure severity and high perceived justice groups report higher levels of recovery satisfaction (M = 5.243), higher levels of repurchase intention (M = 5.249), and also higher positive word-of-mouth intention (M = 5.143) than do the respondents in the high failure severity and low perceived justice groups (recovery satisfaction; M = 3.710, repurchase intention; M = 3.920, and positive word-of-mouth intention; M = 3.685).

Cell means of low failure severity does not reveal a big difference in recovery satisfaction for a low level of perceived justice (M = 4.202) and a high level of perceived justice (M = 4.805). Similarly, for repurchase intention, cell means of the low level of perceived justice (M = 4.399) does not differ much from cell means of the high level of perceived justice (M = 4.585).

Positive word-of-mouth intention also displays a minimal difference of the cell means between low perceived justice (M = 4.111) and high perceived justice levels (M = 4.301). The cell mean results are presented in Table 5.13.

Table 5.13 Study 1 Outcome Variables Cell Mean Results by Perceived Justice and Failure Severity Levels

		Failure Severity			
Outcome Variable: Recovery Satisfaction		Low		High	
		Mean	SD	Mean	SD
Perceived Justice	Low	4.202	1.289	3.710	1.505
	High	4.805	0.711	5.243	0.874
Outcome Variable: Repurchase Intention					
Perceived Justice	Low	4.399	1.220	3.920	1.358
	High	4.585	0.939	5.249	1.079
Outcome Variable: Positive Word-of-Mouth Intention					
Perceived Justice	Low	4.111	1.231	3.685	1.446
	High	4.301	0.924	5.143	1.151

5.1.2.4 Hypotheses Testing

H1 – H4b

To test hypotheses H1 to H4b, Hayes' PROCESS Macro, model 4 is run for simple mediation analysis, with bootstrapped samples of 10000. The unstandardised effects are reported as suggested by Hayes (2018) for a dichotomous predictor variable, in this case, the perceived justice levels of low and high. This is since a dichotomous variable can affect the standardised regression coefficients due to an uneven distribution of the cases between the two groups as well as the differences between the group means. The ordinary least squares path analysis results indicate that perceived justice levels are positively related to recovery satisfaction ($b = 0.71$, $SE = 0.16$, $p < .01$), supporting H1. Results also indicate support to the hypotheses that recovery

satisfaction is positively related to repurchase intention (b = 0.56, SE = 0.06, p < .01) and positive word-of-mouth intention (b = 0.59, SE = 0.06, p < .01), while controlling for perceived justice, therefore supporting H2 and H3 respectively.

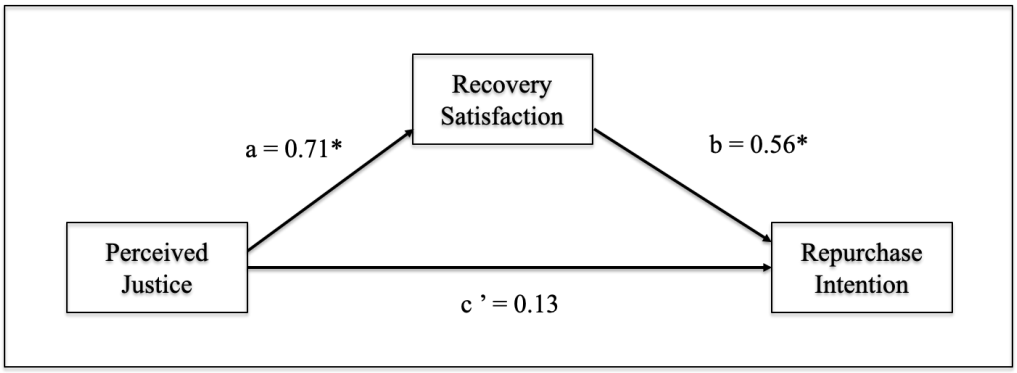
A bootstrapped confidence interval is construed using 95 percentiles, for the indirect effect of perceived justice levels on repurchase intention (b = 0.40, BootSE =0.10) based on 10,000 bootstrap samples is entirely above zero (BootLLCI = 0.09 and BootULCI = 0.44), indicating support to hypothesis H4a that recovery satisfaction mediates the relationship between perceived justice and repurchase intention. The results also indicate support for H4b, that recovery satisfaction mediates the relationship between perceived justice and positive word-of-mouth intention as the indirect effect (b = 0.42, BootSE = 0.11) based on 10,000 bootstrap samples indicate no zero between the confidence intervals (BootLLCI = 0.22 and BootULCI = 0.64).

The direct effect is found to be insignificant between perceived justice levels and repurchase intention (b = 0.13, SE = 0.14, p = .35) and between perceived justice levels and positive word-of-mouth intention (b = 0.25, SE = 0.15, p = .10). The direct effect is also insignificant as zero appears between the confidence intervals for both repurchase intention (LLCI = -0.15 and ULCI = 0.42) and positive word-of-mouth intention (LLCI = -0.05 and ULCI = 0.55). The indirect and direct effect of perceived justice levels on the outcome variables are presented in Table 5.14. The statistical diagrams with the path coefficients are as presented in Figure 5.5 and Figure 5.6.

Table 5.14 Study 1 Indirect and Direct Effect of Perceived Justice Levels on Outcome Variables

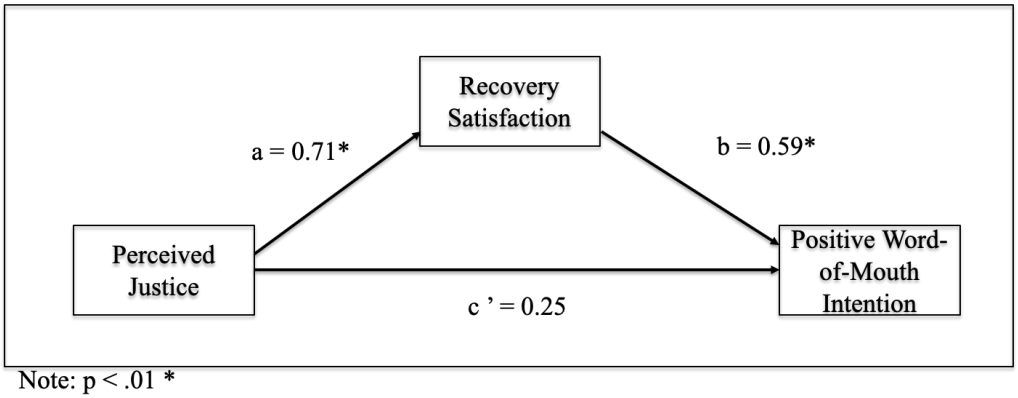
	Indirect via Recovery Satisfaction				Direct			
Outcome Variable	Effect	BootSE	BootLLCI	BootULCI	Effect	se	LLCI	ULCI
Repurchase Intention	0.40	0.10	0.21	0.60	0.13	0.14	-0.15	0.42
Positive Word-of-Mouth Intention	0.42	0.11	0.22	0.64	0.25	0.15	-0.05	0.55

Figure 5.5 Study 1 Statistical Diagram of PROCESS Model 4 for Direct and Indirect Relationship between Perceived Justice and Repurchase Intention



Note: p < .01 *

Figure 5.6 Study 1 Statistical Diagram of PROCESS Model 4 for Direct and Indirect Relationship between Perceived Justice and Positive Word-of-Mouth Intention



Note: p < .01 *

H5

Hayes' PROCESS macro, model 7 for moderated mediation, is applied with a 10,000 bootstrap and bias-corrected confidence intervals of 95%. Perceived justice levels are used as the independent variable (low coded as 0 and high coded as 1), recovery satisfaction as the mediator, and failure severity level as moderator (low coded as 0 and high coded as 1). Additionally, one of the behavioural intentions, such as repurchase intentions and positive word-of-mouth, is used as the dependent variable.

The findings, firstly, support the conditional indirect effect as the bootstrapped confidence interval values for moderated mediation for the outcome variable repurchase intention has no zero between it (BootLLCI = 0.10 and BootULCI = 0.76) with an index of 0.41, and similarly for positive word-of-mouth intention (BootLLCI = 0.10 and BootULCI = 0.79) with an index of 0.43. Therefore, failure severity moderates the relationship between perceived justice levels and

the outcome variables through recovery satisfaction. The index of moderated mediation is presented in Table 5.15.

Table 5.15 Study 1 Index of Moderated Mediation for the Outcome Variables

	Index of Moderated Mediation	BootSE	BootLLCI	BootULCI
Repurchase Intention	0.41	0.17	0.10	0.76
Positive Word-of-Mouth Intention	0.43	0.18	0.10	0.79

The findings next indicate that there is a significant interaction effect of perceived justice levels and failure severity levels on recovery satisfaction ($b = 0.73$, $SE = 0.29$, $p < 0.05$), and the interaction model shows statistical significance as well (R^2 change = 0.02, $F(1, 211) = 6.47$, $p < .05$). Such findings indicate that for every unit increase in failure severity, the effect of perceived justice on recovery satisfaction increases by 0.73.

As the results indicate an interaction between perceived justice levels and failure severity levels on recovery satisfaction, it is then necessary to probe if there is a difference in the effect of the interaction on recovery satisfaction at low and high levels of failure severity. Upon examination of the conditional effect of perceived justice at low and high failure severity levels, the results indicate that at a high failure severity level, a higher perception of justice leads to higher recovery satisfaction ($b = 1.08$, $SE = 0.21$, $p < 0.01$). It is also statistically significant from zero (LLCI = 0.67 and ULCI = 1.49). The low level of failure

severity does not significantly moderate this relationship (b = 0.35, SE = 0.22, p = .10).

These findings indicate that failure severity moderates the relationship between perceived justice and recovery satisfaction such that when failure severity is high, a higher perception of justice will have a more positive effect on recovery satisfaction, therefore supporting H5. Table 5.16 presents the effect of perceived justice on recovery satisfaction at low and high levels of failure severity.

Table 5.16 Study 1 Conditional Effect of Perceived Justice Levels on Recovery Satisfaction at Failure Severity Levels

Failure Severity Levels	Effect	se	t	p	LLCI	ULCI
Low	0.35	0.22	1.64	0.10	-0.07	0.78
High	1.08	0.21	5.20	0.00	0.67	1.49

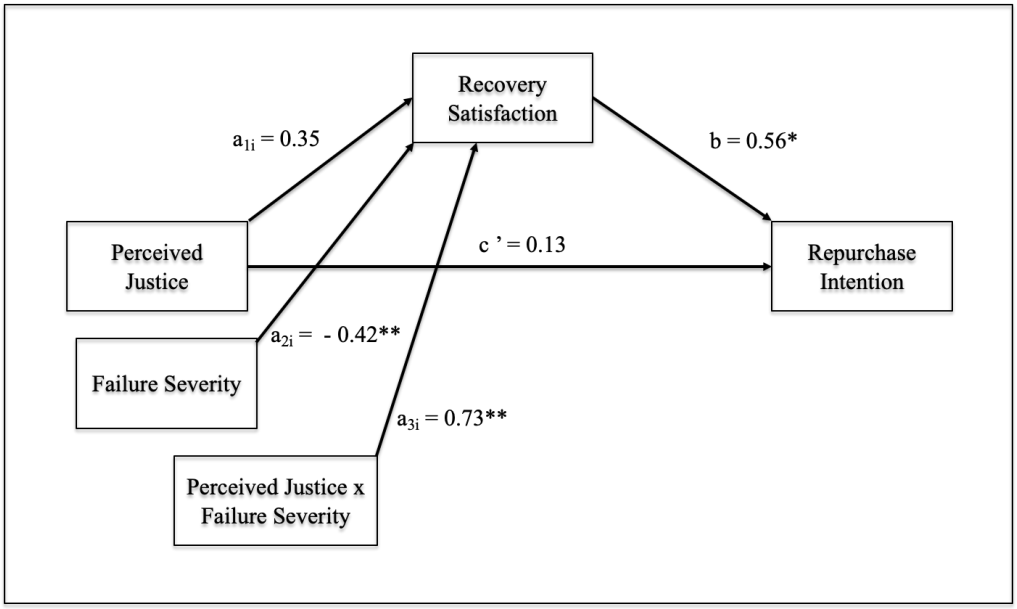
Additionally, the conditional indirect effect of perceived justice on the dependent variables of repurchase and positive word-of-mouth intentions is also presented. The findings indicate that the conditional indirect effect on repurchase intention is positive and significant at both low and high levels of failure severity and the effect is higher at higher levels of failure severity. A similar outcome is found for the conditional indirect effect on positive word-of-mouth intention. The findings are indicated in Table 5.17 and the statistical diagram for the path coefficients are presented in Figure 5.7 and Figure 5.8.

Table 5.17 Study 1 Conditional Indirect Effect of Perceived Justice Levels on Dependent Variables

Dependent Variable (DV)	Failure Severity Levels	Effect of Perceived Justice Levels on DV	BootSE	BootLLCI	BootULCI
PI	Low	0.20	0.10	0.00	0.40
	High	0.60	0.16	0.31	0.92
WOM	Low	0.21	0.11	0.00	0.42
	High	0.64	0.16	0.33	0.97

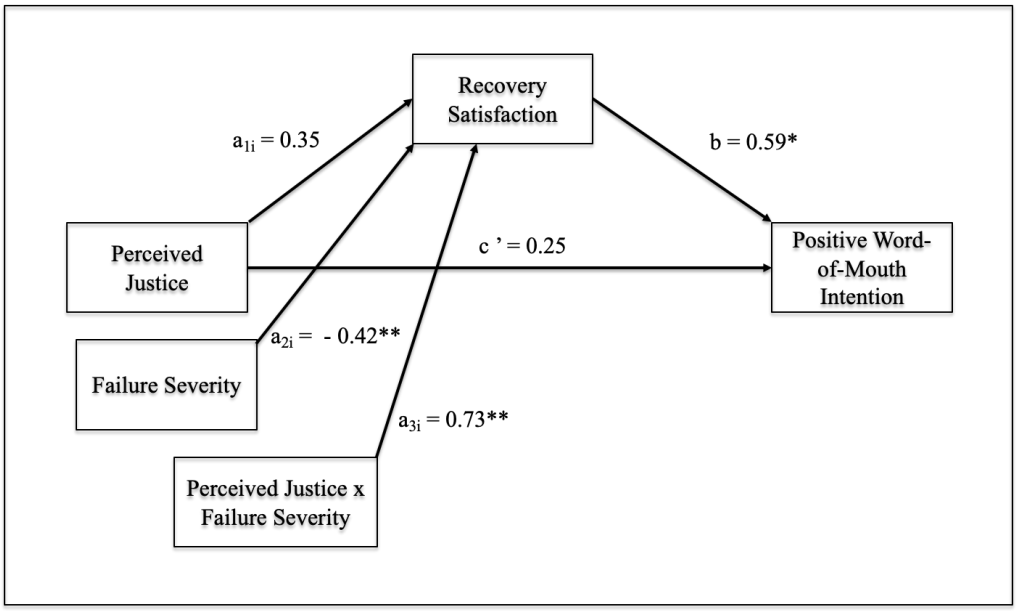
Note: PI = Repurchase intention, WOM = Positive word-of-mouth intention

Figure 5.7 Study 1 Statistical Diagram of PROCESS Model 7 for Interaction of Perceived Justice and Failure Severity on Repurchase Intention



Note: p < .01 * p < .05 **

Figure 5.8 Study 1 Statistical Diagram of PROCESS Model 7 for Interaction of Perceived Justice and Failure Severity on Positive Word-of-Mouth Intention



Note: p < .01 * p < .05 **

5.1.3 Study 1 Discussion

Study 1 is conducted to examine the first research question, which is on the direct and indirect relationship between perceived justice and consumers' behavioural responses. Hayes' PROCESS macro, model 4 is utilised. The findings indicate that the indirect effect is significant, thus the mediating role of recovery satisfaction is confirmed, supporting H4a and H4b. In doing so, it can also be deduced that there is a positive relationship between perceived justice and recovery satisfaction, supporting H1. There is also a positive relationship between recovery satisfaction and the behavioural intentions of repurchase and positive word-of-mouth intentions, supporting H2 and H3 respectively. The findings of this study are in line with other studies within service failure and

recovery that have found a positive relationship between perceived justice and recovery satisfaction (Petzer, De Meyer-Heydenrych, and Svensson, 2017; Yani-de-Soriano et al., 2019), between recovery satisfaction and behavioural outcomes of repurchase (Hazée, Van Vaerenbergh and Armirotto, 2017; La and Choi, 2019) and positive word-of-mouth intentions (Petzer, De Meyer-Heydenrych and Svensson, 2017; Yani-de-Soriano et al., 2019). The findings of H1-H3 are also in tandem with the proponents of justice theory, that a higher perception of fairness would lead to a satisfactory evaluation of the recovery efforts and as a consequence, exhibit higher positive behavioural intentions. Furthermore, the mediating role of recovery satisfaction between perceived justice and behavioural responses is also consistent with prior studies (Kau and Loh, 2006; Gohary, Hamzelu and Alizadeh, 2016; Jung and Seock, 2017).

The consequent role of Study 1 is to address the second research question, which is on the moderating role of failure severity levels on the relationship between perceived justice and recovery satisfaction. Hayes' PROCESS macro, model 7 is specified for the analysis. As hypothesised in H5, the findings indicate that at high levels of failure severity, a higher perception of justice has a more positive impact on recovery satisfaction. This is, however, in contrast to the findings of the studies by Liao (2007), Chuang et al. (2012), and McCollough (2009), which found that at high failure severity, recovery satisfaction was negatively impacted regardless of the level of the recovery effort. On the other hand, Bambauer-Sachse and Rabeson (2015a, 2015b) established positive outcomes of a high compensation in the presence of high severity. Regulatory focus theory (Higgins, 1997) explains the positive outcome despite the severity of the failure.

According to this theory, highly severe failure represents a higher loss and consumers will be even more motivated to regulate those losses and thus expect a good recovery effort. Therefore, when consumers perceive a well-implemented recovery in the presence of highly severe failure, it meets the motivation to regulate the losses and this, in turn, leads them to provide a satisfactory evaluation to the recovery effort. Thus, the findings of this study indicate that a good recovery can offset the losses from a highly severe failure and lead consumers to be satisfied with the recovery.

However, this study could not find the association between recovery effort and recovery satisfaction at a low level of failure severity, as the findings are statistically insignificant. This again can be accounted for by regulatory focus theory (Higgins, 1997). As a failure of low severity represents a small loss experienced by the consumer, the motivation to seek gains against a small loss will not be high. Therefore, a recovery effort, be it well or poorly executed will not mean much as the motivation to receive the gain through the recovery effort is low. As a consequence, consumers' evaluation of the recovery effort does not impact recovery satisfaction.

Additionally, even though it is not hypothesised, this study finds that the effect of perceived justice on the repurchase and positive word-of-mouth intentions through recovery satisfaction is positive and higher at higher levels of failure severity. Thus, a good recovery effort reduces the negative effect of highly severe failure to elicit not only satisfaction with the recovery efforts, but also positive behavioural intentions.

Hence, Study 1 successfully tests and finds support for all the hypothesised relationships to answer the research questions of determining the direct and indirect relationships between the prevalent constructs of service failure and recovery framework and the moderating role of failure severity levels in this framework. Thus, the research objective on determining the effect that failure severity levels have on the relationship between perceived justice and recovery satisfaction within the prevalent framework of service failure and recovery is met. The summary of the hypotheses testing results is presented in Figure 5.18.

Table 5.18 Study 1 Hypotheses Testing Results Summary

Hypotheses	Results
H1: There is a positive relationship between perceived justice and recovery satisfaction	Supported
H2: There is a positive relationship between recovery satisfaction and repurchase intention	Supported
H3: There is a positive relationship between recovery satisfaction and positive word-of-mouth intention	Supported
H4a: Recovery satisfaction will mediate the relationship between perceived justice and repurchase intention	Supported
H4b: Recovery satisfaction will mediate the relationship between perceived justice and positive word-of-mouth intention	Supported
H5: Failure severity will moderate the impact of perceived justice and recovery satisfaction such that for a high level of failure severity, a higher perception of justice will have a more positive effect on recovery satisfaction	Supported

5.2 Study 2

Study 2 addresses the research question of the moderating role of attachment styles on the relationship between recovery satisfaction and behavioural responses. This aims to meet the research objective of examining the influence of an individual trait on the relationship between recovery satisfaction and behavioural intentions. Thus, hypotheses H6a to H7b are tested for the moderating role of attachment styles via its dimensions of attachment anxiety and attachment avoidance on the relationship. Study 2 is a 2 (perceived justice: low vs. high) x 1 (attachment styles: measured) between-subjects design. The method, which encompasses the measures and analyses used in Study 2, is detailed first before the results of the analyses and discussion are presented.

5.2.1 Method

5.2.1.1 Sample and Procedure

Respondents are recruited through convenience sampling. Private companies within the Federal Territory of Kuala Lumpur and the state of Selangor are approached and upon obtaining permission from the management, the paper and pencil questionnaires are distributed to the employees. The questionnaire utilises the scenario that has been successfully pretested in Pretest 2, as analysed and presented in Chapter 4. The questionnaire begins by detailing the study objectives, questionnaire structure, the right to voluntary participation and

withdrawal, and contact details for further information. Respondents have to check a box to indicate the agreement to participate in the study.

Respondents then move on to provide their current telecommunication service provider details such as name, length of service, type of service, current satisfaction levels, and if they have experienced a failure before. The respondents next complete the measurement items that determines their complaining propensity. The measures presented up to this point are for the control variables. Next, respondents fill in the attachment anxiety and attachment avoidance measurement items. The following section then presents the failure scenario. The scenario requires participants to imagine that they are experiencing a service failure of unpleasant interaction in the quest to upgrade an existing service with the service provider. The respondents then complete the measurement items that captures their perception of failure severity and other questions for the control variables such as failure controllability, turn-around time, and recovery expectation.

Next, the respondents read about the recovery efforts implemented, either at a low or high level. The recovery effort is manipulated at a low level by indicating that respondents are treated rudely, and the service upgrade request is not processed, and at a high level by indicating that they are treated politely and the request for an upgrade is to be processed. The respondents then move on to complete the measurement items for the perceived realism of the scenario, the comprehension of the scenario, perceived justice of the recovery efforts, the satisfaction of the recovery efforts, repurchase and positive word-of-mouth

intention. The final section requires respondents to complete basic demographic questions of gender, age, education level, and age group. The respondents are compensated with a shopping voucher of RM10 upon submitting the questionnaire. At the end of the data collection stage, a total of 177 responses are collected and upon eliminating incomplete and ambiguous responses, 153 responses are used for the analysis. The cell sizes range from between 70-83, which is above the minimum that has been reported in prior studies (Smith and Bolton, 1998; Bambauer-Sachse, 2015a; Roschk and Gelbrich, 2017), and above the recommended observations of 20 for each category (Hair et al., 2010).

The dataset is firstly subjected to descriptive analysis. Through the analysis, it is found that more than two-thirds of the respondents are females, and 70% of respondents are between the ages of 25 to 44. As the data is collected from employees within organisations, almost 90% have a tertiary education, with at least half of the respondents having an undergraduate degree. At least 45% of the respondents are Bumiputera. Chinese respondents form a quarter of the respondents and this is followed closely by Indians. Table 5.19 presents the demographic profile of the respondents, and Table 5.20 presents their telecommunication profile.

Table 5.19 Study 2 Respondents' Demographic Profile

Demographic Variable	Dimensions	Frequency	Total	Percentage
Gender	Male	46	153	30.1
	Female	107		69.9
Age Group	18-24	6	153	3.9
	25-34	61		39.9
	35-44	45		29.4
	45-54	24		15.7
	55-64	10		6.5
	65 and above	7		4.6
Education Level	Secondary school or below	16	153	10.5
	Certificate or Diploma	29		19.0
	Bachelor's degree	78		51.0
	Postgraduate degree	30		19.6
Ethnicity	Bumiputera	70	153	45.8
	Chinese	39		25.5
	Indian	36		23.5
	Other	8		5.2

The telecommunication profile indicates that Maxis leads in terms of the number of subscriptions, and post-paid forms more than 70% of subscription type. More than 40% have a subscription with their existing service provider for more than 9 years, which corresponds with the respondents' age profile in Study 2.

Table 5.20 Study 2 Respondents' Telecommunication Profile

Telecommunication Service Profile		Frequency	Total	Percent
Service Provider Name	Celcom	31	153	20.3
	Maxis	64		41.8
	Digi	29		19.0
	U-mobile	19		12.4
	Others	10		6.5
Service Type	Prepaid	35	153	26.4
	Post-paid	118		73.6
Service Length	Less than a year	7	153	4.6
	1 - 3 years	32		20.9
	4 - 6 years	32		20.9
	7 - 9 years	19		12.4
	More than 9 years	63		41.2

5.2.1.2 Measures

The measures in Study 2 remain the same as those employed in Study 1. However, as Study 2 investigates the moderating role of attachment styles, the measure of attachment anxiety and attachment avoidance are included in addition to the other measures. Attachment anxiety and attachment avoidance items are measured on a Likert scale ranging from 1 (strongly disagree) to 7 (strongly agree). Items that are reverse coded are indicated with an "R". The control variables included are the same as those measured in Study 1, as they can have an impact on the evaluation of the service recovery effort and the consequent effect on recovery satisfaction and behaviours. Attachment styles measurement scale items are presented in Table 5.21.

Table 5.21 Attachment Styles Measurement Scale

Attachment Styles adapted from Thomson, Whelan and Johnson (2012)
Attachment Anxiety
I worry about being alone
When I'm not involved in a relationship, I feel somewhat anxious and insecure
I worry that the people I have relationships with won't care about me as much as I care about them
My desire to be very close sometimes scares people away
I worry a lot about my relationships
Attachment Avoidance
I don't feel comfortable opening up to people in relationships
I get uncomfortable when people in my relationships want to be very close
Just when my relationship partners start to get close to me, I find myself pulling away
I find it difficult to allow myself to depend on the people I have relationships with
I am very comfortable being close to people (R)

5.2.1.3 Analyses

The analyses entail again the use of IBM SPSS and IBM SPSS AMOS, both being version 25. Upon presenting the descriptive statistics on the demographic and telecommunication profile, the dataset is then subjected to a manipulation check through univariate analysis of variance (UNIANOVA) to ensure that the variables of perceived justice, which is manipulated at low and high levels, is rated as such by the respondents. Next, confirmatory factor analysis (CFA) is conducted to assess the convergent validity of the measures, namely by measuring the factor loading, average variance extracted (AVE) and composite reliability (CR). It is subsequently followed by an evaluation of discriminant validity to ensure all items are allocated according to the different variables and to be theoretically dissimilar (Hair et al., 2010; Sekaran and Bougie, 2010).

The consequent analysis performed is to check for the main effects of perceived justice levels on the outcome variables, while controlling for the covariates. This is done through a multivariate analysis of covariance (MANCOVA). Finally, the hypotheses are tested using Preacher, Rucker and Hayes's (2007) method of testing moderated mediation. Hayes' PROCESS macro is utilised for this purpose. More specifically, this analysis allows for the examination of the indirect effect of perceived justice of recovery efforts on behavioural responses of repurchase intention and positive word-of-mouth intention through recovery satisfaction and if it is moderated by consumer attachment styles.

The index of moderated mediation presented through the bootstrapped confidence interval levels in the analysis will allow the interpretation of the

conditional indirect effect. Furthermore, the analysis will also indicate the conditional indirect effect at the levels of the moderating variables. As attachment styles is a continuous variable, spotlight analysis is applied which enables the determination of the interaction effect of recovery satisfaction and attachment styles on the outcome variables at three levels - at the mean, and one standard deviation above and below the mean, of attachment anxiety and attachment avoidance (Hayes, 2018).

Spotlight analysis is a feature embedded within the macro that functions to shift the mean level of the consumer attachment styles up or down by "one or more standard deviations" (Fitzsimons, 2008, p. 7) and tests the effect of the interaction on the outcome variables at these levels of the attachment styles. Spotlight analysis allows for testing at different levels of the continuous independent variable without unnecessary dichotomising, such as with a median split (Trump, 2014), which has been found in prior studies to give both false positive and false negative results (Irwin and McClelland, 2003).

5.2.2 Findings

5.2.2.1 Manipulation Check

A manipulation check is conducted to test that the treatment conditions for perceived justice within the scenario presented to participants are significantly perceived as intended. Univariate analysis of variance (UNIANOVA) is performed to test the effect of the perceived justice manipulations at low and

high levels against the reported scores of the 17 items in the perceived justice scale.

The results show a significant main effect of perceived justice manipulation on perceived justice evaluation (F (1, 151) = 51.231, p < .001, η^2_p =0.253). The findings imply that manipulation of perceived justice at low and high levels is successful. The between-subject effects and parameter estimates of perceived justice levels are presented in Table 5.22.

Table 5.22 Study 2 Between-Subject Effects and Parameter Estimates of Perceived Justice Levels on Perceived Justice Evaluation

Between-Subject Effects				Parameter Estimates				
DV	F (1,151)	Partial ETA squared	PJL	B	Std. Error	t	95% Confidence Interval	
							Lower Bound	Upper Bound
Perceived Justice	51.231	0.253	Low	-1.192	0.166	-7.158	-1.521	-0.863
			High	0[a]				

a. This parameter is set to zero because it is redundant.

Note: p < .01

Furthermore, the participants in the low perceived justice condition (M = 3.797, SD = 1.153) perceived a lower level of perceived justice than those in the high perceived justice condition (M = 4.883, SD = 0.851), as presented in Table 5.23.

Table 5.23 Study 2 Descriptive Statistics for Perceived Justice

Dependent Variable	Perceived Justice Level	N	Mean	SD	Std. Error	95% Confidence Interval for Mean	
						Lower Bound	Upper Bound
Perceived Justice	Low	83	3.797	1.153	0.127	3.545	4.048
	High	70	4.988	0.851	0.102	4.785	5.191

In addition, the comparison of the means through one-way analysis of variance (ANOVA), indicate that there is a significant difference in the mean for the low and high levels of perceived justice. Thus, it can be deduced that the manipulation is significantly perceived as intended for the low and high levels of perceived justice. On the examination of the descriptive statistics, it is found that the perceived realism of the scenario is high (M = 5.464, S.D. = 0.880), including the comprehension as well (M = 5.523, S.D. = 0.960), as the mean values are above four, being the midpoint value of the scale. The above findings combine to suggest the successful manipulation of the conditions, and that the scenario is seen as both realistic and comprehensible. ANOVA results are presented in Table 5.24.

Table 5.24 Study 2 ANOVA Results for Perceived Justice

DV		Sum of Squares	df	Mean Square	F	Sig.
Perceived Justice	Between Groups	53.923	1	53.923	51.231	.000
	Within Groups	158.934	151	1.053		
	Total	212.856	152			

5.2.2.2 Reliability and Validity

The measures used in this study are adopted from previous studies that have demonstrated high values of Cronbach alpha. The reliability value of the measures in Study 2 ranges from 0.771 to 0.968, therefore meeting the recommended value of more than 0.7 (Nunnally, 1978).

The reliability of the control variables ranges from 0.602 to 0.939. For turn-around-time measure, which is a 2-item measure, the Spearman-Brown coefficient is reported as suggested by researchers (Eisinga, Grotenhuis and Pelzer, 2013; Kim and Jang, 2014), and the Spearman-Brown coefficient is 0.679. Another covariate in the study is failure controllability, measured through one item.

Construct Validity

Confirmatory factor analysis (CFA) is also performed to evaluate the relationship of the latent construct. The five items for attachment anxiety and attachment avoidance, and three items for recovery satisfaction, repurchase intention, and positive word-of-mouth intention are included in the analysis. However, perceived justice is not included in the measurement model analysis as it is a dichotomous variable introduced in this study to serve as the experimental condition.

Overall Fit

Multiple indices are employed to ensure the model fit: goodness-of-fit index (GFI); incremental fit index (IFI); Tucker-Lewis index (TLI); comparative fit index (CFI), with a value close to 1.00 indicating a good model fit; the root mean square error of approximation (RMSEA) less than 0.1; and the normed chi-square (chi-square/df) below 3.00 (Anderson and Gerbing, 1988; Hair et al., 2010). The modification indices are examined, and they are all below the values

of 15.0 and therefore do not display high correlated error terms among constructs.

Next, the path estimates given by the factor loadings of each indicator are examined, and the items or indicators that have a value below four or those that are insignificant, are removed. This necessitates the removal of the fifth indicator for attachment avoidance, AV5, which does not load significantly. Findings from the CFA then indicate that the goodness of fit indices for the measurement model is improved. The model fit indices then indicate values of chi-square = 196.018, degrees of freedom (df) = 125, chi-square/df = 1.568, GFI = 0.882, IFI = 0.958, TLI = 0.947, CFI = 0.957, RMSEA = 0.061, and SRMR = 0.056.

To assess construct validity, convergent, and discriminant validity are examined. To determine convergent validity, firstly the unstandardised factor loading estimate is examined for its significance. In this examination, all indicators are found to load significantly and range from 0.461 to 0.938, as one insignificant item for attachment avoidance was removed during the model fit.

In the consequent step, composite reliability (CR) and the average variance extracted (AVE) are calculated. According to Fornell and Larcker (1981) CR should exceed 0.7 and the AVE should be more than 0.5, as this would then demonstrate a reasonable degree of internal consistency between the corresponding indicators (Hair et al., 2010).

Thus, in the analysis, it is found that the CR for each construct is above 0.7, except for recovery satisfaction, which is at 0.64. The AVEs for each factor was above 0.50. Thus, the findings indicate that convergent validity assumptions are met. CFA results are presented in Table 5.25.

Table 5.25 Study 2 CFA Results

Constructs	Maximum Likelihood Estimate			t-value	CR	Alpha	AVE
	Factor Loading λ	Measurement error	Squared Factor Loading λ^2				
Attachment Anxiety					0.726	0.869	0.575
AX1	0.736	1.135	0.542	fixed			
AX2	0.844	0.693	0.712	9.886			
AX3	0.797	1.222	0.635	9.396			
AX4	0.665	1.190	0.442	7.822			
AX5	0.737	1.154	0.543	8.688			
Attachment Avoidance					0.693	0.837	0.587
AV1	0.769	1.173	0.591	fixed			
AV2	0.874	0.496	0.764	10.451			
AV3	0.803	0.656	0.645	9.864			
AV4	0.590	1.765	0.348	7.083			
Recovery Satisfaction					0.638	0.764	0.596
RS1	0.863	0.526	0.745	fixed			
RS2	0.461	1.935	0.213	5.787			
RS3	0.912	0.375	0.832	13.543			
Repurchase Intention					0.702	0.771	0.573
PI1	0.893	0.350	0.797	fixed			
PI2	0.783	0.591	0.613	11.032			
PI3	0.556	1.171	0.309	7.116			
Positive Word-of-mouth Intention					0.907	0.944	0.847
WOM	0.938	0.208	0.880	fixed			
WOM	0.932	0.223	0.869	21.083			
WOM	0.891	0.347	0.794	18.529			

Note: all p values are <.001

Discriminant validity is assessed by referring to the values of the square root of the AVE which has to be greater than the correlations of the constructs (Fornell and Larcker, 1981). The findings indicate that there is only a slightly higher inter-construct correlation among repurchase and positive word-of-mouth intentions than the square root of the AVE for repurchase intention. However, these constructs are well established in the literature, and therefore, it can be inferred that the measurement variables of attachment anxiety, attachment avoidance, recovery satisfaction, repurchase intention, and positive word-of-mouth intention have shown sufficient discriminant validity. The constructs correlation and square root of the AVE are presented in Table 5.26.

Table 5.26 Study 2 Constructs Correlation Matrix and Square Root of AVE

	Attachment Anxiety	Attachment Avoidance	Recovery Satisfaction	Repurchase Intention	Positive Word-of-Mouth Intention
Attachment Anxiety	**0.758**				
Attachment Avoidance	0.235	**0.766**			
Recovery Satisfaction	0.288	0.238	**0.772**		
Repurchase Intention	0.263	0.124	0.756	**0.757**	
Positive Word-of-Mouth Intention	0.302	0.112	0.753	0.788	**0.921**

Note: Diagonal entries in bold show the square root of the average variance extracted (AVE).

5.2.2.3 Main Effects

Prior to hypotheses testing, multivariate analysis of covariance (MANCOVA) is run with perceived justice levels (PJL) of low and high as fixed factor against the outcome variables of recovery satisfaction, repurchase and positive word-of-mouth intentions. This is to examine if there is a statistically significant difference in the dependent variables associated with perceived justice levels after adjusting for differences in the covariates. The covariates of this study being current satisfaction, complaining tendency, recovery expectation, turn-around time, service provider name, service type, service length, prior failure, and failure controllability are included.

Firstly, the multivariate analysis indicates there is a significant main effect of perceived justice levels (Wilks' Lambda = 0.932, F (3,140) = 3.421, $p < .05$, $\eta^2_p = 0.068$) on the outcome variables. The between-subject analysis shows the effects of perceived justice levels are statistically significant on recovery satisfaction (F (1,142) = 9.624, $p < .05$, $\eta^2_p = 0.063$), and on repurchase intention (F (1,142) = 4.443, $p < .05$, $\eta^2_p = 0.030$), but not on positive word-of-mouth intention (F (1,142) = 2.155, $p = .144$, $\eta^2_p = 0.015$).

The analysis also finds that the covariates of current satisfaction (Wilks' Lambda = 0.940, F (3,140) = 2.986, $p < .05$, $\eta^2_p = 0.060$) has a significant relationship with positive word-of-mouth intention (F (1,142) = 4.970, $p < .05$, $\eta^2_p = 0.034$). The covariate of complaining tendency (Wilks' Lambda = 0.944, F (3,140) = 2.787, $p < .05$, $\eta^2_p = 0.056$) is significant in its relationship to recovery

satisfaction (F (1,142) = 5.343, $p < .05$, $\eta^2_p = 0.036$) and positive word-of-mouth intention (F (1,142) = 4.970, $p < .05$, $\eta^2_p = 0.034$).

The covariate of turn-around-time (Wilks' Lambda = 0.858, F (3,140) = 7.724, $p < .001$, $\eta 2p = 0.142$) has a significant relationship with recovery satisfaction (F (1,142) = 20.885, $p < .001$, $\eta 2p = 0.128$), repurchase intention (F (1,142) = 13.572, $p < .001$, $\eta 2p = 0.087$), and positive word-of-mouth intention (F (1,142) = 11.652, $p < .01$, $\eta 2p = 0.076$).

The covariate of service length (Wilks' Lambda = 0.927, F (3,140) = 3.691, $p < .05$, $\eta 2p = 0.073$) is significant in its relationship to recovery satisfaction (F (1,142) = 8.656, $p < .001$, $\eta 2p = 0.057$), repurchase intention (F (1,142) = 6.112, $p < .05$, $\eta 2p = 0.041$), and positive word-of-mouth intention (F (1,142) = 8.413, $p < .01$, $\eta 2p = 0.056$).

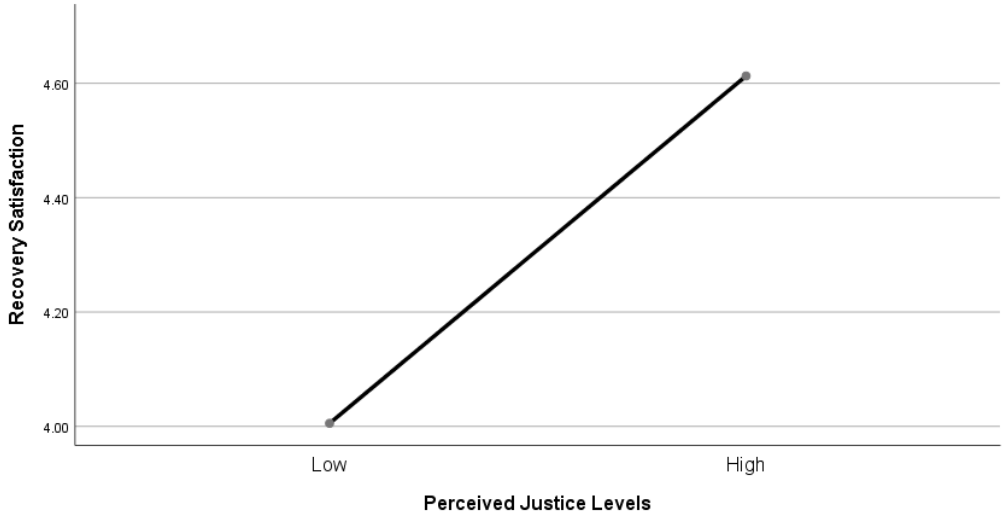
Table 5.27 presents the findings of MANCOVA analysis. The plots representing the effect of perceived justice levels on the outcome variables are presented in Figure 5.9, Figure 5.10, and Figure 5.11.

Table 5.27 Study 2 MANCOVA on Outcome Variables

Source	Multivariate				Between-Subject Effects			
	Wilks Lambda	F (3, 140)	Sig.	Partial ETA squared	DV	F (1, 142)	Sig.	Partial ETA squared
Main Variable								
Perceived Justice Levels (PJL)	0.932	3.421	.019	0.068	RS	9.624	.002	0.063
					PI	4.443	.037	0.030
					WOM	2.155	.144	0.015
Control Variables								
Current Satisfaction	0.940	2.986	.033	0.060	RS	0.000	.990	0.000
					PI	0.000	.985	0.000
					WOM	4.970	.027	0.034
Complaining Tendency	0.944	2.787	.043	0.056	RS	5.343	.022	0.036
					PI	0.865	.354	0.006
					WOM	5.925	.016	0.040
Recovery Expectation	0.997	0.156	.926	0.003	RS	0.146	.702	0.001
					PI	0.074	.786	0.001
					WOM	0.020	.889	0.000
Turn-around-Time	0.858	7.724	.000	0.142	RS	20.885	.000	0.128
					PI	13.572	.000	0.087
					WOM	11.652	.001	0.076
Service Provider Name	0.988	0.587	.625	0.012	RS	0.126	.723	0.001
					PI	0.378	.540	0.003
					WOM	1.606	.207	0.011
Service Type	0.972	1.353	.260	0.028	RS	2.001	.159	0.014
					PI	0.067	.797	0.000
					WOM	0.120	.730	0.001
Service Length	0.927	3.691	.013	0.073	RS	8.656	.004	0.057
					PI	6.112	.015	0.041
					WOM	8.413	.004	0.056
Prior Failure	0.965	1.674	.175	0.035	RS	0.111	.740	0.001
					PI	2.362	.127	0.016
					WOM	1.853	.176	0.013
Failure Controllability	0.990	0.482	.695	0.010	RS	0.004	.952	0.000
					PI	0.001	.974	0.000
					WOM	0.782	.378	0.005

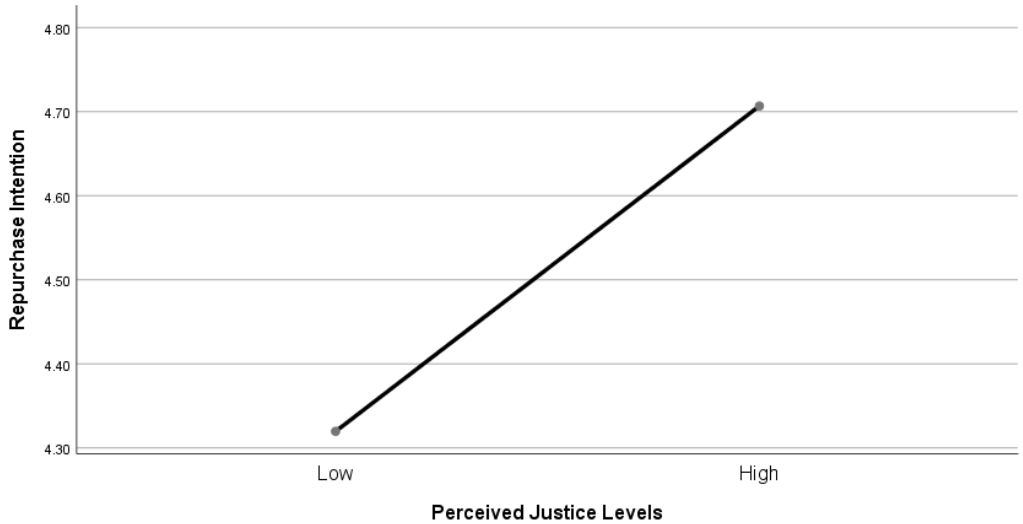
Note: RS =Recovery Satisfaction, PI =Repurchase Intention, WOM =Positive word-of-mouth intention

Figure 5.9 Study 2 Estimated Marginal Mean of Recovery Satisfaction against Perceived Justice Levels



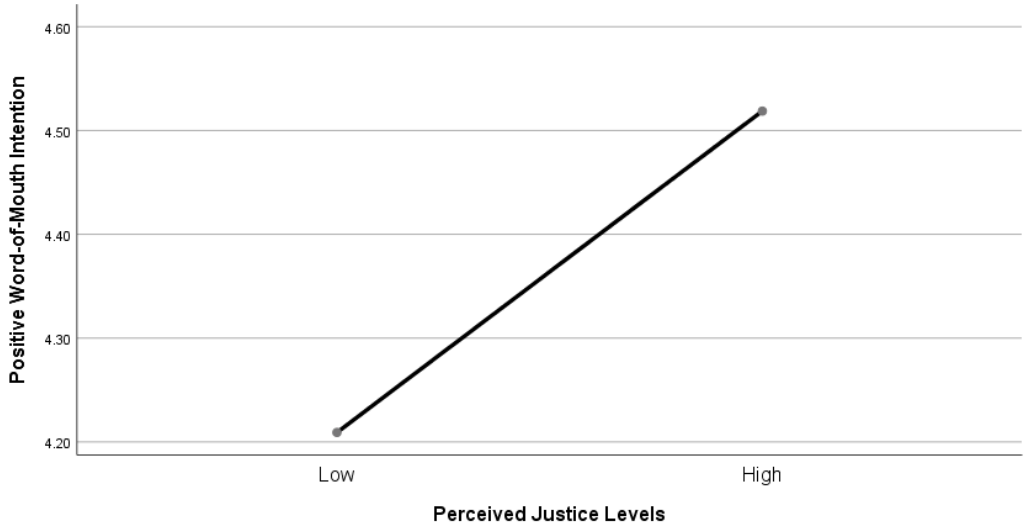
Covariates appearing in the model are evaluated at the following values: Current Sstiafaction = 2.7603, Complaining Tendency = 2.9860, Recovery Expectation = 5.2963, Turn-around-Time = 4.2418, Service Provider Name = 2.37, Service Type = 1.77, Service Length = 3.65, Prior Failure = .30, Failure Controllability = 5.37

Figure 5.10 Study 2 Estimated Marginal Mean of Repurchase Intention against Perceived Justice Levels



Covariates appearing in the model are evaluated at the following values: Current Satisfaction = 2.7603, Complaining Tendency = 2.9860, Recovery Expectation = 5.2963, Turn-around-Time = 4.2418, Service Provider Name = 2.37, Service Type = 1.77, Service Length = 3.65, Prior Failure = .30, Failure Controllability = 5.37

Figure 5.11 Study 2 Estimated Marginal Mean of Positive Word-of-Mouth Intention against Perceived Justice Levels



Covariates appearing in the model are evaluated at the following values: Current Satisfaction = 2.7603, Complaining Tendency = 2.9860, Recovery Expectation = 5.2963, Turn-around-Time = 4.2418, Service Provider Name = 2.37, Service Type = 1.77, Service Length = 3.65, Prior Failure = .30, Failure Controllability = 5.37

5.2.2.4 Hypotheses Testing

H6a

Study 2 utilises Hayes' PROCESS macro, model 14, to test for the moderating role of attachment anxiety and attachment avoidance on the relationship between perceived justice on behavioural intentions through recovery satisfaction. Bootstrapping with a sample of 10,000 and confidence interval levels at 95 percentiles is selected along with the option to mean centre the continuous variables of attachment anxiety, attachment avoidance, and recovery satisfaction.

In model 14, perceived justice levels serve as the independent variable (X), repurchase intention as the dependent variable (Y), recovery satisfaction as the mediator (M) and attachment anxiety as the moderator (W). The findings, first

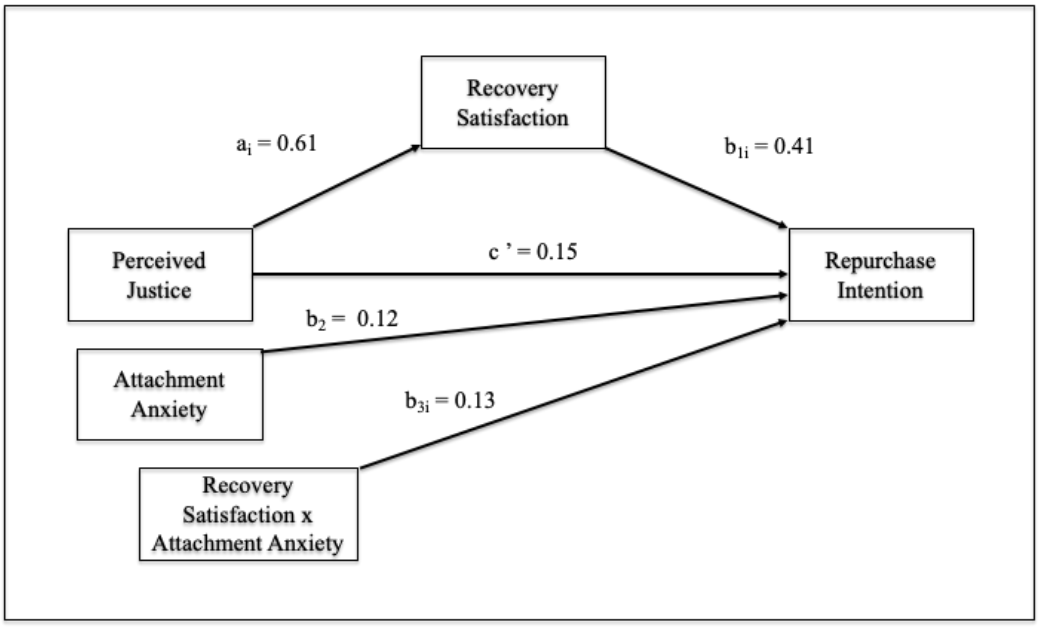
of all, indicate that the conditional indirect effect in this model is positive and significant as bootstrapped confidence interval levels of the moderated mediation are statistically different from zero (BootLLCI = 0.01 and BootULCI = 0.16). The findings imply that the indirect effect of perceived justice on repurchase intention through recovery satisfaction is significantly moderated by attachment anxiety.

The direct effect of perceived justice on repurchase intention is insignificant (b = 0.09, SE = 0.16, p = .58). The effect of perceived justice on repurchase intention is indicated in Table 5.28 and the statistical diagram with the path coefficients is presented in Figure 5.12.

Table 5.28 Study 2 Direct and Conditional Indirect Effect of Perceived Justice on Repurchase Intention

Direct					
Effect	se	t	p	LLCI	ULCI
0.15	0.16	0.94	0.35	-0.17	0.46
Conditional indirect					
Attachment Anxiety		Effect	BootSE	BootLLCI	BootULCI
-SD	-1.31	0.15	0.08	0.01	0.32
Mean	0	0.25	0.09	0.08	0.44
+SD	1.31	0.35	0.13	0.11	0.60
Moderated Mediation					
		Index	BootSE	BootLLCI	BootULCI
		0.08	0.04	0.01	0.16

Figure 5.12 Study 2 Statistical Diagram of PROCESS (Model 14) for Interaction of Recovery Satisfaction and Attachment Anxiety on Repurchase Intention



Furthermore, the interaction coefficient of recovery satisfaction and attachment anxiety on repurchase intention is significant ($b = 0.13$, $SE = 0.04$, $p < 0.01$) with significant variance accounted by the interaction (R^2 change = 0.04, $F(1,139) = 10.65$, $p < .01$). Thus, for every unit increase in attachment anxiety, the effect of recovery satisfaction on repurchase intention increases by 0.13.

The results of the spotlight analysis indicate that the confidence interval levels are statistically significant for attachment anxiety at three levels – at the mean, and one standard deviation above and below the mean, and that the effect of recovery satisfaction on repurchase intention increases at increasing levels of attachment anxiety. The findings imply that attachment anxiety moderates the relationship between recovery satisfaction and repurchase intention such that at

high levels of attachment anxiety, a higher recovery satisfaction will have a more positive effect on repurchase intention.

The next step involves the probing of the conditional effects of recovery satisfaction on repurchase intention at the scale values of attachment anxiety, as this will show if there is a value of the attachment anxiety that allows the effect of recovery satisfaction on repurchase intention to transition from insignificant to significant. The Johnson-Neyman technique or dubbed as floodlight analysis by Spiller et. al (2013) is therefore utilised to find the exact value of attachment anxiety that turns the interaction between attachment anxiety and recovery satisfaction on repurchase intention from non-significant to significant, at a significance level of 0.05. This analysis is conducted once again using model 14 in Hayes' PROCESS macro, but without the option to mean centre, as it will then provide results of attachment anxiety value as per the scale range utilised (1-7).

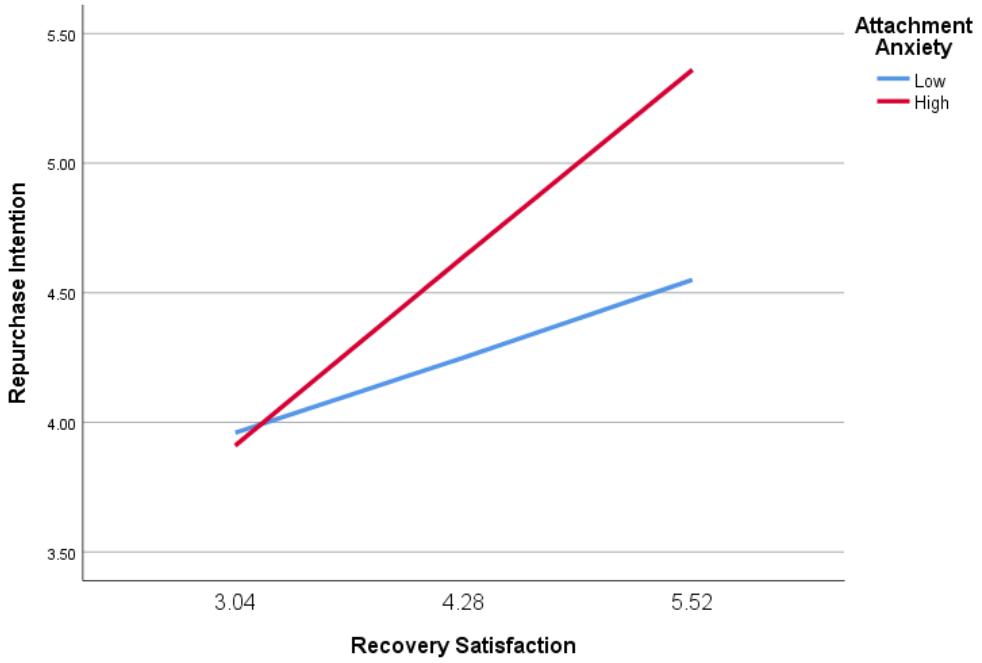
The Johnson-Neyman technique indicates that an attachment anxiety value of above 1.56 (90.20%) leads to a significant positive effect of the interaction on repurchase intention. This indicates that the interaction of recovery satisfaction and attachment anxiety leads to higher repurchase intention for higher values of attachment anxiety rather than for lower values. The findings from the spotlight analysis and the Johnson-Neyman technique provide support for H6a, that at high levels of attachment anxiety, a higher recovery satisfaction will have a more positive effect on repurchase intention.

Table 5.29 presents the effect of recovery satisfaction and attachment anxiety interaction on repurchase intention at levels of attachment anxiety and the Johnson-Neyman significance. Figure 5.13 depicts the relationship between recovery satisfaction and repurchase intention at the attachment anxiety levels of one standard deviation below (low) and above (high) the mean.

Table 5.29 Study 2 Interaction Effect of Recovery Satisfaction and Attachment Anxiety on Repurchase Intention at Attachment Anxiety Levels and Johnson-Neyman Significance

Attachment Anxiety	Value	Effect	se	t	p	LLCI	ULCI
-SD	-1.31	0.24	0.09	2.63	.01	0.06	0.42
Mean	0	0.41	0.07	5.85	.00	0.27	0.55
+SD	1.31	0.58	0.08	7.03	.00	0.41	0.74
Value defining Johnson-Neyman significance region							
	1.56	% below	% above				
		9.80	90.20				

Figure 5.13 Study 2 Effect of Recovery Satisfaction on Repurchase Intention at Attachment Anxiety Levels



H6b

The Hayes' PROCESS macro, model 14 is once again utilised to test H6b. All variables remain the same as in hypothesis H6a testing, except for the dependent variable, Y being positive word-of-mouth intention. The findings, first of all, indicate that the indirect effect in this model is insignificant as the bootstrapped confidence interval of the moderated mediation is not statistically different from zero (BootLLCI = -0.05 and BootULCI = 0.07). Therefore, the examination of the conditional indirect effect of perceived justice on positive word-of-mouth intention through recovery satisfaction at levels of attachment anxiety is not worthy. In addition, the direct effect of perceived justice on positive word-of-

mouth intention is also insignificant (b = 0.12, SE = 0.18, p = .97). Table 5.30 presents the effect of perceived justice on positive word-of-mouth intention.

Table 5.30 Study 2 Direct and Conditional Indirect Effect of Perceived Justice on Positive Word-of-Mouth Intention

Direct					
Effect	se	t	p	LLCI	ULCI
0.12	0.18	0.04	.97	-0.36	0.37
Conditional indirect					
Attachment Anxiety		Effect	BootSE	BootLLCI	BootULCI
-SD	-1.31	0.31	0.12	0.09	0.58
Mean	0	0.32	0.12	0.10	0.58
+SD	1.31	0.34	0.13	0.11	0.61
Moderated Mediation					
		Index	BootSE	BootLLCI	BootULCI
		0.01	0.03	-0.05	0.07

The investigation of the interaction coefficient further confirms that attachment anxiety does not significantly interact with recovery satisfaction to affect positive word-of-mouth intention (b = 0.02, SE = 0.05, p = 0.68). There is also an insignificant variance accounted by the interaction (R^2 change = 0.00, F (1,139) = 0.18, p = .68). Therefore, it can be deduced that attachment anxiety does not significantly moderate the relationship between recovery satisfaction and positive word-of-mouth intention. As such, investigating the effect of low and high anxiety on the relationship between recovery satisfaction and positive word-of-mouth intention is not possible. Therefore, H6b is not supported.

H7a

Model 14 of the Hayes' PROCESS macro is used to test H7a. In the model specification, perceived justice levels serve as the independent variable (X), repurchase intention as the dependent variable (Y), recovery satisfaction as the mediator (M) and attachment avoidance as the moderator (W). The findings firstly indicate that the indirect effect in this model is insignificant as the bootstrapped confidence interval of the moderated mediation is not statistically different from zero (BootLLCI = -0.05 and BootULCI = 0.13).

Therefore, the examination of the conditional indirect effect of perceived justice on repurchase intention through recovery satisfaction at levels of attachment avoidance is not justified. Furthermore, the direct effect of perceived justice on repurchase intention is also insignificant (b = 0.09, SE = 0.16, p = .56). Table 5.31 presents the effect of perceived justice on repurchase intention.

Table 5.31 Study 2 Direct and Conditional Indirect Effect of Perceived Justice on Repurchase Intention

Direct					
Effect	se	*t*	*p*	LLCI	ULCI
0.09	0.16	0.56	.57	-0.23	0.42
Conditional indirect					
Attachment Avoidance		Effect	BootSE	BootLLCI	BootULCI
-SD	-1.08	0.26	0.10	0.08	0.48
Mean	0	0.31	0.11	0.10	0.52
+SD	1.08	0.35	0.13	0.09	0.62
Moderated Mediation					
		Index	BootSE	BootLLCI	BootULCI
		0.04	0.05	-0.05	0.13

The investigation of the interaction coefficient further confirms that attachment avoidance does not significantly interact with recovery satisfaction to affect repurchase intention (b = 0.07, SE = 0.06, p = 0.24). There is also an insignificant variance accounted by the interaction (R^2 change = 0.01, F (1,139) = 1.39, p = .24). Therefore, it can be deduced that attachment avoidance does not significantly moderate the relationship between recovery satisfaction and repurchase intention and therefore, H7a is not supported.

H7b

H7b is also tested using model 14 of Hayes' PROCESS macro. All variables remain the same as for H7a testing, except for the dependent variable, Y being positive word-of-mouth intention. The indirect effect in this model is insignificant as the bootstrapped confidence interval of the moderated mediation is not statistically different from zero (BootLLCI = -0.01 and BootULCI = 0.17). Therefore, the examination of the conditional indirect effect of perceived justice on positive word-of-mouth intention through recovery satisfaction at levels of attachment avoidance is not worthy. The direct effect of perceived justice on positive word-of-mouth intention is also insignificant (b = -0.05, SE = 0.18, p = .78). The effect of perceived justice on positive word-of-mouth intention is presented in Table 5.32.

Table 5.32 Study 2 Direct and Indirect Effect of Perceived Justice on Positive Word-of-Mouth Intention

Direct					
Effect	se	t	p	LLCI	ULCI
-0.05	0.18	-0.28	.78	-0.41	0.31
Conditional indirect					
Attachment Avoidance		Effect	BootSE	BootLLCI	BootULCI
-SD	-1.08	0.31	0.12	0.10	0.57
Mean	0	0.39	0.14	0.13	0.66
+SD	1.08	0.46	0.16	0.15	0.79
Moderated Mediation					
		Index	BootSE	BootLLCI	BootULCI
		0.07	0.05	-0.01	0.17

Investigation of the interaction coefficient further confirms that attachment avoidance does not significantly interact with recovery satisfaction to affect positive word-of-mouth intention (b = 0.11, SE = 0.06, p = 0.08). There is also an insignificant variance accounted by the interaction (R^2 change = 0.01, F (1,139) = 3.04, p = .08). Therefore, it can be deduced that attachment avoidance does not significantly moderate the relationship between recovery satisfaction and positive word-of-mouth intention and as such, H7b is not supported.

5.2.3 Study 2 Discussion

Study 2 is conducted to test the third research question, on the moderating role of attachment anxiety and attachment avoidance on the relationship between recovery satisfaction and behavioural intentions. Hayes' PROCESS macro, model 14 is utilised for this purpose, to test hypotheses H6a to H7b. Firstly, the findings provide support for the moderating role of attachment anxiety on the indirect relationship between perceived justice and repurchase intention. Hence, moderated mediation effect occurs in this framework. Secondly, the interaction between recovery satisfaction and attachment anxiety on repurchase intention is significant. Furthermore, spotlight analysis indicates that the effect of the interaction on repurchase intention increases at increasing levels of attachment anxiety. Upon using the Johnson-Neyman technique, the results show that the effect of the interaction on repurchase intention is significant at values of attachment anxiety above 1.56. The outcome of the interaction, spotlight analysis, and the Johnson-Neyman technique thus provide support for H6a, that postulates attachment anxiety to moderate the relationship between recovery satisfaction and repurchase intention such that at higher levels of anxiety, recovery satisfaction will have a more positive effect on repurchase intention.

The results of Study 2 are consistent with past studies that have found high levels of anxiety to positively affect behavioural loyalty (Vlachos et al., 2010; Kim et al., 2018). The results found are in line with the tenets of attachment theory that postulated individuals with higher anxiety levels have a higher desire for relational intimacy (Mikulincer and Shaver, 2007) and therefore would wish to

maintain the relationship with the service provider (Mende, Bolton and Bitner, 2013).

This study, however, finds that attachment anxiety does not display a significant conditional indirect effect and has no significant impact on the relationship between recovery satisfaction and positive word-of-mouth intention. H6b is, therefore, not supported. The finding of this study is in contrast to the study by Vlachos et al. (2010) that found anxiety moderated the relationship between emotional attachment and word-of-mouth. Thus, consumers' emotional attachment to the service provider would be necessary to be included to better capture the moderating role of attachment anxiety on the relationship between recovery satisfaction and positive word-of-mouth intention.

The moderating role of attachment avoidance on the relationship between recovery satisfaction to both repurchase (H7a) and positive word-of-mouth intentions (H7b) is insignificant. Results of this study suggest that avoidance does not significantly impact positive behavioural outcomes. The findings of Study 2 contrast the findings of past studies that have indicated a low level of attachment avoidance to impact positive behaviours (Vlachos and Vechropoulos, 2012; Kim, Preis and Lee, 2019). However, the study by Mende, Bolton and Bitner (2013) found that the direct relationship between attachment avoidance and loyalty to be insignificant. In addition, high avoidance has been associated with negative evaluations and behaviours such as lower satisfaction, reluctancy to build a consumer-brand relationship, and engagement in anti-brand

actions (Thomson, Whelan and Johnson, 2012; Whelan et al., 2016; Japutra, Ekinci and Simkin, 2018; Japutra, 2020).

Furthermore, it could also be argued that according to attachment theory, individuals high on avoidance are predisposed to distance themselves from relationships and thus, view the relationship with the service provider purely on a transactional or economic basis rather than a relationship basis (Thomson and Johnson, 2006). Thus, they are by nature, not inclined to display benevolence towards the service provider.

Study 2 addresses the research questions to test for the moderating role of attachment styles on the relationship between recovery satisfaction and behavioural response, through hypotheses H6a to H7b. The outcome of this research question thus provides towards meeting the research objective on determining the effect of a third variable, an individual trait, on the relationship between recovery satisfaction and behavioural intentions within the prevalent service failure and recovery framework. The results of the hypotheses testing are presented in Table 5.33.

Table 5.33 Study 2 Hypotheses Testing Results Summary

Hypotheses	Results
H6a: Anxiety attachment will moderate the impact of recovery satisfaction on repurchase intention such that for consumers with high (low) levels of anxiety attachment, higher (lower) recovery satisfaction will have a more (less) positive effect on repurchase intention	Supported
H6b: Anxiety attachment will moderate the impact of recovery satisfaction on positive word-of-mouth intention such that for consumers with high (low) levels of anxiety attachment, higher (lower) recovery satisfaction will have a more (less) positive effect on positive word-of-mouth intention	Rejected
H7a: Avoidance attachment will moderate the impact of recovery satisfaction on repurchase intention such that for consumers with low (high) levels of avoidance attachment, higher (lower) recovery satisfaction will have a more (less) positive effect on repurchase intention	Rejected
H7b: Avoidance attachment will moderate the impact of recovery satisfaction on positive word-of-mouth intention such that for consumers with low (high) levels of avoidance attachment, higher (lower) recovery satisfaction will have a more (less) positive effect on positive word-of-mouth intention	Rejected

5.3 Study 3

Study 3 addresses the final research question which is to examine the moderating role of brand authenticity on the relationship between recovery satisfaction and behavioural responses, through hypotheses H8a to H8b. This research aims to meet the research objective of examining the moderating role of brand-related construct on the relationship between recovery satisfaction and behavioural responses. Study 3 is a 2 (perceived justice: low vs. high) x 1 (brand authenticity: measured) between-subject design. The method, which encompasses measures and analyses used in Study 3, is detailed next before the results of the analyses and discussion are presented.

5.3.1 Method

5.3.1.1 Sample and Procedure

Respondents are recruited through convenience sampling via snowballing technique. The survey is created using Qualtrics.com and the online link is posted along with an invitation on social media platforms and in group chats. Participants who volunteered and completed the survey are then encouraged to invite further participants through their social network.

The questionnaire utilises the scenario of Pretest 3 that is pretested before the main study, as analysed and presented in Chapter 4. The questionnaire begins by detailing the study objectives, questionnaire structure, right to voluntary

participation and withdrawal and contact details for further information. Respondents have to check a box to indicate an agreement to participate in the study.

The respondents then move on to provide their current telecommunication service provider details such as name, length of service, type of service, current satisfaction levels, and if they have experienced a prior failure before. The respondents then complete the measurement items that captures their complaining propensity. The measures presented up to this point are for the control variables.

Next, the respondents complete the brand authenticity measurement scale. The following section then presents the failure scenario. The scenario requires participants to imagine that they experience a service failure in terms of a billing error for an unsubscribed service. Upon reading the scenario, respondents are required to complete the measurement items that determine their perception of the failure severity. Thereafter, respondents evaluate on the measurement items of the control variables which are failure controllability, turn-around time, and recovery expectation.

Thereafter, the respondents read about the recovery efforts implemented, either at a low or high level. The recovery effort is manipulated at a low level by indicating that respondents do not receive an apology and refund, even though the unsubscribed service is cancelled. The high level of recovery effort depicts

that the respondents receive an apology and will be refunded once the unsubscribed service is cancelled.

Respondents then complete the measurement scales on the perceived realism of the scenario, the comprehension of the scenario, perceived justice of the recovery efforts, the satisfaction of the recovery efforts, repurchase and positive word-of-mouth intentions. The final section requires respondents to complete basic demographic questions of gender, age, education level, and age group. All participants who take part in the study are informed of the compensation of a shopping voucher worth RM10. The voucher is either provided to them in person or mailed. At the end of the data collection stage, 237 responses are collected. However, upon removal of incomplete responses, responses from respondents who indicate their age below 18, are not Malaysian (which was identified either through the IP address or those that indicated as such in the ethnicity demographic question), 204 valid responses are left and used for the analysis. The cell sizes range from between 84-120, which is above the recommended observations of 20 for each category (Hair et al., 2010). Cell sizes in other studies of consumer behaviour have been indicated to range between 108-119 in the study by Bergel and Brock (2018), and between 83-221 in the study by Pappu and Quester (2006).

The dataset is firstly subjected to descriptive analysis. The demographic profile shows that almost 45% are males. There is a reasonable distribution of respondents across all of the age groups, whereby about 65% are between the ages of 25-44. This closely reflects the Malaysian population structure.

Bumiputera respondents comprise almost half of the sample, followed by Chinese at almost one third, and Indians at about 15%. Table 5.34 presents the demographic profile of the respondents, and Table 5.35 presents respondents' telecommunication profile.

Table 5.34 Study 3 Respondents' Demographic Profile

Demographic Variable	Dimensions	Frequency	Total	Percentage
Gender	Male	90	204	44.1
	Female	114		55.9
Age Group	18-24	22		10.8
	25-34	72		35.3
	35-44	61		29.9
	45-54	23		11.3
	55-64	22		10.8
	65 and above	4		2.0
Education Level	Secondary school or below	11	204	5.4
	Certificate or Diploma	41		20.1
	Bachelor's degree	112		54.9
	Postgraduate degree	40		19.6
Ethnicity	Bumiputera	96	204	47.1
	Chinese	66		32.4
	Indian	32		15.7
	Other	10		4.9

Maxis emerges as the main service provider for this sample, for more than one-third of the respondents, followed closely by Digi and Celcom. Post-paid service form 80% of subscription type and more than a third have had their subscription with the service provider for more than nine years.

Table 5.35 Study 3 Respondents' Telecommunication Profile

Telecommunication Service Profile		Frequency	Total	Percent
Service Provider Name	Celcom	43	204	21.1
	Maxis	75		36.8
	Digi	45		22.1
	Umobile	18		8.8
	Others	23		11.3
Service Type	Prepaid	41	204	20.1
	Post-paid	163		79.9
Service Length	Less than a year	18	204	8.8
	1 - 3 years	59		28.9
	4 - 6 years	34		16.7
	7 - 9 years	22		10.8
	More than 9 years	71		34.8

5.3.1.2 Measures

The measures in Study 3 remain the same as those employed in Study 1 and Study 2. However, as Study 3 investigates the moderating role of brand authenticity, the measure of brand authenticity is included in addition to the other measures used. Brand authenticity items are measured on a Likert scale ranging from 1 (strongly disagree) to 7 (strongly agree) and are presented in Table 5.36.

Table 5.36 Brand Authenticity Measurement Scale

Brand Authenticity adapted from Morhart et al. (2015)
Continuity
A brand with a history
A timeless brand
A brand that survives time
A brand that survives trend
Credibility
A brand that will not betray you
A brand that accomplishes its value promise
An honest brand

Integrity
A brand that gives back to its consumers
A brand with moral principles
A brand true to a set of moral values
A brand that cares about its consumers

Symbolism
A brand that adds meaning to people's lives
A brand that reflects important values people care about
A brand that connects people with their real selves
A brand that connects people with what is really important

5.3.1.3 Analyses

The analyses also entail the use of IBM SPSS and IBM SPSS AMOS, both being version 25. Upon obtaining the descriptive statistics of the demographic and telecommunication profile, the dataset is then subjected to a manipulation check through univariate analysis of variance (UNIANOVA) to ensure that the variable of perceived justice, which is manipulated at low and high levels, is seen as such by the respondents. Next, confirmatory factor analysis (CFA) is conducted using AMOS to derive the measurement model and to present the reliability and validity of the scales used. The consequent analysis performed is to check for the main effects of perceived justice levels on the outcome variables, while controlling for the covariates. This is done using multivariate analysis of covariance (MANCOVA).

Finally, the hypotheses are tested using Preacher, Rucker, and Hayes's (2007) method of testing moderated mediation. Hayes' PROCESS macro is utilised for this purpose. More specifically, this analysis allows for the examination of the

indirect effect of perceived justice on behavioural responses of repurchase and positive word-of-mouth intentions through recovery satisfaction with brand authenticity as the moderator. The index of moderated mediation presented through the bootstrapped confidence interval levels in the analysis will allow interpretation of the conditional indirect effect. Furthermore, spotlight analysis will indicate the effect of the interaction of recovery satisfaction and brand authenticity on the outcome variables at three levels - at the mean, and one standard deviation above and below the mean, of brand authenticity

5.3.2 Findings

5.3.2.1 Manipulation Check

A manipulation check is conducted to test that the treatment conditions for perceived justice within the scenario presented to participants are significantly perceived as intended. Univariate analysis of variance (UNIANOVA) is performed to test the effect of the perceived justice manipulations at a low and high level against 17 items of the perceived justice scale. Results indicate a significant main effect of perceived justice manipulation on perceived justice evaluation ($F (1, 202) = 106.619$, $p < .001$, $\eta^2_p = 0.345$). This finding implies that manipulation of perceived justice at a low and high level is successful. The results are presented in Table 5.37.

Table 5.37 Study 3 Between-Subject Effects and Parameter Estimates of Perceived Justice Levels on Perceived Justice Evaluation

Between-Subject Effects			Parameter Estimates					
DV	F (1,202)	Partial Eta Squared	PJL	B	Std. Error	t	95% Confidence Interval	
							Lower Bound	Upper Bound
PJ	106.619	0.345	Low	-1.707	0.165	-10.326	-2.033	-1.381
			High	0[a]				

a. This parameter is set to zero because it is redundant.

Note: $p < .01$; PJ = Perceived Justice; PJL = Perceived Justice Levels

Furthermore, the participants in the low perceived justice condition (M = 3.578, SD = 1.200) perceive a lower level of perceived justice than those in the high perceived justice condition (M = 5.285, SD = 1.135). The ANOVA findings also show a significant difference between the mean values for low and high perceived justice levels. These findings indicate that the manipulation is significantly perceived as intended for perceived justice levels. Not only is the perceived realism of the scenario high (M = 5.590, S.D. = 1.160) but also the comprehension (M = 5.779, S.D. = 1.181), as the mean values are above four, being the midpoint value of the scale. The findings indicate the successful manipulation of the conditions, and that the scenario is both realistic and comprehensible. The descriptive statistics and ANOVA for perceived justice are presented in Table 5.38 and Table 5.39 respectively.

Table 5.38 Study 3 Descriptive Statistics for Perceived Justice Levels

Perceived Justice Levels	N	Mean	Std. Deviation	Std. Error	95% Confidence Interval for Mean	
					Lower Bound	Upper Bound
Low	84	3.578	1.200	0.131	3.317	3.838
High	120	5.285	1.135	0.104	5.080	5.490

Table 5.39 Study 3 ANOVA Results for Perceived Justice Levels

DV		Sum of Squares	df	Mean Square	F	Sig.
Perceived Justice	Between Groups	143.991	1	143.991	106.619	0.000
	Within Groups	272.804	202	1.351		
	Total	416.795	203			

5.3.2.2 Reliability and Validity

Construct Reliability

The measures used in this study are adopted from previous studies that have demonstrated high values of Cronbach alpha. The reliability value of the measures in Study 3 ranges from 0.738 to 0.964, well above meeting the recommended value of more than 0.7 (Nunnally, 1978). The reliability value of the control variables ranges from 0.717 to 0.901. For turn-around-time measure, which is a 2-item measure, the Spearman-Brown coefficient is reported as suggested by researchers (Eisinga, Grotenhuis and Pelzer, 2013; Kim and Jang, 2014), and the Spearman-Brown coefficient is 0.226. Another covariate used in the study is failure controllability, measured through one item.

Construct Validity

Confirmatory factor analysis (CFA) is performed to evaluate the relationships of the latent constructs. The 15 items of brand authenticity and three items each for recovery satisfaction, repurchase intention and positive word-of-mouth intention are included into the analysis. The construct of perceived justice is not included into the measurement model analysis as it a dichotomous variable, manipulated at low and high levels for the experimental conditions.

Overall Fit

Multiple indices are employed to ensure the model fit: goodness-of-fit index (GFI); incremental fit index (IFI); Tucker-Lewis index (TLI); comparative fit index (CFI), with a value close to 1.00 indicating a good model fit; root mean square error of approximation (RMSEA) less than 0.1; and the normed chi-square (chi-square/df) below 3.00 (Anderson and Gerbing, 1988; Hair et al., 2010).

The initial model fit indices are indicated as satisfactory, however, upon examining the modification indices, several correlated error terms with values above 15.0 are found, and thus constrained. In addition, path estimates given by the factor loadings of each indicator with a value of below 0.4 are deleted. Thus, the reverse coded items of recovery satisfaction and repurchase intention, RS2 and PI3 respectively, are deleted. As a result, the findings from the CFA show that the goodness of fit indices for the measurement model improved and are within the acceptable range, chi-square = 317.911, degrees of freedom (df) =

187, chi-square/df = 1.700, GFI = 0.891, IFI = 0.978, TLI = 0.973, CFI = 0.978, RMSEA = 0.055, and SRMR = 0.050.

To assess construct validity, convergent and discriminant validity is examined. In examining convergent validity, the unstandardised factor loading estimate is viewed to determine that all loadings are highly significant as required for convergent validity. Following this, the composite reliability (CR), and average variance extracted (AVE) are calculated. According to Fornell and Larcker (1981), CR should exceed 0.7 and the AVE should be more than 0.5, as this would then demonstrate a reasonable degree of internal consistency between the corresponding indicators (Hair et al., 2010).

Thus, in the analysis, the CR for each construct is above 0.7, and the AVEs for each factor is well above 0.50. Therefore, the convergent validity of the measurement model is supported. Table 5.40 presents the CFA results.

Table 5.40 Study 3 CFA Results

Constructs	Maximum Likelihood Estimate			t-value	CR	Alpha	AVE
	Factor Loading λ	Measurement error	Squared Factor Loading λ^2				
Brand Attachment					0.918	0.964	0.635
ACO1	0.539	1.732	0.291	fixed			
ACO2	0.560	1.550	0.314	11.367			
ACO3	0.561	1.473	0.315	11.065			
ACO4	0.582	1.370	0.339	9.643			
ACR5	0.778	1.033	0.605	8.556			
ACR6	0.842	0.652	0.709	8.903			
ACR7	0.860	0.620	0.740	9.000			
AIN8	0.888	0.577	0.789	9.141			
AIN9	0.894	0.463	0.799	9.168			
AIN10	0.898	0.423	0.806	9.187			
AIN11	0.892	0.491	0.796	9.160			
ASY12	0.865	0.536	0.748	9.024			
ASY13	0.914	0.343	0.835	9.263			
ASY14	0.851	0.605	0.724	8.947			
ASY15	0.847	0.577	0.717	8.934			
Recovery Satisfaction					0.781	0.738	0.893
RS1	0.900	0.515	0.810	fixed			
RS3	0.926	0.422	0.857	19.317			
Repurchase Intention					0.802	0.889	0.805
PI1	0.868	0.477	0.753	fixed			
PI2	0.926	0.319	0.857	19.691			
Positive Word-of-mouth Intention					0.913	0.964	0.898
WOM	0.932	0.337	0.869	fixed			
WOM	0.960	0.195	0.922	30.330			
WOM	0.950	0.235	0.903	29.123			

Note: all p values are <0.001

To assess discriminant validity, the square root of the AVE needs to be higher than the inter-construct correlations. The results indicate that the square root of the AVE of the constructs is higher than its inter-construct correlation. There is

only a slightly higher inter-construct correlation among repurchase intention and positive word-of-mouth intention than the square root of the AVE for repurchase intention. However, these constructs are well established and have shown sufficient discriminant validity in other studies that have adopted them. Therefore, it can be deduced that discriminant validity exists among the constructs of this study. Table 5.41 presents the results of the constructs correlation and square root of AVE.

Table 5.41 Study 3 Constructs Correlation Matrix and Square Root of AVE

	Brand Authenticity	Recovery Satisfaction	Repurchase Intention	Positive Word-of-Mouth Intention
Brand Authenticity	**0.797**			
Recovery Satisfaction	0.196	**0.945**		
Repurchase Intention	0.261	0.806	**0.897**	
Positive Word-of-Mouth Intention	0.295	0.776	0.901	**0.947**

Note: Diagonal entries in bold show the square root of the average variance extracted (AVE)

5.3.2.3 Main Effects

Prior to hypotheses testing, multivariate analysis of covariance (MANCOVA) is run with perceived justice levels (PJL) of low and high as fixed factor against the outcome variables of recovery satisfaction, repurchase intention, and positive word-of-mouth intention. This is to examine if there is a significant interaction associated between perceived justice levels and the outcome variables after adjusting for differences in the covariates. Covariates of the study being current customer satisfaction, complaining tendency, recovery expectation, turn-around

time, service provider name, service type, service length, prior failure, and failure controllability are included.

The results of the multivariate analysis show a significant main effect of perceived justice levels on all of the outcome variables (Wilks' Lambda = 0.816, F (3, 191) = 14.400, $p < 0.001$, $\eta^2_p = 0.184$). Between-subjects effect analysis indicate that perceived justice levels have a significant effect on recovery satisfaction (F (1,193) = 42.722, $p < .001$, $\eta^2_p = 0.181$), on repurchase intention (F (1,193) = 9.954, $p < .01$, $\eta^2_p = 0.049$), and also on positive word-of-mouth intention (F (1,193) = 12.447, $p < .01$, $\eta^2_p = 0.061$).

The covariates are all found to have insignificant effects on the dependent variables, except for current satisfaction and turn-around time. Current satisfaction (Wilks' Lambda = 0.896, F (3, 191) = 7.416, $p < 0.001$, $\eta^2_p = 0.104$) significantly has an effect on repurchase intention (F (1,193) = 18.800, $p < .001$, $\eta^2_p = 0.089$), and on positive word-of-mouth intention (F (1,193) = 16.713, $p < .001$, $\eta^2_p = 0.080$). Turn-around-time (Wilks' Lambda = 0.858, F (3, 191) = 10.576, $p < 0.001$, $\eta^2_p = 0.142$) significantly has an effect on recovery satisfaction (F (1,193) = 24.291, $p < .001$, $\eta^2_p = 0.112$), repurchase intention (F (1,193) = 22.528, $p < .001$, $\eta^2_p = 0.105$), and on positive word-of-mouth intention (F (1,193) = 21.665, $p < .001$, $\eta^2_p = 0.101$). The results are presented in Table 5.42. The effects of perceived justice levels on the outcome variables are displayed in Figure 5.14, Figure 5.15, and Figure 5.16.

Table 5.42 Study 3 Multivariate and Between-Subject Effects of Perceived Justice Levels on Recovery Satisfaction, Repurchase Intention, and Positive Word-of-Mouth Intention

	Multivariate				Between-Subject Effects			
Source	Wilks Lambda	F (3, 191)	Sig.	Partial ETA squared	DV	F (1, 193)	Sig.	Partial ETA squared
Main Variable								
Perceived Justice Levels (PJL)	0.816	14.400	.000	0.184	RS	42.722	.000	0.181
					PI	9.954	.002	0.049
					WOM	12.447	.001	0.061
Control Variables								
Current Satisfaction	0.896	7.416	.000	0.104	RS	3.325	.070	0.017
					PI	18.800	.000	0.089
					WOM	16.713	.000	0.080
Complaining Tendency	0.996	0.251	.860	0.004	RS	0.065	.799	0.000
					PI	0.229	.633	0.001
					WOM	0.001	.973	0.000
Recovery Expectation	0.991	0.61	.609	0.009	RS	0.044	.834	0.000
					PI	1.305	.255	0.007
					WOM	0.100	.752	0.001
Turn-around-Time	0.858	10.576	.000	0.142	RS	24.291	.000	0.112
					PI	22.528	.000	0.105
					WOM	21.665	.000	0.101
Service Provider Name	0.976	1.587	.194	0.024	RS	0.130	.719	0.001
					PI	1.298	.256	0.007
					WOM	2.618	.107	0.013
Service Type	0.978	1.463	.226	0.022	RS	4.411	.037	0.022
					PI	1.154	.284	0.006
					WOM	0.876	.350	0.005
Service Length	0.985	0.993	.397	0.015	RS	2.438	.120	0.012
					PI	0.067	.796	0.000
					WOM	0.129	.719	0.001
Prior Failure	0.941	3.996	.009	0.059	RS	1.836	.177	0.009
					PI	2.582	.110	0.013
					WOM	2.917	.089	0.015
Failure Controllability	0.978	1.456	.228	0.022	RS	0.125	.724	0.001
					PI	1.950	.164	0.010
					WOM	0.036	.850	0.000

Note: RS =Recovery Satisfaction, PI =Repurchase Intention, WOM =Positive word-of-mouth Intention

Figure 5.14 Study 3 Estimated Marginal Mean of Recovery Satisfaction against Perceived Justice Levels



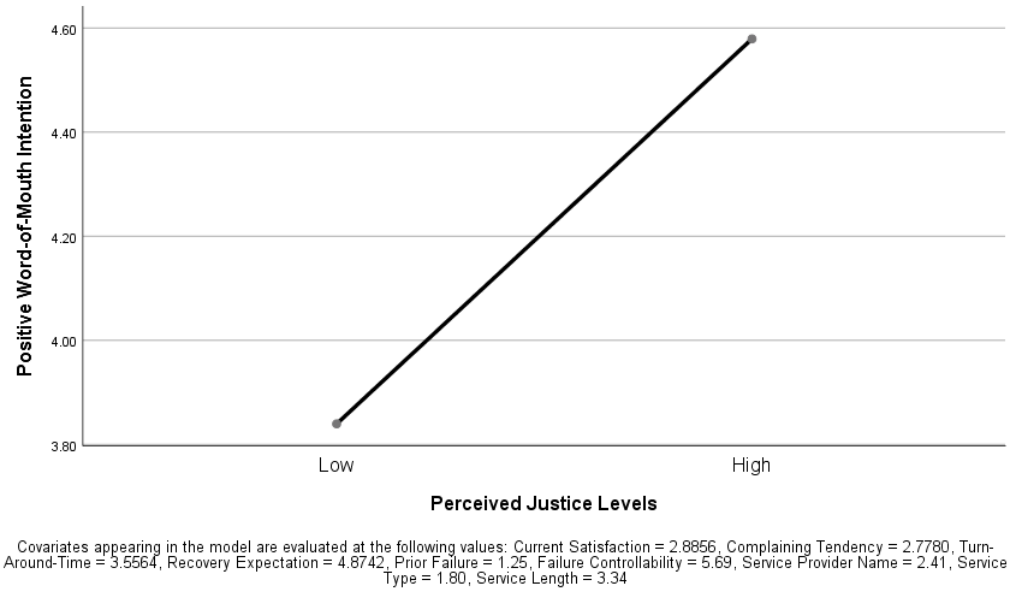
Covariates appearing in the model are evaluated at the following values: Current Satisfaction = 2.8856, Complaining Tendency = 2.7780, Turn-Around-Time = 3.5564, Recovery Expectation = 4.8742, Prior Failure = 1.25, Failure Controllability = 5.69, Service Provider Name = 2.41, Service Type = 1.80, Service Length = 3.34

Figure 5.15 Study 3 Estimated Marginal Mean of Repurchase Intention against Perceived Justice Levels



Covariates appearing in the model are evaluated at the following values: Current Satisfaction = 2.8856, Complaining Tendency = 2.7780, Turn-Around-Time = 3.5564, Recovery Expectation = 4.8742, Prior Failure = 1.25, Failure Controllability = 5.69, Service Provider Name = 2.41, Service Type = 1.80, Service Length = 3.34

Figure 5.16 Study 3 Estimated Marginal Mean of Positive Word-of-Mouth Intention against Perceived Justice Levels



5.3.2.4 Hypotheses Testing

H8a

Hayes' PROCESS macro, model 14, is employed to examine the moderating role of brand authenticity on the relationship between recovery satisfaction and repurchase intention (H8a). Bootstrapping with a sample of 10,000 and confidence interval levels at 95 percentiles is selected, along with the option to mean centre the continuous variables of brand authenticity and recovery satisfaction as they both constitute towards the interaction term.

In this model 14, perceived justice levels serve as the independent variable (X), repurchase intention as the dependent variable (Y), recovery satisfaction as the mediator (M) and brand authenticity as the moderator (W). The findings indicate that the conditional indirect effect in this model is negative and significant as the

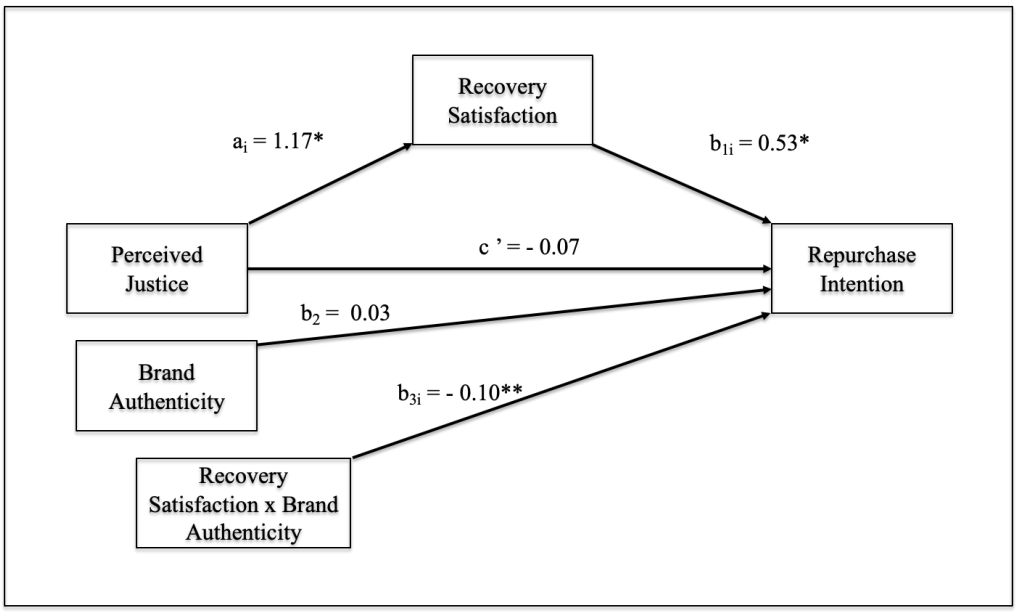
bootstrapped confidence interval of the moderated mediation is statistically different from zero (BootLLCI = -0.21 and BootULCI = -0.03). The findings imply that the indirect effect of perceived justice on repurchase intention through recovery satisfaction is significantly moderated by brand authenticity.

The findings also indicate that the direct effect of perceived justice on repurchase intention is insignificant (b = -0.07, SE = 0.15, p = .66). The effect of perceived justice on repurchase intention is presented in Table 5.43 and the statistical diagram for the path coefficients is presented in Figure 5.17.

Table 5.43 Study 3 Direct and Conditional Indirect Effect of Perceived Justice on Repurchase Intention

Direct					
Effect	se	t	p	LLCI	ULCI
-0.07	0.15	-0.44	0.66	-0.36	0.22
Conditional indirect					
Brand Authenticity		Effect	BootSE	BootLLCI	BootULCI
-SD	-1.26	0.76	0.16	0.47	1.08
Mean	0.00	0.62	0.13	0.38	0.89
+SD	1.26	0.48	0.13	0.25	0.74
Moderated Mediation					
		Index	BootSE	BootLLCI	BootULCI
		-0.11	0.05	-0.21	-0.03

Figure 5.17 Study 3 Statistical Diagram Path (Model 14) for Interaction of Recovery Satisfaction and Brand Authenticity on Repurchase Intention



Note: p < .01 * p < .05 **

The investigation of the interaction confirms that recovery satisfaction significantly interacts with brand authenticity to have an effect on repurchase intention (b = -0.10, SE = 0.04, p < 0.05). There is a significant variance accounted by the interaction (R^2 change = 0.02, F (1,190) = 7.05, p < .05). The results of the spotlight analysis indicate that the confidence interval levels are statistically significant for brand authenticity at three levels - at the mean, and one standard deviation above and below the mean, and that the effect of recovery satisfaction on repurchase intention reduces at increasing levels of brand authenticity. Therefore, it can be deduced that brand authenticity moderates the relationship between recovery satisfaction and repurchase intention in a negative direction.

The next step involves the probing of the conditional effects of recovery satisfaction on repurchase intention at the scale values of brand authenticity, as

this will indicate the value along the measured range of brand authenticity that allows the effect of recovery satisfaction on repurchase intention to transition from insignificant to significant. The Johnson-Neyman technique is therefore utilised to find the exact value of brand authenticity that turns the interaction between brand authenticity and recovery satisfaction on repurchase intention from non-significant to significant, at a significance level of 0.05. This analysis is conducted once again using model 14 specification in Hayes' PROCESS macro, but without the option to mean centre, as it will then provide results of brand authenticity value as per the scale range utilised (1-7).

The Johnson-Neyman analysis indicates that there is no statistically significant value found within the observed range of brand authenticity that turns the interaction from non-significant to significant. Hence, the conditional indirect effect of perceived justice on repurchase intention through recovery satisfaction is significant at all values of brand authenticity.

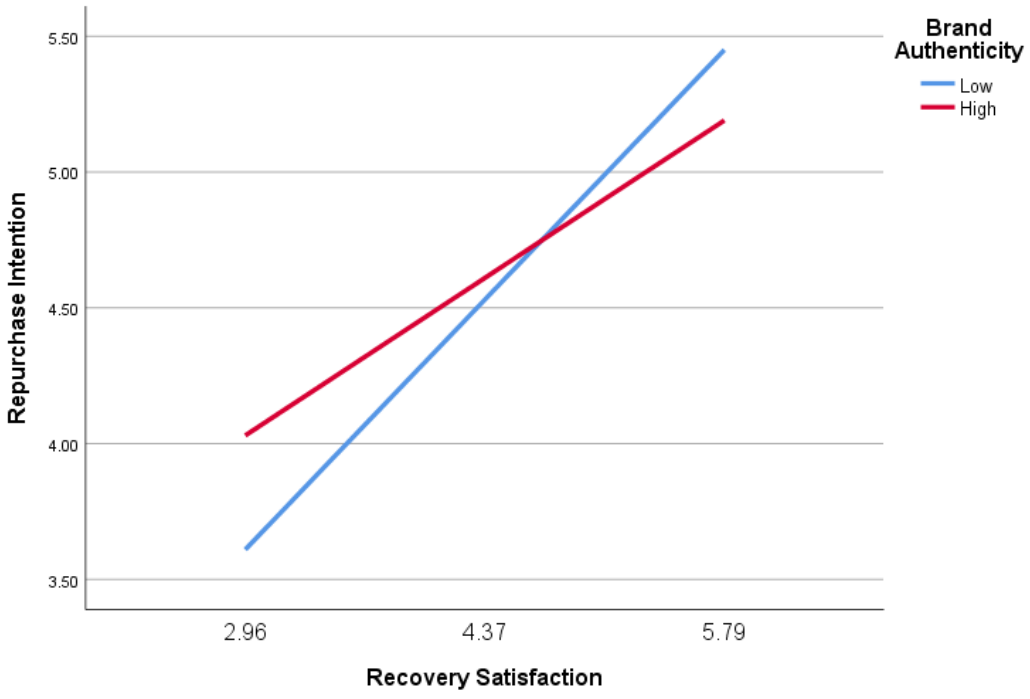
The findings of the analysis thus indicate that brand authenticity is a significant moderator and its effect on the relationship between recovery satisfaction and repurchase intention is negative. H8a, however, posits that brand authenticity will moderate the relationship between recovery satisfaction and repurchase intention such that for consumers with a higher perception of brand authenticity, a higher recovery satisfaction will have a more positive effect on repurchase intention. Thus, H8a is partially supported, in terms of its moderating role, but not in the positive direction hypothesised.

Table 5.44 provides the effect of the interaction of recovery satisfaction and brand authenticity on repurchase intention at levels of brand authenticity while Figure 5.18 presents the effect of recovery satisfaction on repurchase intention at brand authenticity levels of one standard deviation below (low) and above (high) the mean.

Table 5.44 Study 3 Interaction Effect of Recovery Satisfaction and Brand Authenticity on Repurchase Intention at Brand Authenticity Levels

Brand Authenticity	Value	Effect	se	t	p	LLCI	ULCI
-SD	-1.26	0.65	0.08	8.52	0.00	0.50	0.8
Mean	0.00	0.53	0.05	9.77	0.00	0.42	0.64
+SD	1.26	0.41	0.06	6.37	0.00	0.28	0.54

Figure 5.18 Study 3 Effect of Recovery Satisfaction on Repurchase Intention at Brand Authenticity Levels



H8b

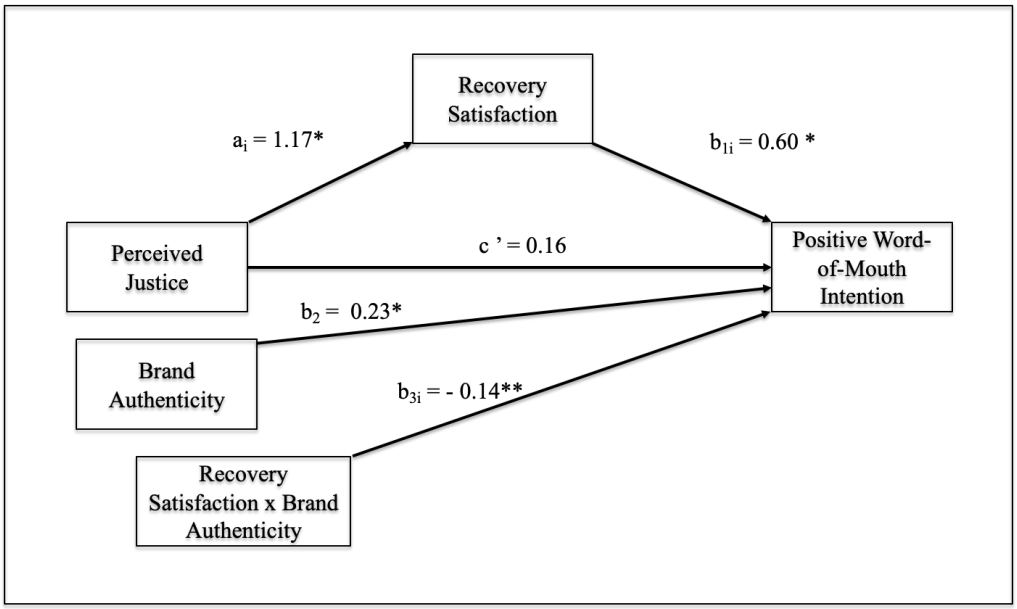
To test H8b, Hayes' PROCESS macro model 14 is again used and all variables remain the same as for H8a testing, except for the dependent variable, Y being positive word-of-mouth intention. The findings first of all indicate that the conditional indirect effect in this model is negative and significant as the bootstrapped confidence interval levels of the moderated mediation are statistically different from zero (BootLLCI = -0.28 and BootULCI = -0.04). The findings imply that the indirect effect of perceived justice on positive word-of-mouth intention through recovery satisfaction is significantly moderated by brand authenticity.

The findings also indicate that the direct effect of perceived justice on positive word-of-mouth intention is insignificant (b = 0.13, SE =0.19, p = .49). The effect of perceived justice on positive word-of-mouth intention is presented in Table 5.45. The statistical diagram for the path coefficients is presented in Figure 5.19.

Table 5.45 Study 3 Direct and Conditional Indirect Effect of Perceived Justice on Positive Word-of-Mouth Intention

Direct					
Effect	se	t	p	LLCI	ULCI
0.13	0.19	0.69	0.49	-0.25	0.51
Conditional indirect					
Brand Authenticity		Effect	BootSE	BootLLCI	BootULCI
-SD	-1.26	0.90	0.18	0.56	1.27
Mean	0.00	0.70	0.15	0.43	1.01
+SD	1.26	0.51	0.15	0.24	0.83
Moderated Mediation					
		Index	BootSE	BootLLCI	BootULCI
		-0.16	0.06	-0.28	-0.04

Figure 5.19 Study 3 Statistical Diagram Path (Model 14) for Interaction of Recovery Satisfaction and Brand Authenticity on Positive Word-of-Mouth Intention



Note: p < .01 * p < .05 **

The investigation of the interaction confirms that brand authenticity significantly interacts with recovery satisfaction to affect positive word-of-mouth intention (b = -0.14, SE = 0.05, p < 0.05). There is a significant variance accounted by the interaction (R^2 change = 0.02, F (1,190) = 8.03, p < .05). The results of the spotlight analysis indicate that the confidence interval levels are statistically significant for brand authenticity at three levels - at the mean, and one standard deviation above and below the mean, and that the effect of recovery satisfaction on positive word-of-mouth intention reduces at increasing levels of brand authenticity. The findings imply that brand authenticity moderates the

relationship between recovery satisfaction and positive word-of-mouth intention negatively.

The next step involves the probing of the conditional effects of recovery satisfaction on positive word-of-mouth intention at the scale values of brand authenticity, as this will demonstrate if there is a value of the brand authenticity that allows the effect of recovery satisfaction on positive word-of-mouth intention to transition from insignificant to significant. The Johnson-Neyman technique is again utilised to find the exact value of brand authenticity that turns the interaction between recovery satisfaction and brand authenticity on positive word-of-mouth intention from non-significant to significant, at a significance level of 0.05. This analysis is conducted using model 14 specification in Hayes' MACRO, but without the selection to mean centre, as it will then provide results of brand authenticity value as per the scale range utilised (1-7).

The Johnson-Neyman analysis indicates that there is no statistically significant value found within the observed range of brand authenticity that turns the interaction from non-significant to significant. Hence, the conditional indirect effect of perceived justice on positive word-of-mouth intention through recovery satisfaction is significant at all values of brand authenticity.

The findings of the analysis thus indicate that brand authenticity is a significant moderator and its effect on the relationship between recovery satisfaction and positive word-of-mouth intention is negative. H8b, however posits that brand authenticity will moderate the relationship between recovery satisfaction and

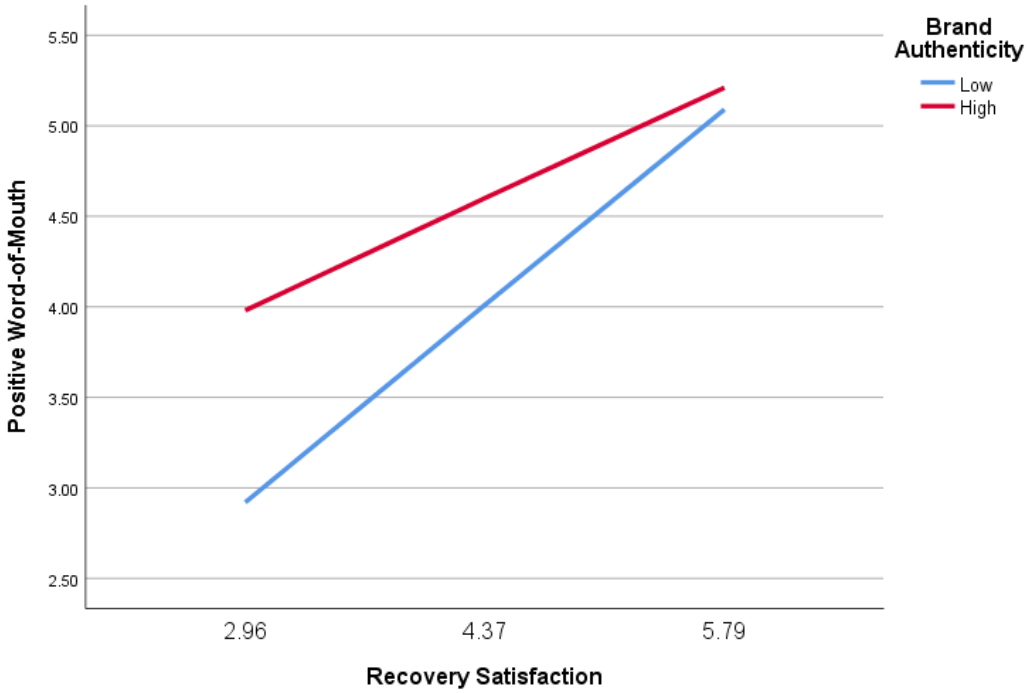
positive word-of-mouth intention such that for consumers with a higher perception of brand authenticity, a higher recovery satisfaction will have a more positive effect on positive word-of-mouth intention. Thus, H8b is partially supported in terms of its moderating role, but not in the positive direction hypothesised.

Table 5.46 presents the effect of the interaction of recovery satisfaction and brand authenticity on positive word-of-mouth intention at levels of brand authenticity while Figure 5.20 depicts the effect of recovery satisfaction on positive word-of-mouth intention at brand authenticity levels of one standard deviation below (low) and above (high) the mean.

Table 5.46 Study 3 Interaction Effect of Recovery Satisfaction and Brand Authenticity on Positive Word-of-Mouth Intention at Brand Authenticity Levels

Brand Authenticity	Value	Effect	se	t	p	LLCI	ULCI
-SD	-1.26	0.77	0.10	7.70	0.00	0.57	0.96
Mean	0.00	0.60	0.07	8.45	0.00	0.46	0.74
+SD	1.26	0.43	0.08	5.15	0.00	0.27	0.60

Figure 5.20 Study 3 Effect of Recovery Satisfaction on Positive Word-of-Mouth Intention at Brand Authenticity Levels



5.3.3 Study 3 Discussion

Study 3 is conducted to answer the final question for the moderating role of brand authenticity on the relationship between recovery satisfaction and behavioural responses by testing H8a and H8b. Hayes' PROCESS macro, model 14 is utilised for the analysis. The results firstly suggest that brand authenticity moderates the relationship of recovery satisfaction to both the dependent variables of repurchase intention and positive word-of-mouth intention. The moderating role of brand authenticity is in line with past studies that have found brand authenticity to be a significant moderator (Guèvremont and Grohmann, 2017; Matthews et al., 2020). It is furthermore evident in Study 3 that the effect of recovery satisfaction on the positive behavioural outcomes reduces at

increasing levels of brand authenticity. Even though the interaction of recovery satisfaction and brand authenticity on the positive behaviours is significant, there is no value of brand authenticity indicated at which the interaction turns from insignificant to significant. Thus, H8a and H8b are partially supported in terms of the moderating role of brand authenticity but in a manner opposite as predicted as it was hypothesised that brand authenticity would moderate on the relationship between recovery satisfaction and positive behaviours such that at higher levels of brand authenticity, recovery satisfaction would have a higher positive impact on the behaviours.

The findings of Study 3 are in contrast to past studies that have indicated higher levels of brand authenticity leads to positive behavioural responses (Ilicic and Webster, 2014; Morhart et al., 2015; Shuqair, Pinto and Mattila, 2019; Jiménez-Barreto et al., 2020). The findings of Study 3 could probably be due to the lack of emotional attachment (Kowalczyk and Pounders, 2016), product quality (Cinelli and LeBoeuf, 2020), brand trust (Busser and Shulga, 2019; Portal, Abratt and Bendixen, 2019), and brand involvement (Fritz, Schoenmueller and Bruhn, 2017) as these constructs were indicated as mediators linking perceived brand authenticity to behaviours. In addition, even though consumers perceive the brand to be authentic, the consumption of the brands' services may not assist consumers to achieve self-projection and self-reinforcing assets. Self-projection (Napoli, Dickinson-Delaporte and Beverland, 2016) and self-reinforcing assets (Oh et al., 2019) have been indicated to link brand authenticity to positive behavioural responses.

Study 3 addresses the research question to test for the moderating role of brand authenticity on the relationship between recovery satisfaction and behavioural responses and finds only partial support in terms of its moderating role but not in the direction hypothesised. Therefore, the results of Study 3 provide towards meeting the research objective in determining the role of a brand-related construct as a third variable on the relationship between recovery satisfaction and behavioural intentions. The results of the hypotheses testing are presented in Table 5.47.

Table 5.47 Study 3 Hypotheses Testing Results Summary

Hypotheses	Results
H8a: Brand authenticity will moderate the impact of recovery satisfaction on repurchase intention such that for consumers with a higher (lower) perception of brand authenticity, a higher (lower) recovery satisfaction will have a more (less) positive effect on repurchase intention	Partially supported
H8b: Brand authenticity will moderate the impact of recovery satisfaction on positive word-of-mouth intention such that for consumers with a higher (lower) perception of brand authenticity, a higher (lower) recovery satisfaction will have a more (less) positive effect on positive word-of-mouth intention	Partially supported

5.4 Summary

This chapter firstly introduces the three studies conducted and the background to the experimental approach selected for this study. The three studies aim to address the research questions that are proposed to meet the research objectives, as presented in Chapter 1. The three studies are presented separately within this chapter as in the order of the research questions that each study addresses. Each study has three major sections - method (sample and procedures, measures and analysis employed); findings (manipulation, reliability and validity, main and interaction effects and hypotheses testing); and discussion.

Study 1 highlights the positive relationship among the constructs of service failure and recovery framework including the mediating role of recovery satisfaction. It is also indicated through Study 1 that it is possible to recover from a highly severe failure as the recovery effort perceived as fair can meet the motivation of the consumers in obtaining gain and offsetting losses. Study 1 thus provides towards answering research questions on the direct and indirect relationship of constructs in the service failure and recovery framework including the effect that failure severity levels have on the relationship between perceived justice and recovery satisfaction. Therefore, Study 1 achieves the first research objective of examining the role of failure severity levels within the prevalent service failure and recovery framework.

Study 2 finds that consumers high on attachment anxiety have a higher tendency to repurchase when they are satisfied with the recovery efforts. Study 3 indicates that brand authenticity moderates the relationship of recovery satisfaction to the

behavioural responses but in a negative manner to the hypothesis posited. Study 2 and 3 therefore, provide towards answering the research questions on the moderating role of attachment styles and brand authenticity on the relationship between recovery satisfaction and behavioural intentions. These research questions are derived to meet the second research objective which is to examine the influence of an individual trait of attachment styles and a brand-related construct of brand authenticity as a third variable on the relationship between recovery satisfaction and behavioural intentions.

The next and final chapter, Chapter 6, will present the summary of the study, general discussion based on the findings of the three studies and the implications of the findings from a theoretical, managerial, and methodological perspective. The final chapter concludes with the limitations of the study and draws upon these limitations to present the avenue for future research.

CHAPTER 6: CONCLUSION AND CONTRIBUTIONS

Chapter 5 presented the analyses, findings, and discussion of the hypotheses tested for this study to answer the research questions and meet the research objectives. This final chapter, Chapter 6, thus begins by concluding the study by presenting a summary of the research followed by a general discussion of the findings in relation to the overarching problem statement that leads to the research objective and research questions, as presented in Chapters 1 and 3. The subsequent section then presents the contributions of the study from theoretical, managerial, and methodological perspectives. This is followed by the limitations of the present study and based upon the limitations, recommendations for future studies are detailed.

6.1 Summary of the Study

This study has been undertaken to address the problem statements that are derived from the extant service failure and recovery literature. Firstly, it has been indicated in past studies that the severity of failure can range from low to high (De Matos et al., 2009; Grégoire, Laufer and Tripp, 2010), but most studies of service failure and recovery have addressed failures at a constant or one level (Sreejesh, Anusree and Abhilash, 2019). Therefore, the investigation of failure severity has not received much attention within service failure and recovery

studies (Khamitov, Grégoire and Suri, 2020). In the studies that have examined failures at low and high levels, their impact on the satisfaction of the recovery efforts has been found to be conflicting (Chuang et al., 2012; Bambauer-Sachse and Rabeson, 2015a). As highlighted in the literature review, service failure has affected both consumers and service providers adversely, and the effect is more pronounced with higher severity (Grégoire et al., 2018; Walsh et al., 2019). Hence, the first research objective of this study is to examine the effect that failure severity levels have on the relationship between the perceived justice of the recovery efforts and the resulting recovery satisfaction, within the widely accepted service failure and recovery framework.

Furthermore, it has been found in a small growing body of literature that satisfaction with recovery does not lead consumers to repurchase and engage in positive word-of-mouth (Weun, Beatty and Jones, 2004; Forbes, Kelley and Hoffman, 2005; Chen et al., 2018) even though most studies associate recovery satisfaction with these positive behavioural intentions (Maxham III, 2001; Maxham III and Netemeyer, 2002a; De Matos et al., 2009; Kim, Kim and Kim, 2009; Lin, Wang and Chang, 2011; Cambra-Fierro et al., 2013; Gohary, Hamzelu and Alizadeh, 2016; Jung and Seock, 2017; Liu et al., 2019). It has been suggested that the relationship between recovery satisfaction and behavioural responses are not linear (Weun, Beatty and Jones, 2004), thus moderating factors may better explain consumers' behavioural responses (Baron and Kenny, 1986). More recent studies have examined individual and brand-related factors (Jain and Sharma, 2019; Walsh et al., 2019; Sharifi and Spassova, 2020). Through a review of the extant literature, attachment styles of the

consumer are included as an individual level trait as it can explain consumers' evaluations and behavioural responses as indicated in past studies (Thomson and Johnson, 2006; Park et al., 2010; Mende, Bolton and Bitner, 2013; Japutra, Ekinci and Simkin, 2018; Kordrostami and Kordrostomi, 2019, Japutra, 2020) and has received repeated calls to be investigated within service failure and recovery context (Khamitov, Grégoire and Suri, 2018; Khamitov, Grégoire and Suri, 2020). Perception of brand authenticity is introduced as the brand-related factor into this study as even though it is a relatively new construct, it has been shown to impact behaviours in a growing body of literature (Fritz, Schoenmueller and Bruhn, 2017; Carsana and Jolibert, 2018; Arya et al., 2019; Lehman, O'Connor and Carroll, 2019; Oh et al., 2019; Jiménez-Barreto et al., 2020; Matthews et al., 2020; Srivastava, Dey and Balaji, 2020), and has been found to be a better predictor compared to a well-established construct of brand attachment (Ilicic and Webster, 2014). Thus, the second research objective of this study is to determine the effect that attachment styles and brand authenticity have on consumers' behavioural intentions after service recovery.

Based on the two research objectives, the research questions thus seek to clarify the direct and indirect relationships of perceived justice and consumers' behavioural intentions, before moving on to examine if failure severity levels affect the relationship between perceived justice and recovery satisfaction differently. In addition, this study also considers the questions if attachment styles, and perceived brand authenticity respectively affect consumers' behavioural intentions after service recovery. To address these four research questions, an integrated conceptual framework is proposed to capture the role of

failure severity, attachment styles, and brand authenticity within the predominant service failure and recovery framework (Kim, Kim and Kim, 2009; Kuo and Wu, 2012; Cambra-Fierro et al., 2013). Hypotheses are developed to tests the relationships presented in the framework. Study 1 answers the first two research questions, which are on the direct and indirect relationship between perceived justice and the behavioural responses, through recovery satisfaction (H1-H4b), and the moderating role of failure severity (H5). Study 2 and 3 address the remaining two research questions by investigating the moderating role of attachment styles (H6a-H7b) and brand authenticity (H8a and H8b) respectively on the relationship between recovery satisfaction and behavioural intentions. Three scenario-based experimental studies are conducted to test the hypotheses developed in reference to the research questions, as different variables are being controlled to observe the impact on different outcome variables (Atzmüller and Steiner, 2010). Scenarios depicting failures and recoveries that can occur to users of Malaysian telecommunication services are first developed and pretested. The scenarios are then presented in survey questionnaires to collect responses from mobile phone users through the use of convenience sampling. In Study 1, data is collected from students in private higher educational institutes and employees of private companies are the respondents to Study 2. Paper-and-pencil survey questionnaires are utilised in Study 1 and 2. Study 3 employs an online survey questionnaire link to collect responses on social media and chat groups using a snowballing technique. The dataset is subjected to manipulation checks, confirmatory factor analyses (CFA), and multivariate analysis of covariance (MANCOVA). This is followed by hypotheses testing using Preacher, Rucker and Hayes's (2007) method for

mediation and moderated mediation analyses. The discussion based on the findings of the hypotheses testing in relation to the research questions and research objectives derived from the problem statements is presented next.

6.2 General Discussion of the Study

The purpose of Study 1 is to address the research questions on the direct and indirect relationship between perceived justice and behavioural responses (H1-H4b) and if failure severity of low and high levels may affect the relationship between perceived justice and recovery satisfaction differently (H5). Study 1 firstly tests for the direct and indirect relationships through H1-H4b and find evidence of a positive relationship among the constructs of perceived justice, recovery satisfaction, and the positive behavioural intentions, including on the mediating role of recovery satisfaction between perceived justice and behavioural intentions. According to justice theory (Adams, 1963), the better the recovery efforts, the higher the satisfaction and the consequent positive behavioural intentions as the inequity caused by the service failure is restored through the recovery efforts as indicated in past studies (Hazée, Van Vaerenbergh and Armirotto, 2017; Jung and Seock, 2017; La and Choi, 2019; Yani-de-Soriano et al., 2019). Study 1 thus finds support to the hypothesised relationships among the widely investigated constructs of service failure and recovery framework, hence also qualifying the framework. Therefore, it provides towards answering the first research question on the direct and indirect relationship between perceived justice and behavioural responses.

Study 1 also addresses the second research question if levels of failure severity affect the relationship between perceived justice and recovery satisfaction differently. It is indicated through the testing of H5, that at a high failure severity level, a recovery perceived high on fairness leads to higher satisfaction with the recovery. In contrast, the perceived justice of the recovery effort does not lead to satisfaction with the recovery at a low level of failure severity. Regulatory focus theory (Higgins, 1997) accounts for these findings as it states that consumers' motivation to offset losses and to receive gains increases in tandem with the severity of the failure. A well-implemented recovery effort, at high levels of failure severity, is thus able to offset the higher losses experienced, leading to satisfactory evaluation of the recovery efforts, similar to the outcome based on the studies conducted by Bambauer-Sachse and Rabeson (2015a, 2015b). On the other hand, Study 1 finds that there is an insignificant relationship between perceived justice and recovery satisfaction at low levels of failure severity which is in contrast to other studies that have found a positive association between recovery efforts and recovery satisfaction at low levels of failure severity (Liao, 2007; McCollough, 2009; Chuang et al., 2012). This can be again accounted for by regulatory focus theory which proposes that when consumers perceive the failure to be lower in severity, the losses experienced through the failure is low, hence, the motivation to obtain gains through the recovery is low as well.

Therefore, in clarifying the second research question, Study 1 finds that failure severity levels affect the relationship between perceived justice of recovery efforts and recovery satisfaction differently, where the relationship is positive and significant at high levels of failure severity and insignificant at low levels of

failure severity. Therefore, through the hypotheses testing, Study 1 has answered the research questions and achieve its aim to examine failure severity as a moderator on the relationship between perceived justice and recovery satisfaction within the prevalent framework of service failure and recovery. By doing so, Study 1 addresses the problem statement on the lack of studies that have investigated failure severity levels (Sreejesh, Anusree and Abhilash, 2019; Khamitov, Grégoire and Suri, 2020) and on the inconsistent findings evidenced by the studies that have analysed failure severity levels as a moderator (Chuang et al., 2012; Bambauer-Sachse and Rabeson, 2015a).

Study 2 and 3 are conducted to answer the third and fourth research questions, which are on the presence of a third variable in the form of an individual trait and a brand-related construct that positively affects the relationship between recovery satisfaction and behavioural intentions within the service failure and recovery framework. Attachment styles in Study 2 (H6a-H7b) and brand authenticity in Study 3 (H8a-H8b) are examined for their effect on the relationship between recovery satisfaction and consumers' behavioural intentions. The hypotheses testing in Study 2 indicate that out of the two dimensions of attachment styles, namely attachment anxiety and attachment avoidance, only attachment anxiety positively affects the relationship between recovery satisfaction and behavioural intention of repurchase (H6a). Therefore, consumers satisfied with the recovery efforts have a higher tendency to repurchase when their attachment anxiety is high. The findings are in line with the tenets of attachment theory, which states that highly anxious consumers desire for relational intimacy will lead to a higher intention to remain with the

service provider and is consistent with findings of past studies (Vlachos et al., 2010; Kim et al., 2018). However, attachment anxiety has no effect on positive word-of-mouth intention upon satisfaction with the recovery efforts, which can be attributed to the lack of emotional attachment (Vlachos et al., 2010). Attachment anxiety differs from emotional attachment which entails passion, positive evaluation, and declaration of love for the service provider (Carroll and Ahuvia, 2006). Therefore, even if attachment anxiety is high, a lack of emotional attachment especially for telecommunication service, which is a utilitarian service may explain the tendency of consumers to not engage in positive word-of-mouth. Attachment avoidance does not affect the positive behavioural intentions because attachment theory explains that these individuals are more predisposed to distance themselves from relationships. This finding is supported by the extant literature that has indicated that avoidance has been linked to negative behaviours instead (Japutra, Ekinci and Simkin, 2018).

The results of the hypotheses testing in Study 3 indicate that brand authenticity negatively affects consumers' positive behavioural intentions post-recovery satisfaction, which is in contrast to past studies that have found positive outcomes when consumers perceive brand authenticity to be higher (Oh et al., 2019; Jiménez-Barreto et al., 2020). Semiotics theory provides towards understanding how consumers arrive at the perception of brand authenticity (Morhart et al., 2015). Consumer touchpoints with the service provider are the basis upon which consumers apply the semantic relational cues to arrive at a perception of brand authenticity (Morhart et al., 2015). Therefore, it may be vital to understand how these touchpoints enhance or impede the perception of brand

authenticity along with how emotional attachment (Kowalczyk and Pounders, 2016), product quality perception (Cinelli and LeBoeuf, 2020), brand trust (Busser and Shulga, 2019; Portal, Abratt and Bendixen, 2019), and brand involvement (Fritz, Schoenmueller and Bruhn, 2017) influence the effect that brand authenticity has on behaviours. Furthermore, it may also be possible that even though consumers perceive the brand to be authentic, they may not require authenticity in consumption (Arnould and Price, 2000). In addition, if the consumption of authentic services does not lead to achieving self-reinforcing assets, which is through the motivational goals of enticing-the-self, enriching-the-self and enabling-the-self, it may impede the effect that perceived brand authenticity can have on behavioural responses (Oh et al., 2019).

Study 2 and 3 thus answer the research questions that are formulated to address the objective of examining the effects of a third variable on the relationship between recovery satisfaction and behavioural intentions. The findings of Study 2 and 3 provide evidence that the relationship between recovery satisfaction and behavioural intentions is not linear as advocated by Weun, Beatty and Jones (2004), as attachment anxiety in consumers is found to affect this relationship such that highly anxious consumers have higher tendency to repurchase when they are satisfied with the recovery efforts. Brand authenticity is also found to influence the relationship between recovery satisfaction and positive behavioural intentions, albeit negatively. Therefore, Study 2 and 3 indicate the influence of a third variable to explain the outcome of past studies that have found recovery satisfaction does not lead to positive behavioural intentions

(Weun, Beatty and Jones, 2004; Forbes, Kelley and Hoffman, 2005; Chen et al., 2018).

6.3 Contributions of the Study

6.3.1 Theoretical Contributions

There are four contributions that this study makes from a theoretical perspective. Firstly, it is necessary to include failure severity levels within the service failure and recovery framework as this study highlight that failure severity of low and high levels impact the recovery satisfaction differently. A well-implemented recovery effort can offset the effect of higher severity and lead to a satisfactory evaluation of the recovery efforts. On the other hand, this study finds that when the severity of failure is low, a well or poorly implemented recovery effort does not make a difference in recovery satisfaction. This study contributes by providing further support that recovery satisfaction can be attained in the presence of high severity, contradicting the findings of most studies (Weun, Beatty and Jones, 2005; Chuang et al., 2012; Balaji and Sarkar, 2013) but supporting the findings of a few studies (Bambauer-Sachse, 2015a, 2015b). Thus, this study enriches the understanding of the effect of failure severity levels on recovery satisfaction and suggests its necessity to be examined within the service failure and recovery framework as it has not received much attention before (Sreejesh, Anusree and Abhilash, 2019; Khamitov, Grégoire and Suri, 2020).

Secondly, the individual trait of attachment styles is introduced into the service failure and recovery framework to understand how this trait, as a third variable, influences behaviours upon recovery satisfaction, as prior studies have indicated that consumers do not engage in positive behaviours even if they are satisfied with the recovery efforts (Weun, Beatty and Jones, 2004; Forbes, Kelley and Hoffman, 2005; Chen et al., 2018). This study finds that consumers high on attachment anxiety display a higher tendency to remain with the service provider when they are satisfied with the recovery, thus confirming the presence of a third variable and providing empirical evidence to a growing body of literature that has found attachment styles to impact consumption behaviour (Mende, Bolton and Bitner, 2013; Kordrastami and Kordrastami, 2019; Mende et al., 2019). Furthermore, attachment styles are investigated as a moderator on the relationship between recovery satisfaction and behavioural intentions within service failure and recovery context. Thus, it enriches the literature on the mechanism and context within which attachment styles can impact consumer behaviour.

Thirdly, this study incorporates the brand-related factor of brand authenticity in the service failure and recovery framework to understand the dynamic behaviour of consumers in recovery efforts. This study investigates brand authenticity as a moderator, similar to Guèvremont and Grohmann (2017) and Matthews et al. (2020), within service failure and recovery framework, using the scales developed by Morhart et al. (2015). The findings indicate that brand authenticity is a significant moderator and is captured through the measurement scale proposed by Morhart et al. (2015), among the various scales that have been

recently introduced for perceived brand authenticity. This study contributes to the emerging body of literature on brand authenticity by testing the construct in a utilitarian service context and a developing economy.

Fourthly, the application of the four underpinning theories, namely, justice theory, regulatory focus theory, attachment theory, and semiotics theory is vital in this study to capture the complex relationship between service failure and consumer responses in the event thereof. Justice theory (Adams, 1963) is instrumental in explaining consumers' evaluation of the fairness of the recovery efforts leading to recovery satisfaction and positive behavioural responses as indicated in past studies (La and Choi, 2019; Yani-de-Soriano et al., 2019). Regulatory focus theory (Higgins, 1997) provides the basis for consumers' higher motivation to obtain benefits or gains through the recovery effort with increasing severity level, as evident in the studies by Bambaeur-Sachse and Rabeson (2015a, 2015b). In this study, attachment theory (Bowlby, 1973, cited in Simpson, 1990) thus explains how the inherent anxiety influence consumer behaviour, in line with past studies (Mende, Bolton and Bitner, 2013; Kim et al., 2018). Semiotics theory (Peirce, 1931-1958, cited in Mick, 1986), through the indexical, iconic and symbolic semantic relations (Grayson and Martinec, 2004; Morhart et al., 2015), provide the basis upon which consumers form a perception of brand authenticity. The perception of brand authenticity is found in this study to impact consumer behaviour upon service failure and recovery, as indicated by other studies (Shuqair, Pinto and Mattila 2019; Jiménez-Barreto et al., 2020). Thus, these theories play important roles in developing the integrated framework in this study. An integrated framework is indicated to be necessary for this study

to capture consumers' dynamic and complex behaviours and with theories that explain the behaviours. Thus, this study provides a robust framework that can be further tested within another context.

6.3.2 Managerial Contributions

From a managerial perspective, there are three main contributions. Firstly, the findings of this study suggest that it is possible for service providers to recover from a highly severe failure, as also found by Bambauer-Sachse and Rabeson (2015a, 2015b). Thus, managers need to detect the perception of failure severity, as advocated by Liu et al. (2019), to design and implement recovery that restores consumers satisfaction. Satisfaction with recovery efforts lead consumers to repurchase and engage in positive word-of-mouth. On the other hand, managers may not need to engage in extensive recovery efforts when failure is perceived as low in severity, as this study finds that consumers' expectation for recovery is low to non-existent. These findings are important as failures lower in severity may occur more than highly severe failures. Thus, once managers understand how consumers perceive the severity of the failure, these managers will be able to allocate the resources for the recovery cost-effectively to satisfy the consumers. Such insights may be useful as it has been found through data from leading service companies such as Xerox and Federal Express that recovery costs about 25–30 percent of sales revenue and that typically around 70 percent of the recovery efforts are misdirected as they are either not implemented or the recovery is implemented beyond what is expected (Zhu, Sivakumar and Parasuraman, 2004).

The second contribution is that managers would benefit by segmenting consumers according to their attachment styles, especially as this study finds that attachment anxiety affects behavioural responses. Mende, Bolton and Bitner (2013) have called for the segmentation of consumers which can be achieved by implementing simple questions during sign-up or training employees to observe consumers. As consumers high on attachment anxiety desire relational intimacy, they can be targeted for relationship marketing that focuses on relationship building (Mende, Bolton and Bitner, 2013). On the other hand, avoidant consumers can be targeted for similar marketing efforts, but instead of focusing on relationship building, the strategy can be directed towards rewards and incentives as they tend to view service providers from a purely transactional basis and appreciate economic benefits as a result (Thomson and Johnson, 2006; Mende and Bolton, 2011; Mende, Bolton and Bitner, 2013). In addition, as highly anxious consumers display a desire to maintain the relationship with service providers, these consumers can be targeted for cross-selling and upselling. Marketing research firms can capitalise on the distinct traits evidenced by attachment anxiety and attachment avoidance and ensure that their databases of users capture attachment styles that match the requirements of their clients with certain attachment styles.

Thirdly, brand managers benefit from understanding how consumers perceive brand authenticity as this study finds that brand authenticity affects consumer behaviours upon recovery satisfaction. However, as this study finds that perception of brand authenticity negatively affects the positive behaviours,

managers need to focus on factors that impede and promote the perception of brand authenticity. For instance, managers' efforts can be directed on touchpoints that serve to increase emotional attachment (Kowalczyk and Pounders, 2016), product quality (Cinelli and LeBoeuf, 2020), brand trust (Busser and Shulga, 2019; Portal, Abratt and Bendixen, 2019), and brand involvement (Fritz, Schoenmueller and Bruhn, 2017) as these are the basis upon which consumers' perception of brand authenticity leads to positive behaviours. An understanding of how perceived brand authenticity aid consumers to achieve positive self-reinforcing assets (Oh et al., 2019) can also induce positive behaviours towards the service provider brand. Drawing upon the importance of brand authenticity, consulting firms, on the other hand, can offer services to position their clients' brand authenticity and marketing research firms can add brand authenticity determination in their portfolio services.

6.3.3 Methodological Contributions

This research provides two important methodological contributions. Firstly, the nomological validity of constructs is evidenced by the three studies. Nomological validity is achieved when constructs are substantiated across business settings and time to validate the previous studies (Carrillo, Svenson and Otero-Neira, 2019). Each of this study tests the constructs of perceived justice, recovery satisfaction, and behavioural responses, which are the prevalent constructs of service failure and recovery, through different samples and sampling procedures. In Study 1, paper-and-pencil survey questionnaires are provided to students at private universities recruited through convenience

sampling. In Study 2, a paper-and-pencil survey questionnaire is also provided, but to employees in private companies recruited through convenience sampling. In Study 3, an online questionnaire link is posted on social media platforms and in group chats and respondents are recruited through snowballing methods. The three studies conducted thus give nomological validity to the constructs.

Secondly, Studies 1-3 employ Hayes, Preacher, and Rucker (2007) mediation and moderated mediation analysis method through the use of Hayes (2018) PROCESS macro. The use of the macro allows for the examination of the direct, indirect, and conditional indirect effect for the proposed relationships within the service failure and recovery framework. Furthermore, the results are interpreted systematically as advocated by Hayes (2018) and Borau et al. (2015), which yield sound findings and allows for an in-depth discussion that contributes to the literature.

6.4 Limitations and Recommendations for Future Research

There are limitations to this study. Firstly, this study is experimental in approach and utilises scenarios presented in a survey questionnaire to elicit responses from mobile phone users. Although the use of scenarios is associated with the advantages of reducing recall bias (Smith and Bolton, 2002), controlling the effect of "noise" variables (Bitner, Booms and Tetreault, 1990) and ensure high internal reliability and validity (Wen and Chi, 2013), these are at the expense of external validity (Van Vaerenbergh, Larivière and Vermeir, 2012). Thus, a longitudinal study may be able to offset the problem associated with external

validity (Van Vaerenbergh, Larivière and Vermeir, 2012). Other methods of data collection such as interviews and surveys to obtain the retrospective recall of service failures experienced by consumers could also be utilised in future studies. Through these methods, the actual impact on recovery satisfaction and the behavioural responses could be further investigated.

From the perspective of sampling, the use of student samples in Study 1 is well justified drawing upon past studies of service failure and recovery (Ok, Shanklin and Back, 2008). Student samples are also appropriate as it reflects the younger and growing base of telecommunication services. However, future studies may consider the use of a sample that reflects the demographics of the customer-base more closely and could compare it to a student sample which would aid in generalisability (Greenberg, 1987).

Study 1 finds that high recovery satisfaction is evinced at high failure severity levels, thus future studies can examine if a service recovery paradox exists. The severity of failure has been indicated as a factor that can impede the service recovery paradox (Magnini et al., 2007) thus the investigation has been highlighted by scholars (McCollough, 2009; Khamitov, Grègoire and Suri, 2020). Hence, the inclusion of measures for prior satisfaction and overall post-recovery satisfaction in future studies can determine the occurrence of a recovery paradox (McCollough, 2009) and address the call that has been made by scholars to investigate this phenomenon.

Furthermore, the findings of Study 2 indicate that attachment anxiety impacts repurchase intention, however, not on positive word-of-mouth intention. In addition, Study 2 highlights that attachment avoidance does not affect repurchase and positive word-of-mouth intentions. Therefore, it may be necessary for future studies to include measures of emotional attachment (Vlachos et al., 2010) and product and service positioning (Mende et al., 2019) as they have been found to promote the effect of attachment anxiety on word-of-mouth. Future research could also shed more light on the impact that attachment anxiety and attachment avoidance can have on both positive and negative behaviours of consumers upon service failure and recovery as past studies have indicated attachment avoidance to have an impact on consumers' negative behaviours such as revenge, and avoidance (Thomson, Whelan and Johnson, 2012; Japutra, Ekinci and Simkin, 2018; Kordrostami and Kordrostami, 2019). Furthermore, it may also be interesting to examine the effect that the interaction among these two dimensions, leading to the four types of attachment styles – secure, fearful-avoidant, dismissing avoidant, and preoccupied (Bartholomew and Horowitz, 1991) can have on the behavioural responses.

In Study 3, brand authenticity moderates the relationship between recovery satisfaction and behaviours, but negatively. Past studies have indicated that brand authenticity positively impacts behaviours through emotional attachment (Kowalczyk and Pounders, 2016), product quality (Cinelli and LeBoeuf, 2020), brand trust (Busser and Shulga, 2019; Portal, Abratt and Bendixen, 2019), and brand involvement (Fritz, Schoenmueller and Bruhn, 2017). Consumer relevant constructs of self-projection (Napoli, Dickinson-Delaporte and Beverland, 2016)

and self-reinforcing assets (Oh et al., 2019) were also instrumental in the link between perceived brand authenticity and behavioural responses. Thus, future studies may include the aforementioned constructs to better account for the impact that brand authenticity perception can have on behaviours. This study utilises the scale by Morhart et al. (2015), which has been developed within a European context and adopted by several studies (Carsana and Jolibert, 2018; Portal, Abratt and Bendixen, 2019; Chen et al., 2020; Cinelli and LeBoeuf, 2020). However, as cautioned by Napoli, Dickinson-Delaporte and Beverland (2016), it is vital that the scales of brand authenticity be used within the context that they are created. Thus, future studies may utilise other measurement scales that closely reflects the context of the study to rightly capture the perception of brand authenticity.

Finally, it may be noteworthy to apply the integrated framework consisting of failure severity of varying levels along with attachment styles and brand authenticity within a different service context or within a hedonic service or product as this study was conducted within a utilitarian service setting.

6.5 Summary

In summary, this study meets the research objectives through the research questions that lead to the testing of the hypothesised relationship between perceived justice, recovery satisfaction, and behavioural responses, and the moderating effect of failure severity, attachment styles, and brand authenticity. This study examines the moderating effect of severity within the prevalent

service failure and recovery framework and indicates that the relationships among the prevalent constructs are positive, and that failure severity also positively affects the relationship between perceived justice and recovery satisfaction. The findings address the overarching research problem in terms of the lack of studies investigating failure severity and the evident conflicting findings on the effect that severity levels have on recovery satisfaction among the several studies that have examined failure severity levels.

In addition, this study also highlights the effects of a third variable, the individual trait of attachment styles and the brand-related variable of brand authenticity, that affect consumers behavioural responses upon satisfaction with recovery efforts. The presence of the third variable thus clarifies the overarching research problem on why consumers do not engage in positive behaviours upon satisfaction with the recovery efforts. The findings of the three studies thus provide further insight into the role of failure severity and the presence of a third variable within the widely accepted service failure and recovery framework. An integrated service failure and recovery framework are evident to capture and explain the complex and dynamic nature of consumer behaviour upon service failure and recovery context. This study thus advances knowledge for researchers and practitioners for better insight into service failure and recovery management.

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APPENDICES

Appendix 1: Study 1 Questionnaire

An Experiment on the role of Failure Severity and Perceived Justice on Recovery Satisfaction, Repurchase, and Word-of-Mouth Intention

Information for Research Participants

Thank you for agreeing to participate in this research. Your participation in this research is voluntary, and you may change your mind about being involved in the research at any time, and without giving a reason. This information page is designed to give you full details of the research project, its goals, the research team, the research funder, and what you will be asked to do as part of the research. If you have any questions that are not answered by this information page, please ask.

Survey Questionnaire
I am a self-funded doctoral student in the Nottingham University Business School in University of Nottingham Malaysia. I am conducting a research on service failure within telecommunication industry, the perceived fairness in the recovery efforts and its effect on customers' recovery satisfaction, repurchase, and word-of-mouth intention. Service failure scenario will be presented, and you will be requested to imagine yourself to be the customer experiencing the incident with the telecommunication service provider. We are interested in your rating of the intensity of the service failure, your personal perception of the service providers' efforts to resolve the service failure experienced, your satisfaction of the recovery efforts and your consequent repurchase and word-of-mouth intention following that.

You are participating in this survey questionnaire, as you have voluntarily signed up for this through the survey invitation. This survey consists of three (3) parts. First part asks of your telecommunication service type and complaining tendencies, second part contains the scenario and questions pertaining to the scenario. The third part consists of basic demographic questions. It should take no longer than 20 minutes to complete the entire survey. As a token of appreciation for your participation, you will receive a food voucher worth RM10.

Data is collected for academic purposes only; all responses will remain strictly confidential. Data collected will be analyzed to produce aggregate statistics only, and the results will be presented only in summary form in the thesis. This then will be used as a basis to discuss the hypotheses that forms this research.

Contact details
Researcher: Sarabjit Kaur a/p Randhir Singh, + 6012 6908470, saxsr1@nottingham.edu.my, 1856, Jalan E 5/9, Taman Ehsan, 52100 Kepong, Kuala Lumpur
Supervisor: Professor Ong Fon Sim, +6 (03) 8924 8200, fonsim.ong@nottingham.edu.my, University of Nottingham Malaysia, Jalan Broga, 43500 Semenyih, Selangor

Complaint procedure
This study has been approved by the Research Ethics Committee (REC) of Nottingham University Business School (NUBS) and the reference number is NUBS-REC-2019-007. If you wish to complain about the way in which the research is being conducted or have any concerns about the research then in the first instance please contact the supervisor, Professor Ong Fon Sim. Otherwise, please contact the NUBS REC.

Research Ethics Committee
Nottingham University Business School
The University of Nottingham Malaysia Campus
Jalan Broga 43500 Semenyih
Selangor Darul Ehsan, Malaysia
Email: nubs-rec@nottingham.edu.my

IMPORTANT:
Please tick to indicate that you have read the above and voluntarily agree to participate in this study. ☐

Part 1: Your Current Telecommunication Service Profile and Complaining Nature

Q1. Please indicate if you are a currently an existing customer of a telecommunication service provider

- ○ Yes (0)
- ○ No (1)

Q2. Please state the name of your current telecommunication service provider (e.g. Maxis, Celcom).

_____

Q3. Please indicate type of service currently subscribed from your service provider.

- ○ Prepaid (1)
- ○ Postpaid (2)

Q4. Please indicate the length of your relationship with your current service provider.

- ○ Less than a year (1)
- ○ 1 – 3 years (2)
- ○ 4 – 6 years (3)
- ○ 7 - 9 years (4)
- ○ More than 9 years (5)

Q5. The following statements are about your satisfaction level with your current telecommunication service provider. Please indicate the degree to which you agree or disagree with each of the statements presented below by selecting the most appropriate option on a 7-point scale ranging from 1 (strongly agree) to 7 (strongly disagree).

	1 Strongly agree	2 Agree	3 Somewhat agree	4 Neither agree nor disagree	5 Somewhat disagree	6 Disagree	7 Strongly disagree
Satisfied with the service provider.	○	○	○	○	○	○	○
Choice to purchase this service was a wise one.	○	○	○	○	○	○	○
Did the right thing in choosing this service.	○	○	○	○	○	○	○

Q6. Please indicate if you personally have experienced service failure before with your current telecommunication service provider.

○ Yes (0)

○ No (1)

Q7. The following statements are about your own complaining tendencies. Please indicate the degree to which you agree or disagree with each of the statements presented below by selecting the most appropriate option on a 7-point scale ranging from 1 (strongly agree) to 7 (strongly disagree).

	1 Strongly agree	2 Agree	3 Somewhat agree	4 Neither agree nor disagree	5 Somewhat disagree	6 Disagree	7 Strongly disagree
If there is a service failure, I will complain to the company.	○	○	○	○	○	○	○
If I am dissatisfied with the things I buy, I will complain about them to the shop (or other suppliers) that sold them to me.	○	○	○	○	○	○	○
I do not hesitate to complain if I think it is warranted to do so.	○	○	○	○	○	○	○
Based on my past purchasing experiences, I am likely to complain in the event of dissatisfaction or service failure.	○	○	○	○	○	○	○
I am inclined to complain to the service provider if I am unhappy with a service.	○	○	○	○	○	○	○
I am usually reluctant to complain about service regardless of how bad it is.	○	○	○	○	○	○	○
I am less likely than most people to complain about unsatisfactory service.	○	○	○	○	○	○	○

Part 2: **The following is a scenario. *Please imagine yourself to be the customer* experiencing the *incident* described in the scenario.**

> "Imagine that for the past one week you have been experiencing a drop in the signal strength for both your mobile and data connectivity around your area. You are not a heavy user of mobile and data and managed to get by through the use of free WIFI wherever available. However, it begins to cause you some inconvenience and therefore you contact the customer service centre to complain."

Please proceed to answer the question below:

Q8. The following statements are about how you would personally rate the severity of the problem you experienced in the **scenario** above. Please indicate the degree to which you agree or disagree with each of the statements presented below by selecting the most appropriate option on a 7-point scale ranging from 1 (strongly disagree) to 7 (strongly agree).

	1 Strongly disagree	2 Disagree	3 Somewhat disagree	4 Neither agree nor disagree	5 Somewhat agree	6 Agree	7 Strongly agree
The incident with the service described above is a major problem.	○	○	○	○	○	○	○
The incident that you have encountered with the service is only a small inconvenience in your daily life.	○	○	○	○	○	○	○
The above incident with the service is a major aggravation.	○	○	○	○	○	○	○

Q9. The following statements are about your personal recovery expectation following the failure you have just experienced with your service provider in the **scenario**. Please indicate the degree to which you agree or disagree with each of the statements presented below by selecting the most appropriate option on a 7-point scale ranging from 1 (strongly disagree) to 7 (strongly agree).

	1 Strongly disagree	2 Disagree	3 Somewhat disagree	4 Neither agree nor disagree	5 Somewhat agree	6 Agree	7 Strongly agree
I expect the service provider to do everything in its power to solve the problem.	○	○	○	○	○	○	○
I do not expect the service provider to exert much effort to solve the problem.	○	○	○	○	○	○	○
I expect the service provider to try to make up for the problem.	○	○	○	○	○	○	○

Q10. The following statement is on your own perception of the controllability of the failure you have just experienced with your service provider in the **scenario**. Please indicate the degree to which you agree or disagree with the statement below by selecting the most appropriate option on a 7-point scale ranging from 1 (strongly disagree) to 7 (strongly agree).

	1 Strongly disagree	2 Disagree	3 Somewhat disagree	4 Neither agree nor disagree	5 Somewhat agree	6 Agree	7 Strongly agree
Do you think the service provider could have prevented the problem?	○	○	○	○	○	○	○

Please read the following continuation to the scenario, whereby your service provider responds.

> "The service personnel inform you that the issue is not with the connectivity but must be due to your mobile phone being faulty. He asks you to check the connectivity again using a different phone or with another customer who uses services from similar provider. He insists that you should do that before

Please proceed to answer the questions that follow:

Q11. The following statements are about how you would personally evaluate the time taken to resolve the issue that you experienced with the service provider in the **scenario** you have just read. Please indicate the degree to which you agree or disagree with each of the statements presented below by selecting the most appropriate option on a 7-point scale ranging from 1 (strongly agree) to 7 (strongly disagree).

	1 Strongly agree	2 Agree	3 Somewhat agree	4 Neither agree nor disagree	5 Somewhat disagree	6 Disagree	7 Strongly disagree
The service provider was quick to resolve my problem.	○	○	○	○	○	○	○
The length of time taken to resolve my problem was longer than necessary.	○	○	○	○	○	○	○

Q12. The following statements are about how you would personally evaluate the compensation received from the service provider in the **scenario** you have just read. Please indicate the degree to which you agree or disagree with each of the statements presented below by selecting the most appropriate option on a 7-point scale ranging from 1 (strongly disagree) to 7 (strongly agree).

	1 Strongly disagree	2 Disagree	3 Somewhat disagree	4 Neither agree nor disagree	5 Somewhat agree	6 Agree	7 Strongly agree
Considering the trouble caused, the compensation I received from service provider was acceptable.	○	○	○	○	○	○	○
Service provider took good compensation measures to solve the problem.	○	○	○	○	○	○	○
Service provider's efforts were sufficient to offer a satisfactory compensation.	○	○	○	○	○	○	○
I think service provider was quite fair when compensating me for the problem that occurred.	○	○	○	○	○	○	○
In general, service provider was able to compensate me adequately to solve the problems it had in the delivery of the service.	○	○	○	○	○	○	○

Q13. The following statements are about how you would personally evaluate the service providers' procedures in resolving the problem you have experienced in the **scenario** you have just read. Please indicate the degree to which you agree or disagree with each of the statements presented below by selecting the most appropriate option on a 7-point scale ranging from 1 (strongly disagree) to 7 (strongly agree).

	1 Strongly disagree	2 Disagree	3 Somewhat disagree	4 Neither agree nor disagree	5 Somewhat agree	6 Agree	7 Strongly agree
I think my problem was resolved in the right way.	○	○	○	○	○	○	○
I think the service provider has good policies and practices for dealing with problems.	○	○	○	○	○	○	○
Despite the trouble caused by the problem, the service provider was able to respond adequately.	○	○	○	○	○	○	○
The service provider proved flexible in solving the problem.	○	○	○	○	○	○	○
The service provider tried to solve the problem as quickly as possible.	○	○	○	○	○	○	○

Q14. The following statements are about how you would personally evaluate the interaction between the employee and yourself in solving the problem you have experienced in the **scenario** you have just read. Please indicate the degree to which you agree or disagree with each of the statements presented below by selecting the most appropriate option on a 7-point scale ranging from 1 (strongly disagree) to 7 (strongly agree).

	1 Strongly disagree	2 Disagree	3 Somewhat disagree	4 Neither agree nor disagree	5 Somewhat agree	6 Agree	7 Strongly agree
The employee of service provider showed interest in my problem.	○	○	○	○	○	○	○
The employee of service provider did everything possible to solve my problem.	○	○	○	○	○	○	○
The employee of service provider was honest when dealing with my problem.	○	○	○	○	○	○	○
The employee of service provider proved able and to have enough authority to solve the problem.	○	○	○	○	○	○	○
The employee of service provider dealt with me courteously when solving the problem.	○	○	○	○	○	○	○
The employee of service provider showed interest in being fair when solving the problem.	○	○	○	○	○	○	○
The treatment and communication with service provider's employee to solve the problem were acceptable.	○	○	○	○	○	○	○

Q15. The following statements are about how you would personally evaluate the realism of the **scenario** described above. Please indicate the degree to which you agree or disagree with each of the statements presented below by selecting the most appropriate option on a 7-point scale ranging from 1 (strongly disagree) to 7 (strongly agree).

	1 Strongly disagree	2 Disagree	3 Somewhat disagree	4 Neither agree nor disagree	5 Somewhat agree	6 Agree	7 Strongly agree
The incident in the scenario was believable.	○	○	○	○	○	○	○
I believe that such an incident can happen in real life.	○	○	○	○	○	○	○
It was easy to imagine myself in the role of the customer in the incident.	○	○	○	○	○	○	○

Q16. The following statement is about how you would personally evaluate the comprehension of the **scenario** described above. Please indicate the degree to which you agree or disagree with the statement presented below by selecting the most appropriate option on a 7-point scale ranging from 1 (strongly disagree) to 7 (strongly agree).

	1 Strongly disagree	2 Disagree	3 Somewhat disagree	4 Neither agree nor disagree	5 Somewhat agree	6 Agree	7 Strongly agree
The incident in the scenario described is easy to understand.	○	○	○	○	○	○	○

Following the scenario that you have experienced, please proceed to answer the following:

Q17. The following statements are about how satisfied you personally are with the service providers handling and resolving the problem you have experienced in the **scenario** above. Please indicate the degree to which you agree or disagree with each of the statements presented below by selecting the most appropriate option on a 7-point scale ranging from 1 (strongly disagree) to 7 (strongly agree).

	1 Strongly disagree	2 Disagree	3 Somewhat disagree	4 Neither agree nor disagree	5 Somewhat agree	6 Agree	7 Strongly agree
In my opinion, the service provider provided a satisfactory resolution to my problem on this particular occasion.	○	○	○	○	○	○	○
I am not satisfied with the service providers' handling of this particular problem.	○	○	○	○	○	○	○
Regarding this particular problem, I am satisfied with service provider.	○	○	○	○	○	○	○

Q18. The following statements are about your own intention to continue with your relationship with the service provider upon experiencing the situation in the **scenario** above. Please indicate the degree to which you agree or disagree with each of the statements presented below by circling the most appropriate option on a 7-point scale ranging from 1 (strongly disagree) to 7 (strongly agree).

	1 Strongly disagree	2 Disagree	3 Somewhat disagree	4 Neither agree nor disagree	5 Somewhat agree	6 Agree	7 Strongly agree
In the future, I intend to use the services from this service provider.	○	○	○	○	○	○	○
If I were in the market for additional services, it is likely I would subscribe services from this service provider.	○	○	○	○	○	○	○
In the near future, I will not subscribe to this service provider.	○	○	○	○	○	○	○

Q19. The following statements are about your own intention to spread word-of-mouth after your experience with the service provider as in the **scenario** above. Please indicate the degree to which you agree or disagree with each of the statements presented below by circling the most appropriate option on a 7-point scale ranging from 1 (strongly disagree) to 7 (strongly agree).

	1 Strongly disagree	2 Disagree	3 Somewhat disagree	4 Neither agree nor disagree	5 Somewhat agree	6 Agree	7 Strongly agree
I would recommend this service provider to someone who seeks my advice.	○	○	○	○	○	○	○
I say positive things about this service provider to other people.	○	○	○	○	○	○	○
I would recommend this service provider to others.	○	○	○	○	○	○	○

Part 3: The following are questions on your basic demographic profile.

Q20. Please indicate your gender

- ○ Male (0)
- ○ Female (1)

Q21. Please indicate your age

- ○ below 18 (1)
- ○ 18-24 (2)
- ○ 25-34 (3)
- ○ 35-44 (4)
- ○ 45-54 (5)
- ○ 55-64 (6)
- ○ 65 and above (7)

Q22. Please indicate your highest level of education

- ○ Secondary school or below (1)
- ○ Certificate or Diploma (2)
- ○ Bachelor degree (3)
- ○ Postgraduate degree (4)

Q23. Please indicate your ethnicity

- ○ Bumiputera (1)
- ○ Chinese (2)
- ○ Indian (3)
- ○ Other (4) _____

END OF SURVEY. THANK YOU FOR YOUR RESPONSE.

Appendix 2: Study 2 Questionnaire

An Experiment on the role of Attachment Style on the Relationship between Recovery Satisfaction and Repurchase and Word-of-Mouth Intention

Information for Research Participants

Thank you for agreeing to participate in this research. Your participation in this research is voluntary, and you may change your mind about being involved in the research at any time, and without giving a reason. This information page is designed to give you full details of the research project, its goals, the research team, the research funder, and what you will be asked to do as part of the research. If you have any questions that are not answered by this information page, please ask.

Survey Questionnaire

I am a self-funded doctoral student in the Nottingham University Business School in University of Nottingham Malaysia. I am conducting a research on service failure within telecommunication industry, the perceived fairness in the recovery efforts and its effect on customers' recovery satisfaction, repurchase, and word-of-mouth intention. Service failure scenario will be presented, and you will be requested to imagine yourself to be the customer experiencing the incident with the telecommunication service provider. We are interested in your rating of the intensity of the service failure, your personal perception of the service providers' efforts to resolve the service failure experienced, your satisfaction of the recovery efforts and your consequent repurchase and word-of-mouth intention following that.

You are participating in this survey questionnaire, as you have voluntarily expressed your intention to do so. This survey consists of three (3) main parts. First part asks about your telecommunication service type, view of self and others. Second part consists of the scenario and questions pertaining to the scenario. The third part consists of basic demographic questions. It should take no longer than 20 minutes to complete the entire survey. As a token of appreciation for your participation, you will receive a shopping voucher worth RM10.

Data is collected for academic purposes only; all responses will remain strictly confidential. Data collected will be analyzed to produce aggregate statistics only, and the results will be presented only in summary form.

Contact details

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Complaint procedure

This study has been approved by the Research Ethics Committee (REC) of Nottingham University Business School (NUBS) and the reference number is NUBS-REC-2019-011. If you wish to complain about the way in which the research is being conducted or have any concerns about the research then in the first instance please contact the supervisor, Professor Ong Fon Sim. Otherwise, please contact the NUBS REC.

Research Ethics Committee
Nottingham University Business School
The University of Nottingham Malaysia Campus
Jalan Broga 43500 Semenyih
Selangor Darul Ehsan, Malaysia
Email: nubs-rec@nottingham.edu.my

IMPORTANT:
Please tick to indicate that you have read the above and voluntarily agree to participate in this study. ☐

Part 1: Your Current Telecommunication Service Profile and Complaining Nature

Q1. Please indicate if you are a currently an existing customer of a telecommunication service provider

- ○ Yes (0)
- ○ No (1)

Q2. Please state the name of your current telecommunication service provider (e.g. Maxis, Celcom).

_____

Q3. Please indicate type of service currently subscribed from your service provider.

- ○ Prepaid (1)
- ○ Postpaid (2)

Q4. Please indicate the length of your relationship with your current service provider.

- ○ Less than a year (1)
- ○ 1 – 3 years (2)
- ○ 4 – 6 years (3)
- ○ 7 - 9 years (4)
- ○ More than 9 years (5)

Q5. The following statements are about your satisfaction level with your current telecommunication service provider. Please indicate the degree to which you agree or disagree with each of the statements presented below by selecting the most appropriate option on a 7-point scale ranging from 1 (strongly agree) to 7 (strongly disagree).

	1 Strongly agree	2 Agree	3 Somewhat agree	4 Neither agree nor disagree	5 Somewhat disagree	6 Disagree	7 Strongly disagree
Satisfied with the service provider.	○	○	○	○	○	○	○
Choice to purchase this service was a wise one.	○	○	○	○	○	○	○
Did the right thing in choosing this service.	○	○	○	○	○	○	○

Q6. Please indicate if you personally have experienced service failure before with your current telecommunication service provider.

○ Yes (0)

○ No (1)

Q7. The following statements are about your complaining tendencies. Please indicate the degree to which you agree or disagree with each of the statements presented below by selecting the most appropriate option on a 7-point scale ranging from 1 (strongly agree) to 7 (strongly disagree).

	1 Strongly agree	2 Agree	3 Somewhat agree	4 Neither agree nor disagree	5 Somewhat disagree	6 Disagree	7 Strongly disagree
If there is a service failure, I will complain to the company.	○	○	○	○	○	○	○
If I am dissatisfied with the things I buy, I will complain about them to the shop (or other suppliers) that sold them to me.	○	○	○	○	○	○	○
I do not hesitate to complain if I think it is warranted to do so.	○	○	○	○	○	○	○
Based on my past purchasing experiences, I am likely to complain in the event of dissatisfaction or service failure.	○	○	○	○	○	○	○
I am inclined to complain to the service provider if I am unhappy with a service.	○	○	○	○	○	○	○
I am usually reluctant to complain about service regardless of how bad it is.	○	○	○	○	○	○	○
I am less likely than most people to complain about unsatisfactory service.	○	○	○	○	○	○	○

View of Self and Others

Q8. The following statements are about your view of self. Please indicate the degree to which you agree or disagree with each of the statements presented below by selecting the most appropriate option on a 7-point scale ranging from 1 (strongly disagree) to 7 (strongly agree).

	1 Strongly disagree	2 Disagree	3 Somewhat disagree	4 Neither agree nor disagree	5 Somewhat agree	6 Agree	7 Strongly agree
I worry about being alone.	○	○	○	○	○	○	○
When I'm not involved in a relationship, I feel somewhat anxious and insecure.	○	○	○	○	○	○	○
I worry that the people I have relationships with won't care about me as much as I care about them.	○	○	○	○	○	○	○
My desire to be very close sometimes scares people away.	○	○	○	○	○	○	○
I worry a lot about my relationships.	○	○	○	○	○	○	○

Q9. The following statements are about your view of others. Please indicate the degree to which you agree or disagree with each of the statements presented below by circling the most appropriate option on a 7-point scale ranging from 1 (strongly disagree) to 7 (strongly agree).

	1 Strongly disagree	2 Disagree	3 Somewhat disagree	4 Neither agree nor disagree	5 Somewhat agree	6 Agree	7 Strongly agree
I don't feel comfortable opening up to people in relationships.	○	○	○	○	○	○	○
I get uncomfortable when people in my relationships want to be very close.	○	○	○	○	○	○	○
Just when my relationship partners start to get close to me, I find myself pulling away.	○	○	○	○	○	○	○
I find it difficult to allow myself to depend on the people I have relationships with.	○	○	○	○	○	○	○
I am very comfortable being close to people.	○	○	○	○	○	○	○

Part 2: The following is a scenario. Please imagine **yourself to be the customer** experiencing the incident described in the scenario.

"Imagine that you have just received a SMS from your service provider of a promotion that you can upgrade at no cost from your existing contract to another package that includes unlimited mobile, data and SMS. You decide to take this offer and call the customer service centre. It takes you about five minutes to go through the automated responses before you connect to a customer service employee.

You begin to explain your intention, but the employee interrupts and says that you have connected to the wrong department and that you will need to be transferred to the correct department. However, the line gets cut. You decide to call again but this time you select to connect to the customer service employee to complain."

Please proceed to answer the questions below:

Q10. The following statements are about how you would personally rate the severity of the problem you experienced in the **scenario** above. Please indicate the degree to which you agree or disagree with each of the statements presented below by selecting the most appropriate option on a 7-point scale ranging from 1 (strongly disagree) to 7 (strongly agree).

	1 Strongly disagree	2 Disagree	3 Somewhat disagree	4 Neither agree nor disagree	5 Somewhat agree	6 Agree	7 Strongly agree
The incident with the service described above is a major problem.	○	○	○	○	○	○	○
The incident that you have encountered with the service is only a small inconvenience in your daily life.	○	○	○	○	○	○	○
The above incident with the service is a major aggravation.	○	○	○	○	○	○	○

Q11. The following statements are about your personal recovery expectation following the failure you have just experienced with your service provider in the **scenario**. Please indicate the degree to which you agree or disagree with each of the statements presented below by selecting the most appropriate option on a 7-point scale ranging from 1 (strongly disagree) to 7 (strongly agree).

	1 Strongly disagree	2 Disagree	3 Somewhat disagree	4 Neither agree nor disagree	5 Somewhat agree	6 Agree	7 Strongly agree
I expect the service provider to do everything in its power to solve the problem.	○	○	○	○	○	○	○
I do not expect the service provider to exert much effort to solve the problem.	○	○	○	○	○	○	○
I expect the service provider to try to make up for the problem.	○	○	○	○	○	○	○

Q12. The following statement is on your own perception of the controllability of the failure you have just experienced with your service provider in the **scenario.** Please indicate the degree to which you agree or disagree with the statement below by selecting the most appropriate option on a 7-point scale ranging from 1 (strongly disagree) to 7 (strongly agree).

	1 Strongly disagree	2 Disagree	3 Somewhat disagree	4 Neither agree nor disagree	5 Somewhat agree	6 Agree	7 Strongly agree
Do you think the service provider could have prevented the problem?	○	○	○	○	○	○	○

Please read the following scenario on the response from your service provider

You ask to speak to the manager, and you are transferred immediately. You explain the incident. The manager listens and after you finish says, "We are sorry to hear about your experience. I am going to have to put you on hold please while I check." Within a minute, he comes back on the line and says, "We are pleased to inform that we can upgrade your contract to the new package from our end. Would you like to proceed?"

Please proceed to answer the questions that follow:

Q13. The following statements are about how you would personally evaluate the time taken to resolve the issue that you experienced with the service provider in the **scenario** you have just read. Please indicate the degree to which you agree or disagree with each of the statements presented below by selecting the most appropriate option on a 7-point scale ranging from 1 (strongly agree) to 7 (strongly disagree).

	1 Strongly agree	2 Agree	3 Somewhat agree	4 Neither agree nor disagree	5 Somewhat disagree	6 Disagree	7 Strongly disagree
The service provider was quick to resolve my problem.	○	○	○	○	○	○	○
The length of time taken to resolve my problem was longer than necessary.	○	○	○	○	○	○	○

Q14. The following statements are about how you would personally evaluate the compensation received from the service provider in the **scenario** you have just read. Please indicate the degree to which you agree or disagree with each of the statements presented below by selecting the most appropriate option on a 7-point scale ranging from 1 (strongly disagree) to 7 (strongly agree).

	1 Strongly disagree	2 Disagree	3 Somewhat disagree	4 Neither agree nor disagree	5 Somewhat agree	6 Agree	7 Strongly agree
Considering the trouble caused, the compensation I received from service provider was acceptable.	○	○	○	○	○	○	○
Service provider took good compensation measures to solve the problem.	○	○	○	○	○	○	○
Service provider's efforts were sufficient to offer a satisfactory compensation.	○	○	○	○	○	○	○
I think service provider was quite fair when compensating me for the problem that occurred.	○	○	○	○	○	○	○
In general, service provider was able to compensate me adequately to solve the problems it had in the delivery of the service.	○	○	○	○	○	○	○

Q15. The following statements are about how you would personally evaluate the service providers' procedures in resolving the problem you have experienced in the **scenario** you have just read. Please indicate the degree to which you agree or disagree with each of the statements presented below by selecting the most appropriate option on a 7-point scale ranging from 1 (strongly disagree) to 7 (strongly agree).

	1 Strongly disagree	2 Disagree	3 Somewhat disagree	4 Neither agree nor disagree	5 Somewhat agree	6 Agree	7 Strongly agree
I think my problem was resolved in the right way.	○	○	○	○	○	○	○
I think the service provider has good policies and practices for dealing with problems.	○	○	○	○	○	○	○
Despite the trouble caused by the problem, the service provider was able to respond adequately.	○	○	○	○	○	○	○
The service provider proved flexible in solving the problem.	○	○	○	○	○	○	○
The service provider tried to solve the problem as quickly as possible.	○	○	○	○	○	○	○

Q16. The following statements are about how you would personally evaluate the interaction between the employee and yourself in solving the problem you have experienced in the **scenario** you have just read. Please indicate the degree to which you agree or disagree with each of the statements presented below by selecting the most appropriate option on a 7-point scale ranging from 1 (strongly disagree) to 7 (strongly agree).

	1 Strongly disagree	2 Disagree	3 Somewhat disagree	4 Neither agree nor disagree	5 Somewhat agree	6 Agree	7 Strongly agree
The employee of service provider showed interest in my problem.	○	○	○	○	○	○	○
The employee of service provider did everything possible to solve my problem.	○	○	○	○	○	○	○
The employee of service provider was honest when dealing with my problem.	○	○	○	○	○	○	○
The employee of service provider proved able and to have enough authority to solve the problem.	○	○	○	○	○	○	○
The employee of service provider dealt with me courteously when solving the problem.	○	○	○	○	○	○	○
The employee of service provider showed interest in being fair when solving the problem.	○	○	○	○	○	○	○
The treatment and communication with service provider's employee to solve the problem were acceptable.	○	○	○	○	○	○	○

Q17. The following statements are about how you would personally evaluate the realism of the **scenario** described above. Please indicate the degree to which you agree or disagree with each of the statements presented below by selecting the most appropriate option on a 7-point scale ranging from 1 (strongly disagree) to 7 (strongly agree).

	1 Strongly disagree	2 Disagree	3 Somewhat disagree	4 Neither agree nor disagree	5 Somewhat agree	6 Agree	7 Strongly agree
The incident in the scenario was believable.	○	○	○	○	○	○	○
I believe that such an incident can happen in real life.	○	○	○	○	○	○	○
It was easy to imagine myself in the role of the customer in the incident.	○	○	○	○	○	○	○

Q18. The following statement is about how you would personally evaluate the comprehension of the **scenario** described above. Please indicate the degree to which you agree or disagree with the statement presented below by selecting the most appropriate option on a 7-point scale ranging from 1 (strongly disagree) to 7 (strongly agree).

	1 Strongly disagree	2 Disagree	3 Somewhat disagree	4 Neither agree nor disagree	5 Somewhat agree	6 Agree	7 Strongly agree
The incident in the scenario described is easy to understand.	○	○	○	○	○	○	○

Following the entire scenario that you have experienced, please proceed to answer the following:

Q19. The following statements are about how satisfied you personally are with the service providers handling and resolving the problem you have experienced in the **scenario** above. Please indicate the degree to which you agree or disagree with each of the statements presented below by selecting the most appropriate option on a 7-point scale ranging from 1 (strongly disagree) to 7 (strongly agree).

	1 Strongly disagree	2 Disagree	3 Somewhat disagree	4 Neither agree nor disagree	5 Somewhat agree	6 Agree	7 Strongly agree
In my opinion, the service provider provided a satisfactory resolution to my problem on this particular occasion.	○	○	○	○	○	○	○
I am not satisfied with the service providers' handling of this particular problem.	○	○	○	○	○	○	○
Regarding this particular problem, I am satisfied with service provider.	○	○	○	○	○	○	○

Q20. The following statements are about your own intention to continue with your relationship with the service provider upon experiencing the incident in the **scenario** above. Please indicate the degree to which you agree or disagree with each of the statements presented below by selecting the most appropriate option on a 7-point scale ranging from 1 (strongly disagree) to 7 (strongly agree).

	1 Strongly disagree	2 Disagree	3 Somewhat disagree	4 Neither agree nor disagree	5 Somewhat agree	6 Agree	7 Strongly agree
In the future, I intend to use the services from this service provider.	○	○	○	○	○	○	○
If I were in the market for additional services, it is likely I would subscribe services from this service provider.	○	○	○	○	○	○	○
In the near future, I will not subscribe to this service provider.	○	○	○	○	○	○	○

Q21. The following statements are about your own intention to spread word-of-mouth after your experience with the service provider as in the **scenario** above. Please indicate the degree to which you agree or disagree with each of the statements presented below by selecting the most appropriate option on a 7-point scale ranging from 1 (strongly disagree) to 7 (strongly agree).

	1 Strongly disagree	2 Disagree	3 Somewhat disagree	4 Neither agree nor disagree	5 Somewhat agree	6 Agree	7 Strongly agree
I would recommend this service provider to someone who seeks my advice.	○	○	○	○	○	○	○
I say positive things about this service provider to other people.	○	○	○	○	○	○	○
I would recommend this service provider to others.	○	○	○	○	○	○	○

Part 3: The following are questions on your basic demographic profile.

Q22. Please indicate your gender

- ○ Male (0)
- ○ Female (1)

Q23. Please indicate your age

- ○ below 18 (1)
- ○ 18-24 (2)
- ○ 25-34 (3)
- ○ 35-44 (4)
- ○ 45-54 (5)
- ○ 55-64 (6)
- ○ 65 and above (7)

Q24. Please indicate your highest level of education

- ○ Secondary school or below (1)
- ○ Certificate or Diploma (2)
- ○ Bachelor degree (3)
- ○ Postgraduate degree (4)

Q25. Please indicate your ethnicity

- ○ Bumiputera (1)
- ○ Chinese (2)
- ○ Indian (3)
- ○ Other (4) _____

END OF SURVEY. THANK YOU FOR YOUR RESPONSE.

Appendix 3: Study 3 Questionnaire

An Experiment on the role of Brand Authenticity on the Relationship between Recovery Satisfaction and Repurchase and Word-of-Mouth Intention

Information for Research Participants

Thank you for agreeing to participate in this research. Your participation in this research is voluntary, and you may change your mind about being involved in the research at any time, and without giving a reason. This information page is designed to give you full details of the research project, its goals, the research team, the research funder, and what you will be asked to do as part of the research. If you have any questions that are not answered by this information page, please ask.

Survey Questionnaire

I am a self-funded doctoral student in the Nottingham University Business School in University of Nottingham Malaysia. I am conducting a research on service failure within telecommunication industry, the perceived fairness in the recovery efforts and its effect on customers' recovery satisfaction, repurchase, and word-of-mouth intention. Service failure scenario will be presented, and you will be requested to imagine yourself to be the customer experiencing the incident with the telecommunication service provider. We are interested in your rating of the intensity of the service failure, your personal perception of the service providers' efforts to resolve the service failure experienced, your satisfaction of the recovery efforts and your consequent repurchase and word-of-mouth intention following that.

You are participating in this survey questionnaire, as you have voluntarily clicked on the survey invitation link. This survey consists of three (3) main parts. First part asks about your telecommunication service type, and your perception of your service providers' brand authenticity. Second part consists of the scenario and questions pertaining to the scenario. The third part consists of basic demographic questions. It should take no longer than 20 minutes to complete the entire survey. As a token of appreciation for your participation, you will receive a shopping voucher worth RM10.

Data is collected for academic purposes only; all responses will remain strictly confidential. Data collected will be analyzed to produce aggregate statistics only, and the results will be presented only in summary form.

Contact details

Researcher: Sarabjit Kaur a/p Randhir Singh, + 6012 6908470, saxsr1@nottingham.edu.my, 1856, Jalan E 5/9, Taman Ehsan, 52100 Kepong, Kuala Lumpur
Supervisor: Professor Ong Fon Sim, +6 (03) 8924 8200, fonsim.ong@nottingham.edu.my, University of Nottingham Malaysia, Jalan Broga, 43500 Semenyih, Selangor

Complaint procedure

This study has been approved by the Research Ethics Committee (REC) of Nottingham University Business School (NUBS) and the reference number is NUBS-REC-2019-007. If you wish to complain about the way in which the research is being conducted or have any concerns about the research then in the first instance please contact the supervisor, Professor Ong Fon Sim. Otherwise, please contact the NUBS REC.

Research Ethics Committee
Nottingham University Business School
The University of Nottingham Malaysia Campus
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Selangor Darul Ehsan, Malaysia
Email: nubs-rec@nottingham.edu.my

IMPORTANT:

Please tick to indicate that you have read the above and voluntarily agree to participate in this study. ☐

Part 1: Your Current Telecommunication Service Profile and Complaining Nature

Q1. Please indicate if you are a currently an existing customer of a telecommunication service provider

- ○ Yes (0)
- ○ No (1)

Q2. Please state the name of your current telecommunication service provider (e.g. Maxis, Celcom).

_____

Q3. Please indicate type of service currently subscribed from your service provider.

- ○ Prepaid (1)
- ○ Postpaid (2)

Q4. Please indicate the length of your relationship with your current service provider.

- ○ Less than a year (1)
- ○ 1 – 3 years (2)
- ○ 4 – 6 years (3)
- ○ 7 - 9 years (4)
- ○ More than 9 years (5)

Q5. The following statements are about your satisfaction level with your current telecommunication service provider. Please indicate the degree to which you agree or disagree with each of the statements presented below by selecting the most appropriate option on a 7-point scale ranging from 1 (strongly agree) to 7 (strongly disagree).

	1 Strongly agree	2 Agree	3 Somewhat agree	4 Neither agree nor disagree	5 Somewhat disagree	6 Disagree	7 Strongly disagree
Satisfied with the service provider.	○	○	○	○	○	○	○
Choice to purchase this service was a wise one.	○	○	○	○	○	○	○
Did the right thing in choosing this service.	○	○	○	○	○	○	○

Q6. Please indicate if you personally have experienced service failure before with your current telecommunication service provider.

○ Yes (0)

○ No (1)

Q7. The following statements are about your complaining tendencies. Please indicate the degree to which you agree or disagree with each of the statements presented below by selecting the most appropriate option on a 7-point scale ranging from 1 (strongly agree) to 7 (strongly disagree).

	1 Strongly agree	2 Agree	3 Somewhat agree	4 Neither agree nor disagree	5 Somewhat disagree	6 Disagree	7 Strongly disagree
If there is a service failure, I will complain to the company.	○	○	○	○	○	○	○
If I am dissatisfied with the things I buy, I will complain about them to the shop (or other suppliers) that sold them to me.	○	○	○	○	○	○	○
I do not hesitate to complain if I think it is warranted to do so.	○	○	○	○	○	○	○
Based on my past purchasing experiences, I am likely to complain in the event of dissatisfaction or service failure.	○	○	○	○	○	○	○
I am inclined to complain to the service provider if I am unhappy with a service.	○	○	○	○	○	○	○
I am usually reluctant to complain about service regardless of how bad it is.	○	○	○	○	○	○	○
I am less likely than most people to complain about unsatisfactory service.	○	○	○	○	○	○	○

Brand Authenticity of Your Telecommunication Service Provider

Q8. The following statements are about your own evaluation of your **current** telecommunication service providers' brand authenticity. Please indicate the degree to which you agree or disagree with each of the statements presented below by selecting the most appropriate option on a 7-point scale ranging from 1 (strongly disagree) to 7 (strongly agree).

	1 Strongly disagree	2 Disagree	3 Somewhat disagree	4 Neither agree nor disagree	5 Somewhat agree	6 Agree	7 Strongly agree
Continuity							
A brand with a history	○	○	○	○	○	○	○
A timeless brand	○	○	○	○	○	○	○
A brand that survives time	○	○	○	○	○	○	○
A brand that survives trends	○	○	○	○	○	○	○
Credibility							
A brand that will not betray you	○	○	○	○	○	○	○
A brand that accomplishes its value promise	○	○	○	○	○	○	○
An honest brand	○	○	○	○	○	○	○

(Continues to next page)

	1 Strongly disagree	2 Disagree	3 Somewhat disagree	4 Neither agree nor disagree	5 Somewhat agree	6 Agree	7 Strongly agree
Integrity							
A brand that gives back to its consumers	○	○	○	○	○	○	○
A brand with moral principles	○	○	○	○	○	○	○
A brand true to a set of moral values	○	○	○	○	○	○	○
A brand that cares about its consumers	○	○	○	○	○	○	○
Symbolism							
A brand that adds meaning to people's lives	○	○	○	○	○	○	○
A brand that reflects important values people care about	○	○	○	○	○	○	○
A brand that connects people with their real selves	○	○	○	○	○	○	○
A brand that connects people with what is really important	○	○	○	○	○	○	○

Part 2: **The following is a scenario. *Please imagine yourself to be the customer* experiencing the *incident* described in the scenario.**

"Imagine that you have recently received your bill for this month. You notice that there is a charge of RM3 for Caller Ringtone Service, which is a service that replaces your standard ringing tone that your callers' listens, to the current top songs instead. However, you did not subscribe to this service, but the amount has been debited from your account via your auto-debit arrangement with your service provider. You decide to telephone the customer service centre to complain."

Please proceed to answer the question below:

Q9. The following statements are about how you would personally rate the severity of the problem you experienced in the scenario above. Please indicate the degree to which you agree or disagree with each of the statements presented below by selecting the most appropriate option on a 7-point scale ranging from 1 (strongly disagree) to 7 (strongly agree).

	1 Strongly disagree	2 Disagree	3 Somewhat disagree	4 Neither agree nor disagree	5 Somewhat agree	6 Agree	7 Strongly agree
The incident with the service described above is a major problem.	○	○	○	○	○	○	○
The incident that you have encountered with the service is only a small inconvenience in your daily life.	○	○	○	○	○	○	○
The above incident with the service is a major aggravation.	○	○	○	○	○	○	○

Q10. The following statements are about your personal recovery expectation following the failure you have just experienced with your service provider in the scenario. Please indicate the degree to which you agree or disagree with each of the statements presented below by selecting the most appropriate option on a 7-point scale ranging from 1 (strongly disagree) to 7 (strongly agree).

	1 Strongly disagree	2 Disagree	3 Somewhat disagree	4 Neither agree nor disagree	5 Somewhat agree	6 Agree	7 Strongly agree
I expect the service provider to do everything in its power to solve the problem.	○	○	○	○	○	○	○
I do not expect the service provider to exert much effort to solve the problem.	○	○	○	○	○	○	○
I expect the service provider to try to make up for the problem.	○	○	○	○	○	○	○

Q11. The following statement is on your own perception of the controllability of the failure you have just experienced with your service provider in the scenario. Please indicate the degree to which you agree or disagree with the statement below by selecting the most appropriate option on a 7-point scale ranging from 1 (strongly disagree) to 7 (strongly agree).

	1 Strongly disagree	2 Disagree	3 Somewhat disagree	4 Neither agree nor disagree	5 Somewhat agree	6 Agree	7 Strongly agree
Do you think the service provider could have prevented the problem?	○	○	○	○	○	○	○

Please read the following continuation to the scenario, whereby your service provider responds.

You explain the incident. The employee listens and after you finish says, “We are sorry to hear about your experience. I am going to have to put you on hold please while I check”. Within a minute he comes back on the line and says, “We are pleased to inform that the ringtone service will be cancelled effective

Please proceed to answer the questions that follow:

Q12. The following statements are about how you would personally evaluate the time taken to resolve the issue that you experienced with the service provider in the scenario you have just read. Please indicate the degree to which you agree or disagree with each of the statements presented below by selecting the most appropriate option on a 7-point scale ranging from 1 (strongly agree) to 7 (strongly disagree).

	1 Strongly agree	2 Agree	3 Somewhat agree	4 Neither agree nor disagree	5 Somewhat disagree	6 Disagree	7 Strongly disagree
The service provider was quick to resolve my problem.	○	○	○	○	○	○	○
The length of time taken to resolve my problem was longer than necessary.	○	○	○	○	○	○	○

Q13. The following statements are about how you would personally evaluate the compensation received from the service provider in the scenario you have just read. Please indicate the degree to which you agree or disagree with each of the statements presented below by selecting the most appropriate option on a 7-point scale ranging from 1 (strongly disagree) to 7 (strongly agree).

	1 Strongly disagree	2 Disagree	3 Somewhat disagree	4 Neither agree nor disagree	5 Somewhat agree	6 Agree	7 Strongly agree
Considering the trouble caused, the compensation I received from service provider was acceptable.	○	○	○	○	○	○	○
Service provider took good compensation measures to solve the problem.	○	○	○	○	○	○	○
Service provider's efforts were sufficient to offer a satisfactory compensation.	○	○	○	○	○	○	○
I think service provider was quite fair when compensating me for the problem that occurred.	○	○	○	○	○	○	○
In general, service provider was able to compensate me adequately to solve the problems it had in the delivery of the service.	○	○	○	○	○	○	○

Q14. The following statements are about how you would personally evaluate the service providers' procedures in resolving the problem you have experienced in the **scenario** you have just read. Please indicate the degree to which you agree or disagree with each of the statements presented below by selecting the most appropriate option on a 7-point scale ranging from 1 (strongly disagree) to 7 (strongly agree).

	1 Strongly disagree	2 Disagree	3 Somewhat disagree	4 Neither agree nor disagree	5 Somewhat agree	6 Agree	7 Strongly agree
I think my problem was resolved in the right way.	○	○	○	○	○	○	○
I think the service provider has good policies and practices for dealing with problems.	○	○	○	○	○	○	○
Despite the trouble caused by the problem, the service provider was able to respond adequately.	○	○	○	○	○	○	○
The service provider proved flexible in solving the problem.	○	○	○	○	○	○	○
The service provider tried to solve the problem as quickly as possible.	○	○	○	○	○	○	○

Q15. The following statements are about how you would personally evaluate the interaction between the employee and yourself in solving the problem you have experienced in the **scenario** you have just read. Please indicate the degree to which you agree or disagree with each of the statements presented below by selecting the most appropriate option on a 7-point scale ranging from 1 (strongly disagree) to 7 (strongly agree).

	1 Strongly disagree	2 Disagree	3 Somewhat disagree	4 Neither agree nor disagree	5 Somewhat agree	6 Agree	7 Strongly agree
The employee of service provider showed interest in my problem.	○	○	○	○	○	○	○
The employee of service provider did everything possible to solve my problem.	○	○	○	○	○	○	○
The employee of service provider was honest when dealing with my problem.	○	○	○	○	○	○	○
The employee of service provider proved able and to have enough authority to solve the problem.	○	○	○	○	○	○	○
The employee of service provider dealt with me courteously when solving the problem.	○	○	○	○	○	○	○
The employee of service provider showed interest in being fair when solving the problem.	○	○	○	○	○	○	○
The treatment and communication with service provider's employee to solve the problem were acceptable.	○	○	○	○	○	○	○

Q16. The following statements are about how you would personally evaluate the realism of the scenario described above. Please indicate the degree to which you agree or disagree with each of the statements presented below by selecting the most appropriate option on a 7-point scale ranging from 1 (strongly disagree) to 7 (strongly agree).

	1 Strongly disagree	2 Disagree	3 Somewhat disagree	4 Neither agree nor disagree	5 Somewhat agree	6 Agree	7 Strongly agree
The incident in the scenario was believable.	○	○	○	○	○	○	○
I believe that such an incident can happen in real life.	○	○	○	○	○	○	○
It was easy to imagine myself in the role of the customer in the incident.	○	○	○	○	○	○	○

Q17. The following statement is about how you would personally evaluate the comprehension of the scenario described above. Please indicate the degree to which you agree or disagree with the statement presented below by selecting the most appropriate option on a 7-point scale ranging from 1 (strongly disagree) to 7 (strongly agree).

	1 Strongly disagree	2 Disagree	3 Somewhat disagree	4 Neither agree nor disagree	5 Somewhat agree	6 Agree	7 Strongly agree
The incident in the scenario described is easy to understand.	○	○	○	○	○	○	○

Following the scenario that you have experienced, please proceed to answer the following:

Q18. The following statements are about how satisfied you personally are with the service providers handling and resolving the problem you have experienced in the scenario above. Please indicate the degree to which you agree or disagree with each of the statements presented below by selecting the most appropriate option on a 7-point scale ranging from 1 (strongly disagree) to 7 (strongly agree).

	1 Strongly disagree	2 Disagree	3 Somewhat disagree	4 Neither agree nor disagree	5 Somewhat agree	6 Agree	7 Strongly agree
In my opinion, the service provider provided a satisfactory resolution to my problem on this particular occasion.	○	○	○	○	○	○	○
I am not satisfied with the service providers' handling of this particular problem.	○	○	○	○	○	○	○
Regarding this particular problem, I am satisfied with service provider.	○	○	○	○	○	○	○

Q19. The following statements are about your own intention to continue with your relationship with the service provider upon experiencing the situation in the scenario above. Please indicate the degree to which you agree or disagree with each of the statements presented below by selecting the most appropriate option on a 7-point scale ranging from 1 (strongly disagree) to 7 (strongly agree).

	1 Strongly disagree	2 Disagree	3 Somewhat disagree	4 Neither agree nor disagree	5 Somewhat agree	6 Agree	7 Strongly agree
In the future, I intend to use the services from this service provider.	○	○	○	○	○	○	○
If I were in the market for additional services, it is likely I would subscribe services from this service provider.	○	○	○	○	○	○	○
In the near future, I will not subscribe to this service provider.	○	○	○	○	○	○	○

Q20. The following statements are about your own intention to spread word-of-mouth after your experience with the service provider as in the scenario above. Please indicate the degree to which you agree or disagree with each of the statements presented below by selecting the most appropriate option on a 7-point scale ranging from 1 (strongly disagree) to 7 (strongly agree).

	1 Strongly disagree	2 Disagree	3 Somewhat disagree	4 Neither agree nor disagree	5 Somewhat agree	6 Agree	7 Strongly agree
I would recommend this service provider to someone who seeks my advice.	○	○	○	○	○	○	○
I say positive things about this service provider to other people.	○	○	○	○	○	○	○
I would recommend this service provider to others.	○	○	○	○	○	○	○

Part 3: The following are questions on your basic demographic profile.

Q21. Please indicate your gender

- ○ Male (0)
- ○ Female (1)

Q22. Please indicate your age

- ○ below 18 (1)
- ○ 18-24 (2)
- ○ 25-34 (3)
- ○ 35-44 (4)
- ○ 45-54 (5)
- ○ 55-64 (6)
- ○ 65 and above (7)

Q23. Please indicate your highest level of education

- ○ Secondary school or below (1)
- ○ Certificate or Diploma (2)
- ○ Bachelor degree (3)
- ○ Postgraduate degree (4)

Q24. Please indicate your ethnicity

- ○ Bumiputera (1)
- ○ Chinese (2)
- ○ Indian (3)
- ○ Other (4) _____

END OF SURVEY. THANK YOU FOR YOUR RESPONSE.