Antecedents and Outcomes of Psychological Contract Breach: Coping Behaviour as a Mediator of the Effects of Feelings of Violation Related to Service Outcomes

By

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Abstract

Psychological contract is "an individual's relational schema regarding the rules and conditions of the resource exchange between the organization and the person" (Guo et al., 2015, p.4). When people think they are not getting what they expect from a contractual agreement, psychological contract breach occurs (Morrison and Robinson, 1997). Driven by lack of research investigating the antecedents and outcomes of psychological contract breach within service encounters, this study extends existing research on psychological contract theory (Rousseau, 1995) and service marketing literature using the cognitive appraisal theory to investigate antecedents and outcomes of psychological contract breach within a service setting. The study examines a comprehensive model that analyses cognitive appraisal and emotional elicitation to further contribute to service marketing literature.

An examination of the direct effects of feelings of violation on service outcomes precludes an understanding of people's responses to violation-inducing service incidents. Building upon stress-and-coping theory (Folkman and Lazarus, 1984), this study also examines three consumer coping strategies as mediators of violation on consumer's affective states and behavioural outcomes. Therefore, this study aims to build on prior marketing literature research, which has focused narrowly on psychological contract fulfilment and violation, to expand service failure literature by examining antecedents and outcomes of perceived psychological contract breach in a more holistic view.

Using a survey-based approach, 779 usable responses were collected using an online panel by targeting mobile phone users in the USA. Subsequently, structural equation modelling procedures were followed using AMOS23 to analyse the data.

The findings reveal that psychological contract breach can be a source of service failure during service encounters and the perception of contract breach within service encounter failures lead to negative outcomes. Service managers should ask customers to provide feedback that tailored to capture psychological contract issues. Customer active and expressive coping strategies mediate effects of violation on service outcomes. Hence, when customers perceive a contract breach, service managers should encourage customers to use active coping to fix the problem. Otherwise, customers may cope by expressing their feelings of violation to others or deny the failure episode, both of which lead to unfavourable service outcomes for the firm.
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Chapter One

Introduction
1.1 Introduction

This thesis seeks to examine the impact of psychological contracts and violation on consumer affective states and behavioural intentions via an investigation of the mediating mechanism of coping processes in a service setting. This chapter will introduce current theoretical and empirical research and discuss the core concepts of this thesis. This chapter will also acknowledge the prominent research gaps and explain the thesis questions, aims and objectives. The intended contributions of this research, both theoretical and practical, will also be presented, along with an explanation of the approach and methodology adopted to test the thesis hypotheses. Finally, the chapter will conclude with a brief overview of the structure and presentation order of the thesis.

1.2 Research context and precedent

This section will outline the research context and precedent. First, a brief overview of psychological contract breach and violation, and related coping behaviours will be presented. This will be followed by a description of the underpinning theory and a brief justification for its application in conducting this investigation. Second, the section will then introduce the gap within extant marketing literature concerning psychological contract breach and violation. Third, the call for research into the antecedents and outcomes of psychological contract breach and violation will be presented. Finally, the chosen context of this thesis will be introduced and justified.

1.2.1 Service failure categories

Service failure occurs when a service does not meet customers’ expectation (Bitner et al., 1990). Although service failures are assessed by consumers as being unpleasant events, these negative events (i.e. failures) may or may not foster negative consumer emotions (Nguyen and McColl-Kennedy, 2003). To illustrate, in some cases, a consumer may be angry for other reasons. To better explore what drives negative emotions, a service provider should consider the major drivers that produce negative emotions. In doing so, the service provider should consider the key forms of service failure. Traditionally, the services marketing literature has introduced three key categories of service failure. The first category is process failure versus outcome failure. Bitner et al. (1990), Hoffman et al. (1995), Keaveney (1995) and Mohr and Bitner (1995) all identified process and outcome failures. Process failures are related to consumer perception of a service, while outcome failures are related to what consumers actually receive from a service (Mohr and Bitner, 1995; Parasuraman et al., 1985; Smith et al., 1999). The second category is the magnitude
of failure. Magnitude of failure is another method used to categorise service failure events. Prior research has indicated that the higher the magnitude of the failure, the higher the level of consumer dissatisfaction (Gilly and Gelb, 1982; Hoffman et al., 1995; Richins, 1987; Smith et al., 1999). The final category is core versus non-core failure. Keaveney (1995) defined core service failures as those that occurred due to mistakes or technical problems with the services themselves. In other words, consumers view non-core failures as minor mistakes and core service failures as bigger mistakes (Keaveney, 1995).

Although it is acknowledged that there are several categories of failure and that negative emotion typically accompanies service failure (Nguyen and McColl-Kennedy, 2003), no study has explicitly investigated perceived psychological contract breach and feelings of violation in terms of the type/source of service encounter failure. Given the lack of research in the field of service marketing, this study relied upon psychology and marketing literature in order to identify the appropriate theories relevant to the antecedents and outcomes of consumer perception of psychological contract breach and feelings of violation. Specifically, this study will examine the application of cognitive appraisal theory, along with causal attribution theory in order to develop a conceptual framework to be used to understand the antecedents and outcomes of psychological contract breach and feelings of violation.

1.2.2 Psychological contract breach and violation

Argyris (1960) first referred to the concept of psychological contract in 1960; a concept that was later popularised by the work of Levinson et al. (1962) and Schein (1978). This research is management (not marketing) based. The term ‘psychological contract’ refers to the idea of mutual obligations between two parties (i.e. an organisation and its employees). A psychological contract represents an exchange relationship where both explicit and implicit become mutual obligations between employees and organisations. Explicit promises are created from policies, written communications and other management contacts, whereas implicit promises are derived from previous experience of exchange, “vicarious learning or taken-for-granted factors”, for example, equity or good faith (Rousseau, 2001). To date, previous studies have focused on exploring a variety of relationships between psychological contract fulfilments and/or breach and the consequences within an employee context (see Guzzo et al., 1994; Herriot et al., 1997; Rousseau, 1990).
Rousseau (2004) described three main types of psychological contract: transactional, relational and hybrid/balanced contracts. Transactional contracts refer to worker obligations of longer working hours and additional roles in exchange for high performance-related pay, training and improvement. Relational contracts reflect loyalty and a minimum length of service in exchange for a degree of job security (Economic Exchange Theory) (Rousseau, 2004). The third type of psychological contract, known as "hybrid" or balanced psychological contract, combines an open-ended time frame and the mutual concern of relational agreements. Commitments on the part of the employer to develop employees, along with employee flexibility and willingness to adapt to changes in economic conditions, are the core characteristics of hybrid contracts. However, of the three types of psychological contract identified by Rousseau (2004), the two contracts that predominantly used to describe most employment relationships are transactional and relational contracts (see Anderson and Schalk, 1998; Raja et al., 2004; Rousseau, 2004; Turnley et al., 2003; Zhao et al., 2007). Different items were developed and utilised to separately measure two dimensions of psychological contract fulfilment (see Guzzo et al., 1994; Herriot et al., 1997; Rousseau, 1990; Rousseau, 2004). Particularly, measuring the obligations that organisations believe their employees should fulfil and the obligations that employees expect their organisation to fulfil in return.

In a consumer context, a psychological contract is defined as “an individual’s relational schema regarding the rules and conditions of the resource exchange between the organization and the person” (Guo et al., 2015, p.4). To clarify, psychological contracts reflect stated and unstated consumer expectations of service obligations delivered by a service organisation. Berscheid (1994) argued that schemas reflect the structure and organisation of social information in an individual’s memory, which represents expectations about the individual’s own behaviour, as well as the behaviour of another party and the expected interaction between the two parties. Hence, when individuals perceive they are not getting what they expect from an agreement, whether psychological or written, psychological contract violation occurs (Morrison and Robinson, 1997; Niehoff and Paul, 2001; Pate and Malone, 2000; Pugh et al., 2003; Robinson, 1996). In other words, breach occurs when the service provider fails to fulfil its obligations to its consumers. It is worth noting that terms psychological contract breach, violation and service failure, which appear in the literature, are related terms. The distinctions between the terms are made during concept development (Goles et al., 2009) (see sections 2.5 and 2.8). Thus, it can be argued that psychological contract breach is a source of service encounter failure in which both consumers’
and service providers’ expectations (i.e. resources exchange and mutual obligations) are not met during the service encounter (Malhotra et al., 2017; Pavlou and Gefen, 2005).

Previous literature has introduced multiple types of expectations, including expectations as “prediction”, expectations as an “ideal standard”, expectations based on previous experiences and expectations as “explicit and/or implicit promises” (Zeithaml et al., 1993). Several authors have introduced and explored the idea of forming expectations. Oliver (1980; 1981) introduced three factors that contributed to consumer expectations: the product, the context and individual characteristics. Zeithaml et al. (1993) developed Oliver’s model to consider several service expectation categories, such as service-desired and service-predicted expectations. Zeithaml et al. (1993) also identified four antecedents that impacted desired and predictive services: explicit service promises, implicit service promises, word of mouth and past experience. Hence, consumer evaluation of service delivery and service providers depends on whether these expectations are confirmed, disconfirmed or exceeded during the service encounter (Boulding et al., 1993).

However, psychological contracts are unlike expectations. The former are related to perceived promises and obligations, while the latter are based on general beliefs (Robinson, 1996). Schneider and Bowen (1999, p.39) argued that psychological contracts are implicit in service organisation relationships. Promises provided to consumers allow an understanding of the nature of interactions between service providers and consumers. Zhao et al. (2007) added that the outcomes of expectations and psychological contracts are different when things went wrong. They contended that, when the terms and conditions of a psychological contract are not fulfilled, the cognitive state that resulted is breach not disconfirmation. According to Theotokis et al. (2012), disconfirmation and violation are closely related but two different concepts. The former derives unmet expectations, whereas the latter derives from the violation of the psychological contract (see also Goles et al., 2009; Malhotra et al., 2017; Wang and Huff, 2007). The consumer might believe that they have a psychological contract with the service provider that is not similar to expectations stated within the service context (Fullerton and Taylor, 2015). Expectations are general beliefs. On the other hand, psychological contracts are prior expectations of promises and obligations (Robinson, 1996).

Perceived promises are different from expectations although they might influence some expectations (Montes and Zweig, 2009). There is a probability attached to what consumers expect to experience or get during the service encounter when they build expectations (Zeithaml et al.,
By contrast, when consumers perceive obligations, they believe that they will get something in return (i.e. resources) from the other party of the exchange as certainty of performance is the main characteristic of the promise (McDougall et al., 1998). For example, a consumer may believe that he/she should get a special discount on a new service/product because of his/her loyalty to the firm. Therefore, psychological contract breach is considered to be more significant than disconfirmation of expectations.

Under a psychological contract breach situation, one party believes that the other party of exchange is obligated to deliver and meet some obligations that it has failed to do so (Robinson, 1996). This also can be emphasised by having a conceptual distinction between violation, resulted from psychological contract breach, and dissatisfaction (see Fullerton and Taylor, 2015; Robinson and Morrison, 2000). In short, disconfirmation service failure is an unmet expectation where the responsibility is not known. Psychological contract breach is also unmet expectations, but where the responsibility for the failure is attributed to the service firm (Goles et al., 2009; Malhotra et al., 2017). Hence, expectations are not rooted in promises made, rather than breach (Morrison and Robinson, 1997).

Pyszczynski et al. (1991) argued that discrepancies between standards and perceptions caused emotional distress. However, according to Lazarus (1991b), service failure does not lead to negative emotions; indeed, the evaluation of the event is what evokes negative emotions. According to Freese and Schalk (2008), feelings of violation are affective reactions that reflect a combination of emotions of feelings of anger, frustration, betrayal and unacceptability (Freese and Schalk, 2008). Feelings of violation refer to “emotional distress and feelings of betrayal, anger, and wrongful harm arising from the realization that one’s organisation has not fulfilled a highly salient promise” (Raja et al., 2004, p.350). According to Fullerton et al. (2015), there is an argument that violation, in itself, is a powerful affective result to psychological contract breach.

Accordingly, the conceptual model of this study is different from the disconfirmation one (Oliver, 1980), in that individuals overall service failure assessment, and thus cognitive, emotions and behavioural outcomes are influenced by their current perception of the service and not their current expectations. This perception, in turn, is the result of prior expectations regarding obligations that derived from different sources such as, explicit or implicit promises and terms and conditions of a contractual agreement. This current research utilises the theoretical basis and measurement approaches of previous research of psychological contract and violation (e.g. Guo
et al., 2015; Robinson and Morrison 2000; Rousseau, 1994) to provide a comprehensive model of cognitive appraisals, emotional elicitation and coping that contribute to service marketing literature.

1.2.3 Coping behaviour

Cognitive appraisal theory was first introduced in the 1960’s by Arnold (1960) and Lazarus (1966). This theory was further developed by Lazarus and his colleagues (see Folkman and Moskowitz, 2004; Lazarus and Folkman, 1984; Lazarus, 1966; 1991a) in order to understand coping responses to stressful situations. Lazarus (1991a; 1991b) developed a cognitive model of emotion, which provided a clear explanation of the relationship between appraisal processes and outcome emotions. The cognitive model of emotion explained how a variety of emotions may be derived from the same incident, depending on different individuals and different occasions.

Cognitive appraisal is the process through which individuals evaluate both the importance of a particular stressful experience for their well-being (primary appraisal) and their ability to cope with it (secondary appraisal). In primary appraisal, consumers must first assign blame for the situation by identifying the accountable individual or organization. These attributions of blame can be either internal (whereby the consumer is responsible), external (whereby someone else is responsible) or situational (whereby no-one was responsible) (Weiner, 1986). In the primary process, the individual asks “what do I have at stake in this encounter?” and “who is responsible?”. In a secondary appraisal the individual is concerned with their reactions, as opposed to their actions. Hence, the individual evaluates options to cope with an incident and the environment responds to their behaviour to manage the stressful event.

Cognitive appraisal of an individual’s situation depends on internal and external factors. Internal factors include personality, beliefs and goals. External factors include product/service performance and other individuals’ responses. In addition, according to Connor-Smith and Flachsbart (2007), several conceptual models of coping claim that coping processes are affected by both situation-specific factors, such as affective responses and cognitive appraisals and more stable dispositional trait influences. Personal factors affect how an individual will evaluate the importance of a specific encounter for his or her well-being. For example, when a service provider problem is considered stressful to a consumer’s well-being (i.e. physical health, financial loss or social embarrassment) negative emotions may be fostered.
Similarly, situational variables are primarily factors that affect the accurate evaluation and expectation of potential threats. According to Duhachek and Iacobucci (2005, p.52) “researchers who examined the effect of personality-based traits on coping behaviour (e.g. Bolger, 1990; McCrae and Costa, 1986) assumed that individuals’ coping responses are stable over time and across widely disparate types of stress, suggesting that enduring personality traits are the origin of such behaviours”. However, other scholars have argued that personality traits impact coping mechanisms at multiple stages of the processing phase (see Birkás et al., 2016; Bolger and Zuckerman, 1995; Tandon et al., 2013). It has been argued by Connor-Smith and Flachsbart (2007) and Duhachek and Iacobucci (2005) that consumer traits can influence consumer choices for coping differently depending on the perceptions that are generated by the cognitive appraisal process.

Cognitive appraisal of a negative experience leads to individual emotional reactions, such as frustration and anger. Yi and Baumgartner (2004) studied how different negative emotions, generated by purchase-related conditions, led to using several coping behaviours. They reported that anger led to confrontational coping, frustration led to disengagement and regret led to acceptance. In addition, angry individuals expected to fix the problem by someone else, while disappointed individuals believed the situation was not controllable so no need to cope with it. On the other hand, regretful individuals acknowledged that they had made a poor decision and were happy to accept the outcomes of their own actions.

Previous literature that studied coping (e.g. Lazarus and Folkman, 1984) has suggested that consumer choice of coping strategies can be influenced by several factors, such as how they evaluate the stressful situation and how they appraise their capability to manage stress (Han et al., 2015). A review of the coping literature revealed that while various research studies have been conducted by many researchers over the past three decades (e.g. Carver et al., 1989; Duhachek, 2005; Duhachek and Kelting, 2009; Folkman et al., 1986; Lazarus and Folkman, 1984), there is still considerable disagreement with regards to the underpinning theoretical structure of coping processes. Although two, three, four and five-dimensional effective higher order theories have been discussed and considered in various coping studies (see Skinner et al., 2003; Duhachek, 2005), a classic example of a higher order coping theory is Lazarus and Folkman's (1984) problem-focused versus emotion-focused coping distinction. Literature focussed on consumer behaviour tends to conceptualise coping strategies at the level of the two-dimensional structure of coping: problem-focused and emotion-focused (Duhachek, 2005). However, Duhachek and Oakley (2007, p.221) stated that “in many cases, these higher order theories of coping are purely
conceptual systems and are not operationally attached to existing measures (as in Lazarus and Folkman's, 1984, problem-focused/emotion-focused coping and their coping inventory: the Ways of Coping Questionnaire).

1.2.4 Cognitive appraisal theories

Cognitive appraisal theory was first popularised by Richard Lazarus and colleagues (e.g. Folkman and Moskowitz, 2004; Lazarus, 1966; 1991a; 1991b; Lazarus and Folkman, 1984) to understand coping responses to stressful events. Bagozzi et al. (1999) and Johnson and Stewart (2005) contended that this approach was a beneficial method for investigating emotion in the context of consumer behaviour. Cognitive appraisal theorists proposed dimensions, which looked at the relationship between an individual's cognitive process during a situation and the emotions that resulted from the appraisal process. Roseman et al. (1990) suggested two dimensions within which emotions were elicited: event-caused versus person-caused and self-caused versus agency-caused. They argued that an event fostered negative emotions when it was caused by other people and was inconsistent with the individual's motive. Smith and Ellsworth (1985) and Ortony et al. (1988) considered other variables, such as 'impersonal' versus 'human-control' and 'self' versus 'other agency', to understand emotions elicited due to a stressful event. Other psychologists investigated related constructs such as 'control', 'accountability' and 'blame' (see Folger and Cropanzano, 2001; Folkman and Lazarus, 1991; Folkman et al., 1986; Izard, 1977; Lazarus, 1991b; 1966; Lazarus and Folkman, 1984; Monat and Lazarus, 1991). It is worth noting that there is a significant overlap among the dimensions introduced by appraisal theories in terms of the cognitive function of negative emotions (Nguyen and McColl-Kennedy, 2003). Generally, scholars have argued that if B caused a problem for A and A thinks that this problem could have been controlled by B, A will feel emotionally negative towards B (Ortony et al., 1988; Roseman, 1984; Scherer, 1984; Smith and Ellsworth, 1985).

When applying these psychological dimensions to the context of service failure, service failures that lead to negative emotions can be divided into two categories based on their causes: external and non-external. From a consumer perspective, an externally-caused service failure is when a service provider causes a service failure. On the other hand, a non-externally caused service failure is one caused by the consumer, by the situation or when a consumer does not know who or what caused the problem (e.g. circumstances). For example, when a consumer has made an appointment to visit a dentist and arrived on time but waited for more than one hour, this will be appraised as a failure. The consumer might think that the long wait time was caused by
the customer service representative who did not do well in arranging the appointment schedule. Therefore, the problem would be considered to be an externally-caused service failure and the dentist clinic would be considered to be the external party that caused the problem. However, if the consumer arrived late, the long wait time in this case would be caused by him/her. This, therefore, would be an example of an internally-caused service failure. Finally, if the dentist was delayed by an emergency situation and all patients who had scheduled an appointment had to wait for a long time, this would also be appraised as a non-externally-caused service failure. No matter the cause, negative emotion needs a target (Nguyen and McColl-Kennedy, 2003).

To illustrate, an individual must feel negative emotion toward someone or something (Berkowitz, 1999). In the context of service failure, if a consumer perceives the failure episode to be the service provider’s fault, they will attribute blame and be angry with the service provider. Conversely, consumers might attribute blame to and become angry with themselves or other parties (Nguyen and McColl-Kennedy, 2003), but these cases are outside of the scope of this investigation. However, it is worth noting that causal attributions do not explore the intensity of consumer negative emotions because appraisal theories focus on the generic idea of emotion rather than distinct emotions, such as joyful, anger and regret (Izard, 1991; Lazarus, 1991b; Lazarus and Folkman, 1984; Quigley and Tedeschi, 1996; Roseman, 1984; Roseman et al., 1996; Roseman et al., 1990).

Essentially, cognitive appraisal theorists argue that the cognitive appraisal process can lead to eliciting various emotions (Watson and Spence, 2007). The fundamental concept of appraisal theories is that an individual evaluates and interprets situations in terms of their own well-being. These evaluations result in emotional responses or no emotion at all. Different individuals can have different emotional responses towards the same event depending on their individual appraisal processes. To illustrate, emotions are generated due to an individual’s psychological appraisal process, not by a certain situation or physical condition (Bagozzi et al., 1999; Folkman et al., 1986; Lazarus, 1991a; 1991b; 1966; Lazarus and Folkman, 1984; Nyer, 1997; Roseman, 1984; Roseman et al., 1990; Stephens and Gwinner, 1998).

In applying cognitive appraisal theory, this study proposes the cause of the service failure (i.e. perceived psychological contract breach) to be the main component that causes consumers to engage in the primary appraisal process (i.e. the attribution of blame), which, in turn, triggers feelings of violation towards the service provider. In addition, in the case of service failure, this study argues that an individual’s cognitive appraisal process will encourage them to use different
coping strategies in order to deal with a failure event. In other words, this study uses a cognitive appraisal framework to investigate the antecedents and outcomes of psychological contract breach, as well as the direct and indirect effects of feelings of violation on the related service outcomes via coping behaviour.

1.2.5 Cognitive appraisal process

Consumers suffer negative emotions if they experience service failure that leads to consumer dissatisfaction and unfavourable behavioural outcomes (see Bhandari et al., 2007; Joireman et al., 2016; Namkung and Jang, 2010; Reynolds and Harris, 2009; Tombs et al., 2014; Tsarenko and Strizhakova, 2013). When service failures foster negative emotions, consumers tend to attribute the causes to the organisation. Thus, negative emotions drive negative outcomes (Fiske and Taylor, 2013). A great deal of previous research has explored the role of consumer emotions in failed service transactions (see Balaji et al., 2017; Bonifield and Cole, 2007; Chebat and Slusarczyk, 2005; De Witt et al., 2008; Gabbott et al., 2011; Koc et al., 2017; Schoefer and Diamantopolous, 2008; Schoefer and Ennew, 2005). After a negative experience following a service encounter, consumers may try to manage the emotional responses elicited due to their cognitive appraisal of the service failure event (Gabbott et al., 2011; Gross, 1998; Obeidat et al., 2017; Tsarenko and Strizhakova, 2013). During cognitive appraisal, consumers evaluate events against their own personal goals.

Cognitive appraisal theory (Lazarus and Folkman, 1984) claims that when experienced a stressful consumption encounter, such as a service failure, consumers react using several coping tactics by engaging their cognitive, emotional and behavioural resources to manage the stress imposed by the event (see Nyer, 1997; Tsarenko and Strizhakova, 2013; Yi and Baumgartner, 2004). Not one, but multiple coping strategies, can be used to manage the elicited stress and failure outcomes (Duhachek and Kelting, 2009). These coping strategies may lead to positive and negative outcomes. Coping theories have been used since the late 1990s to study emotions and coping strategies (see Duhachek and Iacobucci, 2005; Duhachek and Oakley, 2007; Lee et al., 2011; Shiv, 2007; Yi and Baumgartner, 2004; Zeelenberg and Pieters, 2004).

According to Ortony et al. (1988), emotion elicited from unfavorable experiences depends on appraisal dimensions. This study focuses on blame attribution (Roseman, 1991) and coping potential (Lazarus, 1991b), which are responsible for the occurrence of negative emotions (Gelbrich, 2010). Examination of the direct effects of consumer feelings of violation related to
behavioural intentions prevents an understanding of an individual’s internal reaction to violation-inducing service failure episodes. Therefore, the application of cognitive appraisal theory helps to develop and test a comprehensive model to examine the impact of psychological contract breach and violation on consumers’ primary and secondary appraisal processes that leads to several unpleasant service outcomes. In other words, this study tests a developed comprehensive model to assess the impact of perceived contract breach on consumers’ primary appraisal (i.e. attribution of blame) that associate with feelings of violation. Furthermore, the model examines the mediating role of the secondary appraisal process (i.e. implementation of coping strategies) on four service outcomes.

1.2.6 Cognitive approaches to negative emotions

In psychology literature, there are different approaches to understanding emotions (see section 3.4). The cognitive approach is suitable for the context of this study as it facilitates empirical testing and has been used in service and social psychology settings (Nguyen and McColl-Kennedy, 2003). However, even though a cognitive approach to negative emotions has been well developed and applied, it has been criticised by some theorists. In particular, Berkowitz (1989; 1993) proposed a ‘cognitive–neoassociationistic’ approach that claimed that any negative physical state (e.g. low temperature, physical pain and/or stress) might generate negative emotions. This approach opposed cognitive appraisal analysis of negative emotions.

In addition, Scherer (1999) argued that negative emotions (e.g. anger) can sometimes be awakened independently. Moreover, non-cognitive appraisal theorists (Berkowitz, 1989; 1993; Oatley and Johnson-Laird, 1996; Quigley and Tedeschi, 1996) argued that appraisal theories do not always work perfectly as negative emotions can be elicited unconsciously. In other words, individuals can be frustrated without going through a cognitive assessment of an unpleasant situation. However, the author acknowledges that each of the theoretical approaches has its own individual merit. The main purpose of this study is to apply cognitive appraisal theory to investigate the antecedents and outcomes of perceived psychological contract breach. Specifically, this study argues that cognitive appraisal theory can help better explain consumer feelings of violation resulting from the perception of psychological contract breach and how coping behaviour mediates the relationship between feelings of violation and related service outcomes.
1.2.7 Why cognitive appraisal theory?

Appraisal theory is a cognitive approach that considers emotion to be an essential element of the cognition process (Izard, 1991). Fundamentally, cognitive appraisal theorists provide dimensions that incorporate an individual's cognitive process of a stressful incident and the emotions that are the result of the appraisal process (Folkman and Lazarus, 1991; Lazarus, 1991a; 1991b; Roseman, 1984; Roseman et al., 1996; Roseman et al., 1995; Roseman et al., 1990; Smith and Ellsworth, 1985; Smith and Lazarus, 1993). Appraisal theorists have introduced four main streams (see sections 3.2.6 and 3.2.7) that are characterised by the nature of the appraisal dimensions: outcome desirability, certainty, fairness and attribution (Watson and Spence, 2007).

Attribution research (cf. Heider, 1958; Shaver, 2012; Weiner, 1985, 1986) concentrates essentially on the nature of the causal attributions that are part of emotion-antecedent appraisals (Scherer, 1999). Weiner (1980; 1985; 1986), a key researcher in this field, emphasised that a number of major emotions (e.g. anger, pride or shame), can be determined solely based on the internal-external attribution of responsibility. Attribution (agency) is applied in this research as causal attribution, which is the most popular attribution theory applied in service failure and recovery literature (Folkes, 1984; 1988; Folkes et al., 1987; Forrester and Maute, 2001; Härtel et al., 1998; Hunt and Kernan, 1991; Taylor, 1994; Swanson and Kelley, 2001). According to Gotlib and Abramson (1999), attribution theories describe how individuals explain their world and the situations that happen to them, especially negative situations.

There are three common approaches to measuring emotions in the field of marketing: ‘categories’, ‘dimensions’ and ‘cognitive appraisals’ (Watson and Spence, 2007). Scholars have suggested that applying the cognitive appraisals approach is useful for examining emotions in the context of consumer behaviour (Bagozzi et al., 1999; Johnson and Stewart, 2005; Watson and Spence, 2007). Furthermore, among three approaches, the cognitive appraisal approach provides a more manifest and comprehensive clarification of consumer behavioural responses to emotions than either of the other two approaches (i.e. categories approach and dimensions approach) (see section 3.4). According to Watson and Spence (2007), cognitive appraisal theories address three issues. First, appraisal theories demonstrate the underpinning characteristics inherent in situations that are evaluated or appraised. Second, they explore and measure emotions elicited due to the appraisal process. Third, appraisal theories help to understand the behavioural responses related to the experienced emotions.
1.2.8 Calls for research

Prior studies have examined the antecedents and consequences of psychological contract breach and feelings of violation (see Li and Lin, 2010; Lövblad et al., 2012; Malhotra et al., 2017; Mason and Simmons, 2012; Pavlou and Gefen, 2005). Other studies have investigated different norms of consumer-organisation relationships, but have not conceptualised psychological contract breach (see Wan et al., 2011). Therefore, more research is needed to explore antecedents and outcomes of psychological contract breach and the feelings of violation related to service failure. Malhotra et al. (2017) call for research into other outcome variables to psychological contract, such as word of mouth and consumer rage, that could be examined to determine the impact of contract breach and violation within consumer settings. In the event of service failure, blame for the negative encounter is often attributed to the organisation, which tends to elicit negative consumer emotions (Folkes, 1984). Previous investigations have also examined the role of attribution of blame within the relationship related to service failure, negative emotions and the related coping processes (see Albrech et al., 2017; Stephens and Gwinner, 1998; Tao et al., 2016; Yi and Baumgartner, 2004). This thesis argues that in service situations where consumers are obligated to draw upon negative emotions, their attribution of blame could positively influence the elicited feelings of violation.

In addition, future research could aim to better understand the relative influence of different mediating mechanisms by which contract breach and violation affect consumer behaviour. Bougie et al. (2003) call for research into investigating consumers coping with powerful emotions during the service encounter and into the consequences of this behaviour in order to help service organisations to respond adequately to powerful negative emotions. Yi and Baumgartner (2004) call for research into examining the impact of coping on variables that have special values for marketing practitioners. They proposed that future studies should incorporate specific consumer responses to investigate whether coping strategies mediate the relationship between experienced emotions and specific consumer behaviours that directly important for marketers. Watson and Spence (2007) contended that there was not enough supporting evidence to recommend including coping as a necessary appraisal; instead, they believed that coping was best thought of as an emotional consequence. Duhachek (2005) and Moschis (2007) also strongly recommended that further studies needed to empirically examine the consequences of coping in order to expound the process of coping with negative emotions to introduce a meaningful segment of consumers based on coping styles. Jun and Yeo (2012) call for research into empirically studying negative emotions and coping mechanisms, along with consumer behaviour.
Understanding emotional consumer reactions is important to help service managers develop effective recovery strategies or practices. While prior research has focused on establishing direct relationships between negative emotions and outcomes (Gregoire et al., 2009; Ha and Jang, 2009; Wen and Chi, 2013), little attention has been given to the underlying processes that explain how negative consumer emotions lead to service outcomes (Wangenheim, 2005). Building upon stress-and-coping theory (Lazarus and Folkman, 1984), this thesis will evaluate consumer-coping strategies - active, expressive support-seeking and denial - as mediators of feelings of violation on consumer affective states and behavioural outcomes.

The above discussion underlined the central role played by cognition and emotion in explaining consumer responses to service failure events. According to Singh and Crisafulli (2015), future research could assess specific emotions in order to obtain more robust generalisations about existing findings within service failure literature. While psychological contracts have made significant contributions to the organisational behaviour and human resource management fields of study, their relevance to marketing research cannot be underestimated. Hence, this thesis incorporates a psychological contract perspective into the service marketing literature in order to address these gaps in the literature by investigating antecedents and outcomes of psychological contract breach along with a specific emotion (i.e. feelings of violation). In addition, this thesis will introduce an analysis of the mediating effect of coping as a significant contributor to an understanding of the relationship between feelings of violation and predicted cognitive, emotional and behavioural responses in circumstances of psychological contract breach.

1.2.9 Thesis context

“Service encounter” is a term used to describe the moment of interaction between consumers and service providers (Bitner et al., 1990). Voorhees et al. (2017, p.270) defined service encounter as “any discrete interaction between the customer and the service provider relevant to a core service offering, including the interaction involving provision of the core service offering itself”. Services are inherently varied. In other words, services differ from provider to provider, from consumer to consumer and from day to day. As a result, they are hard to standardise (Berry, 1990). Therefore, problems can occur in service encounters (Swanson and Kelly, 2001). According to Maxham (2001, p.11), any problems, whether real and/or perceived, that relate to service, and happen during a consumer’s experience with a service firm, are referred to as service failures in marketing literature. There are different sources of failure. One example is failure due to inappropriate actions of frontline employees (e.g. rudeness, stealing or ignoring
consumers). Other examples are failing to respond to consumers’ needs and requests, or failing to deliver a core service, such as being not available or providing an unreasonably poor service (Bitner et al., 1990).

The context of service encounters is a valuable and suitable context to assess consumer feelings of violation. In a typical service exchange, a service provider delivers intangible services to consumers (Bitner, 1992), which could be subject to many sources of failures. An examination of psychological contracts in relation to service encounters has an advantage over studying purely legal contracts. Guo et al. (2015) contended that consumers are not fully aware of all of the explicit terms and conditions written in legal contracts. However, they do have an implicit understanding of the service provider’s obligations. Accordingly, even if the explicit contract terms or conditions have not been violated, consumers may still perceive that their obligations have not been fulfilled as expected and, thus, perceive a contract breach (Pavlou and Gefen, 2005). According to Gilmore and Carson (1996), the intangible aspects of services create different challenges for managers.

Consumers have their own specific needs and/or requests and make judgments based on whether the service provider meets these needs or requests. Bitner et al. (1990) suggested that the service encounter should be described from the consumer’s perspective, which may create a situation whereby the consumer perceives a service failure during a service encounter, but the service provider does not. This is consistent with Bagozzi (1978) who contended that cognitive “congruence/incongruence” between consumers and organisations reflected the quality of marketing transactions. To clarify, consumer perception of actual marketing transactions may not meet their expectations evoked by direct advertising and explicit messages (Parasuraman et al., 1985; Zeithaml et al., 1993) or by promises and implicit messages made by the service provider (Zeithaml et al., 1993; Grönroos, 1984; Wan et al., 2011).

In the twenty-first century, mobile phones have become a need and most adults have one for pure convenience. The number of mobile phone users is predicted to exceed the five billion mark by 2019 worldwide. In 2016, it is estimated that 62.9% of the population in the world already possessed a mobile phone. The mobile phone penetration is expected to continue to grow to reach 67% by 2019. In addition, the number of smartphone users worldwide is estimated to increase by one billion in a time span of five years, which means the number of smartphone holders in the world is estimated to reach 2.7 billion by 2019 (Anonymous, 2018a). Thus, consumers are likely to frequently encounter failed obligation fulfilment based on explicit and
implicit contractual agreements. Therefore, the mobile phone context is appropriate for this thesis. Thus, the nature and the importance of the telecom service and previous marketing research, both provide justification for the contextual focus of this thesis.

1.3 Research questions

In order to explore feelings of violation and the mediating effects on service outcomes, this thesis developed a conceptual model and used structural equation modelling (SEM) to test nine hypotheses via an exploration of the mechanism using ten variables: one independent variable (i.e. perceived psychological contract breach), one cognitive (i.e. attribution of blame), one negative emotion (i.e. feelings of violation), three coping strategies (i.e. active coping, expressive support-seeking coping and denial coping) and four service outcomes (regret, dissatisfaction, desire for revenge and loyalty intentions). SEM has been championed for examining theoretical relationships among multiple predictors, intervening, analysing outcome variables, and controlling measurement error (Hair et al., 2014; Motl et al., 2002). The relationships among the latent variables were related to a psychological contract breach situation based on theoretical and empirical backgrounds. Thus, this research proposes to investigate the following questions:

1. When psychological contract breach occurs in a service setting, do users attribute the blame to the service provider?
2. To what extent do perceived contract breach and attribution of blame predict feelings of violation?
3. What are the negative outcomes of psychological contract breach in the context of service organisations?
4. To what extent does coping mediate the effects of feelings of violation on service outcomes?
5. What should managers do to maintain positive outcomes?

1.4 Research aims

This thesis applies the cognitive appraisal theory (Lazarus and Folkman, 1984) to expand service marketing literature by examining the role of three sets of consumer resources: cognition (i.e. attribution of blame), emotions (i.e. feelings of violation) and behaviours (i.e. coping strategies), in shaping consumer responses to a specific set of circumstances (i.e. perceived
psychological contract breach). The research also takes a holistic view of mechanisms employed by exploring the direct and indirect effects of feelings of violation on consumer affective states and behavioural intentions via coping processes in a service setting.

1.5 Research objectives

By applying cognitive appraisal theory to contract breach and violation incidents, this thesis proposes that there are different antecedents and outcomes of psychological contract breach. Hence, the research objectives are:

1. To assess the direct relationship between perceived contract breach, attribution of blame and feelings of violation.

2. To examine the association of feelings of violation on contract breach outcomes (i.e. regret, dissatisfaction, desire for revenge and loyalty intentions).

3. To explore the mediating mechanism of coping through an expansion of the appraisal model by examining the mediation effects of coping strategies on contract breach and violation outcomes.

4. To give service marketing theorists and practitioners an insight into the impact of coping on service outcomes resulting from contract breach and violation.

1.6 Research contributions

This thesis contributes to literature on service failure and service marketing in several ways. First, to the best of the author’s knowledge, this is the first empirical investigation that develops and tests a comprehensive model that explores the mediating mechanism underpinning the antecedents and outcomes of psychological contract breach and feelings of violation in a service setting. Second, this investigation establishes a clear empirical link between psychological contract breach and specific negative emotions (i.e. feelings of violation) that lead to different outcomes (i.e. regret, dissatisfaction, desire for revenge and loyalty intentions) within a service setting. Third, this thesis contributes to current theory by developing and testing a coping framework that reflects consumer cognitive, emotional and behavioural adaptations under stressful events. Specifically, the study expands service failure literature to examine three coping strategies that consumers might employ to cope with perceived contract breach and feelings of violation. These coping strategies mediate the relationship between feelings of violation, elicited
from the perception of contract breach, and the service outcomes in service encounters. Therefore, this thesis investigates the mediating effects of coping behaviour, with a focus on feelings of violation as a key predictor of affective states and behavioural intentions toward a service firm, a relationship that has been afforded little attention in prior service research. Additionally, this thesis advances service managers’ understanding of consumer coping behaviour due to contract breach via a demonstration of how feelings of violation influence consumer coping behaviour, and, as a result, affect service outcomes. The results of this thesis will help inform managers and frontline personnel about how to effectively design and execute recovery tactics and provide practices that adapt to consumer emotions while eliciting outcomes that are more satisfactory.

1.7 Thesis approach and research methodology

Methodologically, this thesis examines the relationship between several constructs. It adopts a deductive approach and quantitative research design. A quantitative questionnaire (n=779) used an online panel targeting mobile phone users from the USA to investigate the research questions. The design of this thesis is descriptive, in accordance with the overall aim of this thesis, which is to test a comprehensive framework in order to investigate antecedents and outcomes of psychological contract breach, and coping as mediator of the effects of feelings of violation on service outcomes. Chapter 5 provides a detailed examination of the methodology. The conceptual model informs the methodological choices and results of this thesis.

1.8 Structure of the thesis and order of presentation

This thesis comprises eight chapters. Chapter one has provided an introduction and topical background. In this chapter, psychological contract, attribution of blame, feelings of violation and coping behaviour have been discussed and defined. This chapter has also clarified the primary aims and objectives of this thesis. In addition, it has identified the research questions and contributions of the thesis. By answering the research questions, it is hoped that the research objectives will be attained and will allow a holistic examination of the direct and indirect effects of feelings of violation, resulting from perceived contract breach, on four related service outcomes. Chapter one ends with an overview of the structure of the thesis.
The aim of Chapter two is to introduce the concept of psychological contract based on a critical literature review. It will present a review of the existing literature, drawing on both conceptual and empirical studies. It will review the literature of psychological contract in terms of the beginning with its historical origins, definitions and theoretical perspectives.

Chapter three will review the link between service failure, attribution of blame and negative emotions. Furthermore, it will discuss cognitive appraisal theory; the theory that underpins the thesis. In addition, the chapter will provide a clear idea about how expectations and psychological contract are relatively close but two different concepts. Further, the chapter will review coping behaviour and how coping behaviour has been studied, particularly within service literature. The information provided will be based on a review of organisational behaviour, psychology, consumer behaviour, buyer-seller relationship and service marketing literature. Finally, the chapter will provide an overview of the four expected outcomes of contract breach and violation. The chapter will build the conceptual foundation upon which this thesis is based.

Chapter four will examine the antecedents and outcomes of psychological contract breach and violation. The chapter will explicate the conceptual and empirical justification for the variables examined in the thesis. This will allow further explanation of the relationship between psychological contract breach, attribution of blame and feelings of violation. It will also analyse the relationship between feelings of violation and the three coping behaviours as well as the mediating effect of coping as applied to feelings of violation and the four predicted service outcomes (i.e. regret, dissatisfaction, desire for revenge and loyalty intentions). Subsequently, the chapter will develop relevant hypotheses to test the relationships proposed in the conceptual model.

The main goal of Chapter five is to discuss and argue the choices of research methodology in terms of research philosophy and paradigm, research strategy, methods and its design and the data collection procedure. The chapter will also present the pre-test findings that preceded the primary online survey. The chapter will present the variables that will be tested and discuss the main instrument of administration - the questionnaire - at length. Finally, the chapter will discuss ethical considerations regarding informed consent, anonymity and confidentiality.

Chapter six will provide the descriptive analysis and evaluation of the measurement model of the thesis. It will present the profile of respondents, descriptive statistics and examinations that had to be employed to validate the measures prior to moving to the formal analysis stage.
Chapter seven will present the results of thesis based on employing Structural Equation Modelling (SEM) analysis. It will report the results of the antecedents and outcomes of contract breach, along with the measurement constructs (i.e. attribution of blame, feelings of violation, regret, dissatisfaction, desire for revenge and loyalty intentions). Furthermore, the chapter will present the results of studying the indirect effects of feelings of violation on the four service outcomes mediated by active coping, expressive support-seeking coping and denial coping behaviours.

Finally, Chapter eight will draw together the entire thesis. In doing so, it will discuss the thesis implications, limitations and suggestions for future studies. It will offer a summary of findings, focusing on the interpretation of the results and conclusions drawn from them, in relation to existing psychological contract, blame, violation, mediating mechanism of coping behaviour and service outcomes. Furthermore, it will provide a comparison of current findings with previous studies related to service failure. It will also discuss theoretical contributions, managerial implications and possible practical policies. Finally, it will address the limitations of the thesis and provide some suggestions for future research.
Chapter Two

Introduction to the Psychological Contract
2.1 Introduction

In stating the research aims and objectives of the current study, Chapter 1 illustrates the need for broader research into the psychological contract in marketing. Chapter 2 aims to provide an introductory review of existing literature on the psychological contract. In particular, Chapter 2 attempts to provide a review of existing literature of the psychological contract concept, from the perception of both fulfilment and breach and subsequent feelings of violation. Consequently, the current chapter is structured as follows. First, the chapter will introduce the history and definition of the psychological contract. Second, the chapter will define the emergence of the psychological contract in marketing literature, in terms of what constitutes a psychological contract in the field of marketing and the subsequent approaches to studying psychological contracts in this field. Third, the chapter will provide an explanation of the relationship between psychological contract breach and feelings of violation. Fourth, the chapter will discuss the service boundaries and present academic insights into the connection between consumer expectations, psychological contract breach and the perception of service failure. Fifth, academic insights into customers' expectations and perceptions of psychological contract breach are considered. Overall, the chapter will provide an in-depth understanding of the history and definitions of psychological contract fulfilment and breach, based on the relevant theoretical background and a review of the current related literature.

2.2 Psychological contracts in organisational behaviour and management literature

Conway and Briner (2005) defined psychological contract fulfilment as the degree to which an employee believed his or her organisation had fulfilled its obligations, whereas psychological contract violation has been conceptualised as the failure to fulfil expected obligations (see Grimmer and Oddy, 2007; Morrison and Robinson, 1997; Turnley and Feldman, 1999). Breach has been conceptualised as a discrepancy between what an employee perceives, based on promises given to him or her and what is actually met by the organisation (Rousseau, 1989). This section will discuss the history, definitions and characteristics of the psychological contract.

2.2.1 History of the psychological contract

Literature on the psychological contract has expanded considerably over the past three decades, mostly after Rousseau’s (1989; 1995; 2001) works. However, the origin of the concept is much deeper and dates back to earlier social exchange theory studies. Blau (1964) noted that,
“central to this theory is that social relationships have always been comprised of unspecified obligations and the distribution of unequal power resources” (Cullinane and Dundon 2006, p.114).

From an organisational behaviour perspective, the concept of social exchange has been strongly influenced by the work of Argyris (1960), Levinson et al. (1962) and Schein (1965; 1978). Argyris (1960) first utilised the term ‘psychological work contract’ to describe the perceptions that both organisations and employees had of their employment relationship.

Argyris (1960) conceptualised the psychological work contract as an exchange relationship between employees and foremen. This was a narrower perspective than that shown in earlier studies by Menninger (1958) and March and Simon (1958) (in Barling et al., 2008). These earlier studies indicated that both social and the economic exchanges affected the employment relationship (Fox, 1974). Later, this concept was popularised by Levinson et al. (1962) and Schein (1978). Levinson et al. (1962, p.21) defined the psychological contract as “a series of mutual expectations of which the parties to the relationship may not themselves be dimly aware but which nonetheless govern their relationship to each other”. Schein (1978) added that the expectations between two parties not only reflected the question of how much work an employee ought to do in order to get paid, but also represented the total set of mutual obligations, privileges and rights. Schein (1978) contributed by stating that employee switch, dissatisfaction and employee isolation, were all consequences of the violation of explicit psychological contract issues, such as pay and working hours (Cullinane and Dundon, 2006).

The application of the psychological contract to management theory began to occur in the 1990s. During this period, academics and practitioners were interested in undertaking research to explore and uncover, new and more innovative managerial practices. This new expansion into the study of the psychological contract was led by Rousseau (1989; 1990), Rousseau (1989, p.123) defined the psychological contract as “an individual’s belief regarding the terms and conditions of a reciprocal exchange agreement between the focal person and another party”. This definition focused on beliefs held by individual employees, rather than those held by the organisation and it acknowledged the existence of reciprocity. Furthermore, it emphasised the idea of perceived agreements, not actual agreements, in psychological contracts between parties.

Rousseau (1995) defined four types of psychological contract: transactional, transitional, relational and balanced contracts. Transactional contracts refer to employee obligations of longer working hours and additional roles, in exchange for high performance-related pay, training and development (economic exchange theory – a short relationship). On the other hand, relational
contracts reflect loyalty and a minimum length of service, in exchange for a degree of job security (social exchange theory - a long relationship) (Rousseau, 2004). Thus, the psychological contract is based on perceived promises, which are the commitment made by an organisation in relation to a future set of actions, such as training and promotion. Payment occurs when employees contribute more to the organisation and show their loyalty. Balanced contract is a combination of both transactional and relational contracts, in which the feature of performance-reward contingencies is taken from transactional contracts and open-ended arrangements are taken from relational contracts (Rousseau, 1995). Transitional types refer to the absence of an agreement between the parties, which may exist because of unstable circumstances. For instance, drastic organizational changes (e.g. downsizing) can lead to lack of commitment or no commitment at all between the parties (Rousseau, 1995). However, only relational and transactional contract types have been operationalized and examined in mainstream research because of measurement issues and the huge overlap between the transactional and transitional types and relational and balanced types (Jamil et al., 2013; Rousseau, 2004).

There have been a number of approaches used to construct an analytical framework to measure the psychological contract. Two methods were developed and used to separately measure the obligations that employees expected their organisation to fulfil and the obligations that organisations believed their employees should fulfil in return (see Guzzo et al., 1994; Herriot et al., 1997; Rousseau, 1990). For example, Westwood et al. (2001) measured the promises and commitments workers perceived to have been delivered by their employers, followed by a measurement of the obligations that employees perceived they had undertaken. Some approaches have used indirect measures through related constructs, such as commitment (Kickul, 2001), while other researchers have tried to understand the psychological contract by evaluating potential cultural differences associated with people management. For example, Wang et al. (2003) contributed to the understanding of employment relationships in the global context by examining the relationship between employment relationships and organisation performance in a heterogeneous sample of organisations in the largest emerging economy in the world (i.e. the People’s Republic of China). Tsui et al. (1997) explored how business strategies influenced the psychological contract. In addition, Guest and Conway (2002) examined the psychological contract in organisations via an application of high-performance HRM practices (Cullinane and Dundon, 2006). In addition, studies also empirically have examined the direct impact of psychological contract breach on workers outcomes (see Kim et al., 2018; Li and Hsu, 2016).
2.2.2 Definition of psychological contract

There are many different perspectives about the definition and the purpose of the psychological contract. Some scholars stress that the implicit obligations of one or both parties are fundamental (Rosseau and Tijoriwala, 1998). On the other hand, others suggest there is a need to understand expectations of employment (Atkinson et al., 2003), while some believe that reciprocity is a core issue of the psychological contract (Tekleab and Taylor, 2003). Argyris (1960), Levinson et al. (1962) and Schein’s (1965) early approaches of conceptualising the psychological contract were derived from social exchange theory (Ekeh, 1974; Hechter, 1987). Social exchange theory and psychological contract theory share two characteristics: reciprocity and the exchange relationship. Hence, to be able to explain the sources of agreement and discrepancy between two parties, it is essential to understand how subjective and indeterminate interactions play a role between the two parties of exchange. Also, the expectations of both employer and employee, as well as the level of reciprocity, must be considered. With further development of the application of the psychological contract conducted by Rousseau (1989), a new approach of introducing and measuring psychological contract has been conceptualised.

Rousseau (1989) focused on a one-way interaction rather than a two-way exchange. In other words, she felt that the psychological contract was an individual employees’ “belief in mutual obligations between that person and another party such as an employer” (Rousseau and Tijoriwala, 1998, p.679). Hence, the psychological contract emerged when an employee believed that an employer had made a promise of future returns and the employee offered consideration in exchange for the promise (Rousseau, 1989). It was found that promises could be either explicit or implicit. Explicit promises were usually verbal or written agreements made by the organisation. Implicit promises could evoke the psychological contract when they were perceived by individuals (Conway and Briner, 2005).

Rousseau (1989) re-conceptualised the psychological contract, by emphasising that it should take into account individual employee obligations, not expectations, assuming that failure to meet obligations would lead to more unpleasant reactions than unmet expectations. According to Robinson and Rousseau (1994), it was not necessarily the case that each party shared the same understanding of all contract terms even though they shared the beliefs of agreement and mutuality (Robinson and Rousseau, 1994). A review of current literature has revealed that many papers, published after Rousseau’s new conceptualisation (1989), followed this approach (see Morrison and Robinson, 1997; Peng et al., 2016). Precedent mainly considered individual employee understanding of explicit and implicit promises regarding their contributions, such as
loyalty, versus organisational inducements such as pay, promotion and job security (see Anderson and Schalk, 1998; Conway and Briner, 2002).

However, the re-conceptualisation of the psychological contract by Rousseau has been criticised. According to Guest (1998), the psychological contract should be evaluated to include the employer's perspective, in order to correctly assess the mutual and reciprocal obligations. Guest (2004) stated that to make the psychological contract a proper tool used for the analysis of employment relationships, it needed to be formed using a two-way relationship. It also needed to focus on the perceptions of the exchanged promises and obligations of both parties. Guest (1998) also suggested that the distinction between obligations and expectations was somewhat vague. Boxhall and Purcell (2003) added that when the psychological contract was totally subjective and constructed from an individual perspective only, it could not be considered to be a contractual relationship. According to Cullinane and Dundon (2006, p.116) “under Rosseau's approach, organisations are deemed to be something of an anthropomorphic identity for employees, with employers holding no psychological contract of their own”. Conway and Briner (2009, p.80) argued that while Rousseau’s approach was popular, it was “clearly at odds with previous researchers’ views and not without its own limitations”.

### 2.2.3 Characteristics of the psychological contract

Rousseau’s (1995) paper dominates discussion of the characteristics of psychological contract. The psychological contract has five distinctive characteristics: the first characteristic is, essentially, it is a subjective perception which differs from one individual to another (Rousseau, 1995). Second, the psychological contract is dynamic. In other words, it may change over time during the relationship between the two parties of exchange. Third, the two parties of exchange expect that, eventually, the relationship will culminate with a positive outcome for both parties, as psychological contracts have mutual obligations based on given promises. Fourth, psychological contracts emerge as a result of the interaction between two parties: the employee and the organisation. Therefore, it cannot develop alone and apart from this interaction (Schalk and Freese, 1993). Fifth, in the context of employee psychological contract, it is important to take into account employee behaviour and attitudes, even though psychological contracts are rarely explicitly discussed (Aselage and Eisenberger, 2003). However, when psychological contracts are not discussed and made explicit, this does not signify that they do not exist.
Rousseau (1995, p.60) defined a contract maker as “any person who conveys some form of future commitment to another person”. She differentiated contract makers in a firm into two types: primary (human) and secondary (administrative). Primary (human) contract makers are individuals who act on behalf of a firm. For example, supervisors and colleagues are human contract makers. By contrast, secondary (administrative) contract makers reflect messages or benefits conveyed by a firm (Rousseau, 1995). Examples of secondary contract makers include HRM practices, such as training and compensation. Also, there can be multiple contract makers in a firm.

Rousseau (1995) also introduced three different ways in which contract makers could influence employees: interaction, observation and structural signals. Interaction relates to direct oral or written forms of communication in the form of directions, advice or actual promises delivered by top management, supervisors, co-workers and/or recruiters (Rousseau, 1995). Individual employees can observe and monitor the behaviour of members of a firm (e.g. co-workers and managers) in order to record social indicators (Rousseau, 1995). For example, employees may use information received from managers about organisational policies, such as promotion and suspension, to create a psychological contract. Structural signals deliver information via HRM practices and documentation, such as employee guidebooks and mission statements (Rousseau, 1995). An example of a structural signal would be compensation and benefits that could be perceived to be a form of organisational investment by employees.

In addition, Rousseau (1995) contended that it was necessary to know how both primary contract makers (e.g. supervisors) and secondary contract makers (e.g. HRM practices and organisational culture) shape an employee’s psychological contract in order to successfully manage psychological contracts and communication in a firm. She recognised managers as being one of the core agents in a firm who are usually accountable for providing promises or future commitments to workers. Furthermore, according to Coyle-Shapiro and Kessler (2000), employees usually see the actions of managers as representing the firm itself. However, Coyle-Shapiro and Kessler (2000) also suggested that managers are not the only contract makers in a firm. To clarify, other individuals, such as colleagues participating in supportive conversations, could positively affect employee evaluation of a psychological contract. Hence, organisational behaviour literature has not only studied the role of managers/supervisors, but also considered other human agents, such as co-workers, in relation to employee perception of psychological contract fulfilment.
2.3 Approaches to studying the psychological contract

Rousseau and Tijoriwala (1998, p.680) found that several investigations led to distinctive evaluations of the psychological contract amounting to a “veritable embarrassment of riches from a measurement perspective”. They reviewed the measures utilised in prior psychological contract studies and divided them into three approaches. The first approach is content-oriented measures that assessed certain terms of the contract. The measures included certain obligations based on promises made by the employer and employee. Building on the work of Blau (1964) and MacNeil (1980), psychological contract research within an organisational context (e.g. Chong et al., 2012; Restubog et al., 2013) provided strong evidence for the existence of two types of contract: transactional (i.e. short-term and economic aspects of a contract) and relational (i.e. long-term and socio-emotional aspects).

The two types of psychological contract (i.e. transactional-relational) have dominated psychological contract research (Rousseau, 1990; 1995; Robinson and Rousseau, 1994; Millward and Hopkins, 1998). Transactional contracts encompass highly and specified exchanges of narrow scope, which occur over a short period of time. These types of contracts are essential to both employee and organisational behaviour and actions that could infer cooperation or disagreement. On the other hand, relational contracts are broader, more formless and subjectively understood by the parties engaged in the exchange. Relational contracts stress loyalty, support, trust and long-term commitment. Although the conceptualisation of transactional and relational contracts is clear, there were some issues of clarity due to items overlapping (Taylor and Tekleab, 2004; Coyle-Shapiro and Parzefall, 2008). For example, training has been utilised both as a transactional item (Rousseau, 1990) and a relational one (Robinson et al., 1994). Coyle-Shapiro and Kessler (2000) used training as an independent dimension, along with transactional and relational obligations.

The second approach of studying psychological contract is feature-oriented measures (Rousseau and Tijoriwala, 1998) that linked the contract to one or more underlying attributes or dimensions. The most common attributes or dimensions of feature-oriented measures are tangibility, time-frame, scope, stability, contract level and exchange symmetry. The theoretical framework of Rousseau and McLean Parks (1993) and originally based on Macneil’s (1985) contract theory has defined the first four of these dimensions. The last two dimensions were adopted from Rousseau and Schalk (2000) and Sels et al. (2004).
The third approach is evaluation-oriented measures, which captured the level of employee experience of psychological contract fulfilment or breach and violation. This perspective claimed that the state of the psychological contract could be evaluated by applying two approaches. The first approach is the global approach where participants were explicitly asked to indicate the extent to which the business organisation had fulfilled their obligations as perceived in the psychological contract, on a scale from ‘not at all’ to ‘very well fulfilled’. This approach has been used by numerous studies (e.g. Robinson, 1996; Robinson and Morrison, 1995; Robinson and Rousseau, 1994). The second approach involves assessing the state of psychological contract on the basis of contract fulfilment, breach and violation (e.g. Raja et al., 2004; Turnley et al., 2000; 2003). Among the three types of measures (content, feature and evaluation), the feature-oriented measure is the least developed one (McInnis et al., 2009).

2.4 The emergence of the psychological contract in marketing

Morgan and Hunt (1994, p.34) defined relationship marketing as “all marketing activities directed towards establishing, developing, and maintaining successful relational exchanges”. Relationship marketing principles have been applied in institutional markets as well as consumer markets (Sheth, 1994). Morgan and Hunt (1994) added that relationship marketing appeared in different forms and across several markets, such as long-term exchanges between consumers and service providers. Many studies that have analysed building and maintaining consumer relationships have examined transactional versus relational exchanges, in which relational exchanges led to sustained and long-term relationships (Dwyer et al., 1987; Palmatier et al., 2006; Sheth and Parvatiyar, 1995). Hence, it can be argued that commercial relationships based on close relationships are most preferable for consumers (Guo et al., 2015).

Previous research studies on relationship marketing have offered different classification approaches, such as business-to-consumer (B2C) and business-to-business (B2B) classifications, thus providing a typology of relationship marketing. Each classification is based on its unique theoretical approach and the components used for derivation (see Guo et al., 2015). Some forms of relationship marketing, such as relational, exchange and value creation, were conceptually derived (see Gruen, 1995; Johnson and Slnes, 2004) and some were empirically derived such as operational and information processing (see Bensaou and Venkatraman, 1995; Cannon and Perreault, 1999). Hennig-Thurau et al. (2002) argued that identifying the significant drivers of relationship outcomes for organisations, alongside an understanding of the relationship

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process between these drivers and outcomes were two essential tasks required when constructing a relationship marketing theory.

Hai-Cheng (2005) believed that psychological contract theory could be applied within the area of relationship marketing. Hai-Cheng (2005) examined the concept of the psychological contract in scenarios related to reciprocal exchange using the principle of reciprocity in social exchange theory (e.g. Ekeh, 1974; Hechter, 1987). Hai-Cheng (2005) believed that the psychological contract, in the context of marketing, was the “consumers’ perception and faith of reciprocal obligation between them and organisations”. Wan et al. (2011) sought to understand the differences by exploring how a friendly relationship with a service provider affected consumer responses to a service failure. Wan et al. (2011, p.260) found that “a friendly relationship with a service provider can sometimes decrease the negative feelings that consumers experience as the result of a service failure. However, friendship is not always beneficial”. They argued that consumers reacted more negatively to a service failure incident when they believed that the service provider was obligated to fulfil their needs and when they had a close friendship relationship with the provider, rather than a purely business relationship.

Moreover, the investigation carried out by Mende et al. (2013) showed that the desire to build a close relationship and gain loyalty were not always linear. Furthermore, it was found that a consumer was more likely to invest in an extremely close relationship with one service provider, while preferring a less extreme relationship with another. Guo et al. (2015), with a focus on B2C service relationships, conducted a study that pursued empirically-based classification, differing from previous approaches and presented a general typology of relationship types. This classification was based on psychological contracts that took into account consumers’ perceived terms and conditions of a reciprocal exchange. In addition, the study examined the types of exchanged resources between a consumer and a service provider, as well as the norms that regulated the exchange in a relationship, as the dimensions of the psychological contract. Guo et al. (2015) argued that consumers may have more than one concerns in an exchange, holding a simultaneous self-interest and a mutual/other-interest. The study also considered the consumer perspective in order to obtain a deeper understanding of the relationship exchange process, in order to incorporate a psychological contract perspective into the B2C relationship marketing field (see Guo et al., 2015).
The conceptualisation of the psychological contract forwarded by Guo et al. (2015) provided an alternative understanding of consumer reactions to organisational relationship overtures versus the individual traits approach. Furthermore, it offered new insights into the “dyadic” exchange process from a consumer’s point of view. Guo et al. (2015) asked the respondents to detail the “rules of the game” that explicitly and implicitly underpinned a specific service relationship, as well as perceptions of mutual obligations between the service provider and the consumer. As a result, the investigation introduced one of the most significant contributions to marketing literature by defining and conceptualising the psychological contract (see section 2.4.1). However, the psychological contract has also been used to conduct studies within other marketing contexts (e.g. Hai-Cheng, 2005; 2006; Jingwen et al., 2010; Li and Lin; 2010; Lövblad et al., 2012; Malhotra et al., 2017; Mason and Simmons, 2012; Pavlou and Gefen, 2005; WenLing and Yan, 2014; Yang and Huisan, 2013; Zhao and Ma, 2013). The next section will review the definitions of the psychological contract in marketing and the application of the concept within consumer and service contexts, in particular, will be covered in section 2.8.

2.4.1 Definitions of the psychological contract in marketing

According to Li and Lin (2010), previous research into the service industry has been more focused on innovation, competitiveness and foreign investment. It was not until the 1990s that scholars considered the term of psychological contract in other areas of study, such as service marketing (Li and Lin, 2010). In 1996, Lusch and Brown studied how channel members understood and perceived their mutual obligations in the area of circulation services. However, they did not use the term ‘psychological contract’. In 1997, Blancero and Ellram did use the term ‘psychological contract’ in their research on strategic partnerships. They stated

Psychological contracts are the perceptions of reciprocal agreements that are held by two parties. Typically described as the relationship between employees and employers, this construct can be projected on to other relationships as well, including the relationship between buyers and suppliers. The psychological contract is unique for each relationship; moreover, reciprocity is a critical element (Blancero and Ellram, 1997, p.616).

To clarify, Blancero and Ellram (1997) added that in buyer-supplier relationships, suppliers strived to meet consumer service needs and expectations and, in return, for their commitment, they expected continued business. Schneider and Bowen (1999) argued that the psychological
contract was implicit in relationships and that it was a beneficial construct to explore the nature of the relationship between a service organisation and its consumers. Furthermore, Llewellyn (2001) contended that the psychological contract was a sort of implicit agreement, which represented the understanding of shared viewpoints and expectations between exchange partners on their relation’s clauses and conditions.

Hai-Cheng (2006) suggested that the psychological contract existed in marketing relationships and can be applied to other fields of marketing. Hai-Cheng (2006) emphasised consumer perception. Hai-Cheng (2005; 2006) believed that the psychological contract, in the context of marketing, was related to consumer perceptions and beliefs of reciprocal obligations between them and organisations. Li and Lin (2010) conducted a research study that examined the banking sector to introduce a psychology covenant model for service organisations and consumers. Li and Lin (2010, p.320) defined the psychological contract as “the perceptonal expectation and faith of one party to another based on the perception of one’s own obligation in the relationship of consumers and service organisations”. They added that psychological contracts emphasised the reciprocal obligations between two parties. According to Ma and Deng (2012), the psychological contract between service providers and consumers was a list of their mutual responsibilities and obligations perceived by each other. It has been argued that the expectations and perceptions of both parties on reciprocal obligations were the key characteristics of the psychological contract.

However, research studies conducted within the context of marketing have mostly relied on the organisational behaviour perspective to define and conceptualise the concept of the psychological contract. In other words, authors have relied on employee understanding of the obligations of organisations and adopted a narrow sense of the concept of psychological contracts, replacing the terms ‘employees’ and ‘employers’ with external consumers and a wider range of service organisations in the context of marketing. In addition, they have adopted the global measures of Robinson and Morrison (2000), or only considered transactional and relational exchanges as the dimensions by which to measure the psychological contract (see Chen et al., 2003; Guest and Conway, 2002; Hai-Cheng, 2005; 2006; Li and Lin, 2010; Malhotra et al., 2017; Pavlou and Gefen, 2005; Rousseau and Tijoriwala, 1996). However, Guo et al. (2015) argued that in the context of consumer service relationships, the psychological contract was a relational schema in nature, which determined both explicit and implicit expectations in the exchange process between the consumer and the service organisation. They stated that the psychological contract reflected consumer beliefs about their relationships with service providers; while also
playing a role in helping consumers assess and judge the quality of their service interactions with providers and in deciding how to acquire and utilise services (Guo et al., 2015).

According to Guo et al. (2015), there are two aspects of a psychological contract: the psychological aspect and the contractual aspect. The psychological aspect is derived from a social cognitive view, which reflects an individual’s structure of social information in their memory, while the contractual aspect is derived from a resource exchange standpoint. Role theory in services literature (Solomon et al., 1985) has claimed that consumers were expected to implement a set of learned behaviours based on the requirements of a particular service environment. Thus, “the formation of psychological contract facilitates consumers’ learning of their role expectations in a relationship and helps them perform appropriately according to the social cues in a service encounter” (Guo et al., 2015, p.5). Guo et al. (2015) added that in a reciprocal exchange within a consumer services setting, consumers held their own perceptions of stated and unstated expectations and they became motivated to build psychological contracts so as to decrease risks that may be perceived when acquiring services. In addition, they stated that the psychological contract helped individuals inspect the resource exchange process and govern the exchange mentally. As a result, they defined the psychological contract as “an individual’s relational schema regarding the rules and conditions of the resource exchange between the organisation and the person” (Guo et al., 2015, p.4).

Guo et al. (2015) used reciprocity and social and economic exchange as the primary dimensions of the psychological contract. Reciprocity has been stated to be “the governing mechanism regulating the social exchange process between two parties” (Guo et al., 2015, p.6). According to Bagozzi (1995), reciprocity is at the key of all marketing relationships. There are three main dimensions of reciprocity. First, “the immediacy of returns” concerns the timing with which one party must reciprocate the benefits delivered by the other party to reach the fulfilment of the expected obligations for both parties. Second, “the equivalence of returns” determine to what extent the value of resources exchanged between two parties is equivalent. The third dimension is “the nature of the interest of each party in the exchange” (Bagozzi, 1995).

With regards to economic and social exchange, Guo et al. (2015) defined economic exchange as the “the transactions between parties that are specified and quantifiable in the short term” (Guo et al., 2015, p.6). On the other hand, social exchange was defined as “obligations tied to a transaction that was not explicitly specified and inferred a future return” (Guo et al., 2015, p.6). It has been stated that consumers hold psychological, economic (transactional) and social
(relational) contracts. Blau (1964) provided a clear distinction between economic exchange and social exchange. Blau (1964) added that in economic exchanges, the exchange was specified and a formal contract was used to make sure that each party fulfilled its specific obligations. In contrast, “the benefits involved in social exchange did not have an exact price in terms of a single quantitative medium of exchange” (Blau, 1964, p.94). Therefore, it can be stated that consumers place different importance on the transactional and relational values of a specific relationship.

In summary, the psychological contract is much broader than an economic or legal contract in a consumer context, as it comprises several perceptual aspects that cannot be formally incorporated into a legal contract. Based on resources, consumers' abilities and offers given to the consumer in a specific exchange, the psychological contract can be introduced as an individual’s perceived fulfilment of a reciprocal exchange, which takes into account the explicit rules and conditions and implicit promises that consumers use to understand how tangible and intangible resources will be exchanged between two parties. Moreover, economic exchange, social exchange, mutual/other interest and self-interest are the four primary dimensions that comprise the psychological contract in the context of service marketing. However, when consumers think what they are receiving does not meet what they expected from a contractual agreement, psychological contract breach and feelings of violation are likely to occur (see Morrison and Robinson, 1997; Niehoff and Paul, 2001; Malhotra et al., 2017; Pavlou and Gefen, 2005; Pugh et al., 2003; Robinson, 1996; Robinson and Morrison, 2000). Hence, based on precedent and the conceptualisation of Guo et al. (2015), this study defines psychological contract breach as “the failure to meet an individual’s relational schema, which refers to an individuals’ own understanding of stated and unstated prior expectations of obligations, regarding the rules and conditions of the resource exchange and the mutual obligations between the service provider and the consumer”.

2.5 Psychological contract breach and feelings of violation

The terms breach and violation have been utilised interchangeably in the psychological contract literature, where both of them represented perceptions of unfulfilled promise in a reciprocal relationship (Robinson and Morrison, 1995; Robinson et al., 1994). According to Rousseau (1989, p.129), violation involves “feelings of betrayal and deeper psychological distress [whereby] ... the victim experiences anger, resentment, a sense of injustice and wrongful harm”. However, Morrison and Robinson (1997) made a theoretical contribution by developing a model that outlined three conditions whereby employees perceived psychological contract breach and
violation. They also provided a major foundation for subsequent empirical research studies. Their model distinguished between violation and perceived breach. Morrison and Robinson (1997, p.230) stated “violation goes far beyond the mere cognition that a promise has been broken and it is reasonable to assume that employees can perceive that their organisation has failed to fulfill an obligation without experiencing the strong affective response associated with the term violation”. They defined perceived breach as “a cognitive assessment of contract fulfillment that is based on an employee’s perception of what each party has promised and provided to the other” (Morrison and Robinson, 1997, p.230) and feelings of violation as emotional suffering and feelings of anger, betrayal, injustice, mistrust and wrongful harm which elicited from the experience of one’s organisation has failed to fulfill its obligations.

Hence, while perceived breach is more realised and calculative in nature, feelings of violation is an emotional response to realisation of breach proposing a sequence from breach to violation. Morrison and Robinson (1997) argued that the extent to which perceived psychological contract breach improves into felt violation relies on the interpretation process. The interpretation process is when workers cognitively assess the realised breach, as well as why the situation happened (Wong and Weiner, 1981). Numerous studies have suggested that perceived breach and feelings of violation are distinct constructs and confirmed a positive relationship between perceived breach and feelings of violation (see Conway and Briner, 2002; Raja et al., 2004; Robinson and Morrison, 2000; Peng et al., 2016; Zhao et al., 2007).

Morrison and Robinson (1997) introduced three main antecedents of psychological contract breach. The first of these was ‘reneging’, whereby agent(s) of the organisation knew that there was an obligation existing that should be fulfilled, but they failed to do so. They stated that reneging happened either because the organisation was unable to fulfil a promise or because of its unwillingness. An example would be if a recruiter made an explicit promise and then did not fulfil that promise. The second condition was ‘incongruence’, which would occur when there was a misunderstanding from the employee and organisational agent(s) about the existence, or the nature, of a given obligation. They suggested there were three main factors that caused incongruence: divergent schemata, complexity and ambiguity of obligations and poor communication (see Morrison and Robinson, 1997; Robinson and Morrison, 2000). An example of incongruence would be if an employee misunderstood a statement that was given by a recruiter during the recruitment process. According to Morrison and Robinson (1997) and Robinson and Morrison (2000), both reneging and/or incongruence may cause the perception of a psychological
contract breach due to a discrepancy between an worker's interpretation and understanding of what was promised and an worker's perception of what was actually received.

Morrison and Robinson (1997) stated that the third source of a contract breach was 'employee vigilance', which they described as: “the extent to which the employee actively monitors how well the organisation is meeting the terms of his or her psychological contract” (Morrison and Robinson, 1997, p.238). Morrison and Robinson (1997) stated that vigilance was common in exchange relationships, where each party was concerned with the capability and readiness of the other party to meet its obligations. They suggested three factors that might affect vigilance: ambiguity, the nature of the employee-organisation relationship and the perceived costs of realising an unmet promise (Morrison and Robinson, 1997).

In 2000, Robinson and Morrison conducted a further study to test whether empirical support could be found for that argument. Their study provided empirical support for distinguishing between the two constructs and emphasised that a relationship depended on both the attribution of blame made by the employee and the employee's perceptions of fairness. Thus, the Morrison and Robinson (1997) model helped to distinguish between the two concepts: breach (the perception) and violation (feelings) that, according to Coyle-Shapiro and Parzefall (2008), were, until then, being utilised interchangeably.

A review of organisational behaviour and management literature has also revealed that the majority of studies have predominantly focused on contract breach and violation. Most studies have focused on the perceived breach of employees’ expectations by employers, for example, breach in terms of job security and opportunities for improvement and promotion, which, as a result made employees feel that they had suffered unfairness or betrayal (Morrison and Robinson, 1997). Several research studies have focused on attitudinal response to contract breach and violation, for example, in relation to motivation (Lester et al., 2001), stress (Gakovic and Tetrick, 2003), job satisfaction (Sutton and Griffin, 2004), work-life balance (Sturges and Guest, 2004), job insecurity (Kraimer et al., 2005) and organisational commitment (Lemire and Rouillard, 2005). Other authors have examined some behavioural outcomes of violation, such as work performance (Lester et al., 2002), organisational citizenship behaviour (Othman et al., 2005) and employee turnover (Kraak et al., 2017; Sturges et al., 2005). Many of these studies showed that employees responded differently to contract breach, violation and to organisational change, because they had different understandings of their psychological contracts.
Likewise, within the service context, psychological contract breach occurred due to a discrepancy between what consumers perceived to be the obligations that should be fulfilled and what was actually delivered by the service provider. In other words, psychological contract breach and feelings of violation mainly occur due to unfulfilled obligations regarding a particular contract (Bavik and Bavik, 2015). Psychological contract breach refers to a consumer's perception of having not been treated fairly regarding the terms of an exchange agreement with an organisation (see Niehoff and Paul, 2001; Pavlou and Gefen, 2005). Pavlou and Gefen (2005, p.374) stated that psychological contract breach and violation “typically revolves around actual instances of contract violation or misunderstandings regarding exact contractual obligations”. Similar to organisational behaviour and management literature, psychological contract breach and feelings of violation generally occur due to two main antecedents: reneging and incongruence.

An example of reneging would be if a customer service representative promised to deliver a product to a customer by a certain deadline, but he/she was forced to delay delivery due to product unavailability. Reneging may also occur if the obligated party was intentionally unwilling to fulfil the obligations, for example, if a service provider knowingly advertises a better quality of service delivery than the one they intend to utilise. Moreover, reneging may occur when a service provider disregards fulfilling their obligations, even if they initially intended to fulfil the obligation. For instance, a consumer service representative may promise a consumer to upgrade his/her mobile phone contract to a better bundle, but then decide to abandon the original promise. An example of incongruence would be if a service provider thought that they had fulfilled the consumers’ obligations, but the consumer believed otherwise. According to Pavlou and Gefen (2005, p.375) “incongruence is often the result of complex and ambiguous contracts, differences in cognitive frameworks, divergent cognitive schemata and poor communication regarding contract obligations”. Thus, both reneging and incongruence build a discrepancy between a party’s prior expectations of obligations and the actual delivery experience, which possibly could lead to an incident of psychological contract breach and feelings of violation.

In sum, when firms break one or more of their promises, it creates perceived breach, which in turn generates feelings of anger, mistrust and betrayal-labelled violation (Morrison and Robinson, 1997). Organisational behaviour literature suggests that both perceived breach and felt violation are related to harmful outcomes, such as dissatisfaction, low commitment, high stress, emotional distress and low performance (Bunderson, 2001; Conway and Briner, 2002; Coyle-Shapiro and Kessler, 2000; Gakovic and Tetrick, 2003; Lester, Turnley et al., 2002; Parks and Kidder, 1994; Raja et al., 2004). The bulk of the research has either used the terms ‘breach’
and ‘violation’ interchangeably in relation to outcomes or focused on one of these constructs in relation to outcomes (Jamil et al., 2013; Goles et al., 2009).

When an individual perceives a breach in the psychological contract, it reduces their perceptions of predictability and control (Shore and Tetrick, 1994; Tetrick and LaRocco, 1987). These perceptions are essential to the maintenance of well-being. For example, Conway and Briner (2002) reported that broken promises were strongly associated with negative emotional responses, such as depression and anxiety. A lack of predictability and control may make a person to experience stress and strain (Maslach et al., 2001; Shore and Tetrick, 1994; Sutton, 1990). Furthermore, Gakovic and Tetrick (2003) added that the fulfilment of organisational obligations was a significant predictor of emotional exhaustion and satisfaction. Individuals who perceived that the other party of exchange had failed to fulfil important obligations experienced feelings of violation, which were likely to affect their well-being and manifest into employees burnout (Jamil et al., 2013). Consistent with mainstream research, this study suggests that perceived breach of the psychological contract is likely to generate burnout since it damages the belief of reciprocity, which is important for maintaining the well-being of consumers (Maslach et al., 2001).

Thus, it can be argued that psychological contract breach is a source of service failure in which consumers’ expectations of obligations are not met during the service encounter. In respect to this, the next section will discuss service boundaries. Particularly, it will provide in-depth clarification about how the concepts of contract breach and violation are relevant to service provision.

2.6 The boundaries of services

Service theory, service management and service marketing have advanced considerably over the last decades (Chase and Apte, 2007; Fisk et al., 1993). This is due to service being significantly viewed as an essential basis of exchange (Chandler and Lusch, 2015). In many countries, the service sector plays the most significant factor in economic growth (Sundar et al., 2015, p.26). Indeed, academics have shown that the service sector has developed to become one of the largest and most important sectors in many western countries (Lovelock and Wirtz, 2007; Mahadevan, 2002; Spithoven, 2000) and continues to perform an increasingly important role within the economies of developing nations (Bei and Chiao, 2001; Bitner and Brown, 2008). The GDP from services in the United Kingdom increased to £350,444 Million in the first quarter of

There has been obvious agreement among many scholars about the definition of the concept of services, whereby all have agreed that services are activities, actions, procedures and interactions (Solomon et al., 1985; Zeithaml and Bitner, 2000). Furthermore, Norman (1984) added that consumers play a significant role as both consumers and producers of their time. As producers, consumers help organisations improve and develop services via feedback about their experience of the service provided. This feedback cannot be taken before the interaction between a provider and a consumer. This section will define the boundaries of services to provide the reader with an adequate understanding of services marketing, as well as the link between psychological contract breach and service failure.

Several bodies of literature have covered different aspects of service marketing. One body discussed the foundations and growth of services marketing (e.g. Zeithaml and Bitner, 2000; Zeitharnl et al., 2006). There is also a body, which distinguished services from products. In the second main body of literature, the service authors conducted research projects to explore the differences between goods and services (e.g. Vargo and Lusch, 2004; 2008; Wirtz, 2007). The third body introduced service classifications (e.g. Bitner, 1992; Silvestro et al., 1992). According to Zeithaml and Bitner (2000, p.3), services “include all economic activities whose output is not a physical product or construction, is generally consumed at the time it is produced and provides added value informs that are essentially intangible concerns of its first purchaser”. Zeithaml et al. (2006, p.4) later provided a more direct and general definition of service as being “deeds, processes and performances”. The definitions provided by Zeithaml and Bitner (2000) and Zeitharnl et al. (2006) show the wide variety of exchanges within the service sector. In respect to this, literature attempted to provide service classifications (see Bitner, 1992; Dadfar et al., 2013; Kvist et al., 2006; Laroche et al., 2001; Lovelock and Wirtz, 2007; Paswan et al., 2003; Silvestro et al., 1992; Zeithaml et al., 2006).

Besides studies that focussed on defining the boundaries of service, another extensive body of literature focussed on the dynamics of service delivery. This group of studies, in particular, focused on “service encounter” (see Bitner, 1990; Dolen et al., 2004; Grandey et al., 2005; Smith, 2006; Giardini and Frese, 2008). A review of services marketing literature has shown several
definitions of service encounter. Czepiel et al. (1985, p.3), introduced a service encounter as “one human being interacting with another”. According to Surprenant and Soloman (1987, p.87), a service encounter is “the dyadic interaction between a consumer and a service provider”. To provide more clarification, Shostack (1985, p.243) stated that a service encounters is “a period of time during which a consumer directly interacts with a service”. According to Ma and Deng (2012), a service encounter is an interactive moment between a consumer and a service provider.

There are three elements that represent service encounters: consumer, service providers and service entity context. Keillor et al. (2007) stated that service encounters emphasise the quality of service delivery. In the process of service consumption, a service encounter is an essential element that influences consumer evaluation of service quality, thus contributing to interaction of the two-way communication (consumers and an organisation). In the service context, employees’ knowledge, the friendly interactions with customers, consumers’ evaluation of service encounter, along with other factors related to service delivery determine consumer positive behaviour intention (Ma and Deng, 2012). However, due to the nature of intangibility and the complexity of services, service failures appear to be inevitable, which can lead to unfavourable behavioural outcomes (Balaji et al., 2017; Reynolds and Harris, 2009). Hence, the next section will discuss the issue of service failure.

2.7 Perceptions of service failure and psychological contract breach

In order to provide the reader with a clear explanation of the extant research, this section will begin with an introduction to the theoretical foundations of consumer expectations. Next, it will review literature concerned with service failure and introduce several classifications of service failure. This will be followed by a clarification of how psychological contract breach is distinct from expectations, followed by an introduction to how the concept of psychological contract concept is linked to service encounters.

2.7.1 Perceptions of service failure

According to Hepworth (1992), consumers usually have expectations about what a service encounter will involve and the way that service experience should be delivered (see also Lovelock et al., 1998). Service failure occurs when a service is not provided as expected (Bitner et al., 1990). Any service-related mishaps that occur during a consumer’s involvement with a service firm are referred to as service failures in marketing literature (Maxham, 2001). Parasuraman et
al. (1991) and Spreng et al. (1995) provided a specific definition of service failure, they found that service failure happened when consequences of service delivery (reliability) were poor, or if processes related to service delivery did not meet expectations (tangibility, responsiveness, assurance and empathy). The impact of failure on the appraisal of the encounter varied depending on the specific service situation, individual consumer perceptions and the type of failure involved (i.e. outcome and process). According to Bitner et al. (1990), failure can take many forms, such as bad treatment from front-line employees (e.g. rudeness, stealing, or ignoring consumers), failure to meet consumer needs and requests, or failure to deliver core service quality, such as unreasonably slow service.

Sivakumar et al. (2014) added that service failure occurred when the delivery of a service offering did not meet consumer expectations. Hess et al. (2003, p.129) stated that service failure was "service performance that falls below a consumer's expectations". Sivakumar et al. (2014, p.46) added that "service failure entails negative disconfirmation when service performance falls below expectations. The negative disconfirmation must be ‘noticeable’ enough (Anderson, 1973) to result in negative emotions such as anger, irritation, frustration, and annoyance". Many have suggested that such discrepancies may lead to feelings of inequity (Bitner et al., 1990; McCollough et al., 2000; Ruyter and Wetzels, 2000; Sparks and Fredline, 2007) and/or consumer dissatisfaction (Kelley et al., 1993; Lewis and Spyrokopoulous, 2001).

The literature showed that service failure often resulted in decreased consumer satisfaction (Smith et al., 1998). Hence, service encounters generally tend to be evaluated based on how well the actual service experience met the consumer's pre-purchase expectations. Service quality/failure depends particularly on cognitive congruence/incongruence between consumers and the service provider (Bagozzi, 1978). In interpersonal communication, relational transgressions refer to a violation of the implicit or explicit rules guiding relationship evaluation and performance (Metts, 1994). Aaker et al. (2004) suggested that relational transgressions caused by service failures may affect consumer assessment of the service provider's quality and performance and may cause feelings of betrayal and, in some cases, end the relationship (Metts, 1994).

Bitner et al. (1990, p.75) examined the sources of favourable and unfavourable service encounters and suggested that there were three major sources of service failure. They stated that first source was "employee response to service delivery system failures" (Bitner et al., 1990, p.75). This source was considered the primary service failure. The second source was "employee
response to consumer needs” (Bitner et al., 1990, p.75), indicating that service failures occurred due to the inability or unwillingness of employees to be flexible within the service delivery process. Finally, the third source was “unprompted and unsolicited employee action” (Bitner et al., 1990, p.75), which represented negative and unexpected perception of employee behaviour (Bitner et al., 1990). The identification classification of service failure by Bitner et al. (1990) has been adapted and implemented in several studies within different contexts. For example, Kelley et al. (1993) provided a new definition of the subsequent subgroups for each category examining within the context of the retail industry. Hoffman et al. (1995) adopted the classification provided by Bitner et al. (1990) to make it applicable to a single industry focussed study. In addition, a review of the literature showed that there were divergent classifications of service failure offered by many other authors (see Arnold et al., 2005; Holloway and Beatty, 2003; Meuter et al., 2000; Michel, 2001).

2.7.2 Emotions related to service failure

Emotions are episodic and valence affective states that emerge in response to an event or encounter (Scherer, 2005). The cognitive appraisal theory of emotions (Smith and Lazarus, 1993) posits that consumer evaluation of an event fosters specific emotions. Since service failure encounters are negative valence situations, the vast majority of marketing investigations take into account only negative emotions when analysing consumer reactive behaviour to failure episodes (Mattila and Ro, 2008; Gelbrich, 2010; Joireman et al., 2016). However, Chebat and Slusarczyk (2005) have argued that emotions, whether positive and negative, related to service encounter may occur concurrently in some cases. Positive and negative emotions are two largely independent states that can occur in conjunction (Westbrook, 1987; Babin and Boles, 1998). In other words, feeling of negative emotion during service failure may not prevent the ability to also experience positive emotions (Balaji et al., 2017).

Two approaches to measuring emotions in the field of service failure were adopted in previous studies. The first was a valence-based approach, for example, studying dissatisfaction related to service failure encounters. The second approach was a specific emotions approach, for example, testing different specific negative emotions, such as anger, sadness, frustration and regret (Singh and Crisafulli, 2015). In the valence-based approach, negative emotions were expected to cause more unfavourable outcomes while positive emotions were expected to lead to more pleasant outcomes (Singh and Crisafulli, 2015). Alternatively, it has been argued that a failure and its related behaviours are better understood by adopting the specific emotion
approach, in which different emotions, with the same valence, may have different outcomes (Zeelenberg and Pieters, 2004). Traditional research has largely focused on the valence-based approach (Schoefer and Ennew, 2005) working under the assumption that the outcomes of the valence of affective states on cognition and behaviour are essential and research considering specific emotions would add little more information. However, researchers have reported that specific negative emotions have led to different behaviour (Raghunathan and Pham, 1999; Funches, 2011).

It is debatable whether emotions are an outcome of cognition or vice versa, or whether emotions and cognition operate concurrently (Singh and Crisafulli, 2015). The complexity that features in the relationship between cognition and emotions, presented in service marketing research, can be noticed within psychology research. In this domain, some scholars supported the affective independence hypothesis and claimed that emotions and cognition were independent (Singh and Crisafulli, 2015). However, an opposing view questioned the affective independence hypothesis and suggested that affect created by a situation was linked to a stimulus in memory and related cognitive associations (see Duncan and Barret 2007; Storbeck and Clore 2007).

Overall, the debate on whether cognition and emotions are correlated or independent is still open with no definitive conclusions (Balaji et al., 2017; Singh and Crisafulli, 2015; Watson and Spence, 2007). In addition, empirical research has reported that consumer responses to service failure experiences rely on several contingency factors, for example, the context within which service failure occurs, consumer characteristics and existing perceptions about the organisation (Singh and Crisafulli, 2015). These factors have also contributed to the clarification of consumer reactions to service failure experiences (Singh and Crisafulli, 2015). These contingency factors will be discussed in detail in the next sub-section.

### 2.7.3 Contingency factors in consumer reactions to service failure

The review of service marketing literature suggested that there are three groups of contingency factors related to consumer response to service failure: ‘consumer-firm relationship factors’, ‘consumer-related factors’ and ‘firm-related factors’. Research evidence for each factor will be discussed below.
Consumer-firm relationship factors are determined by the perception of the quality of prior service encounters, the type of consumer-firm relationship existing prior to the service failure, consumer willingness to maintain the relationship and the level of employee-consumer relationship. Research showed that consumers who have experienced positive encounters with a firm for a long time are likely to continue the relationship. Generally, in these cases, consumers tend to have lower expectations of service recovery and, therefore, attribute the service failure to a temporary cause (Hess et al., 2003). Furthermore, consumers who are engaged in relational exchanges with the service provider express a higher level of satisfaction (Priluck, 2003) and loyalty towards the firm (Mattila, 2001). Thus, consumers engaged in relational relationships with a firm tend to generate a feeling of interdependence and are more likely to forgive the firm following a service failure experience. Long-term relationships build consumer affective commitments, namely an “emotional attachment to, identification with, and involvement in a firm” (Evanschitzky et al., 2012, p.410).

In contrast, research also showed that consumer-firm relationship could have negative effects. Consumers low in affective commitment are more likely to show less tolerance for failure episodes and are not willing to collaborate with firms in order to improve service delivery (e.g. by complaining) (Mattila 2004; Evanschitzky et al., 2012). Grégoire and Fisher (2008) found that consumers who had a long history with a firm felt betrayed when experiencing a service failure. This group of consumers were found to misbehave by seeking revenge against the firm (Grégoire et al., 2009). Therefore, consumers who have a high appreciation of the firm’s beliefs and values are likely to reuse their services after a service failure. Conversely, those who aimed to gain benefits (mostly transactional) from the relationship with the firm are more likely to attempt to obtain recovery after a service failure experience (Singh and Crisafulli, 2015).

Firm-related factors, such as brand reputation and brand equity, enrich associations with the service and brand in consumers’ minds. These associations would have existed prior to a service failure experience and should, therefore, affect the way that consumers respond to such an encounter. The literature review showed that brand reputation for high service quality and high brand equity reduces the severity of negative impact on consumer satisfaction in the event of a service failure (see Huang, 2011). After a service failure episode, consumers show greater tolerance for organisations with good reputations and high equity, regardless of whether service recovery occurred or not. The above discussion is supported by a number of consumer psychology theories, such as the categorisation theory, introduced by Cohen and Basu (1987); the assimilation theory, proposed by Meyers-Levy and Sternthal (1993); and the anchoring and
adjustment model, developed by Hogarth and Einhorn (1992). According to Singh and Crisafulli (2015, p.128), “these theories claim that consumer perceptions about the brand are re-accessed when a service failure is encountered. Thus, positive memory associations function as a benchmark against which new information (i.e. service failure) is integrated”.

The third contingency concerns consumer-related factors, such as cultural background and emotional intelligence. Consumers were shown to vary in their responses to service failure episodes depending on their cultural backgrounds (see Hui and Au 2001; Mattila and Patterson, 2004) and emotional intelligence. For example, it can be noted that emotional intelligence represents a consumer characteristic that plays an important role in affecting responses to service failure experiences (Gabbott et al., 2011).

2.7.4 Consumer expectations

To understand consumers’ overall perceptions of service provision, Sivakumar et al. (2014, p.43) defined consumer expectations as “pretrial beliefs about a product (Olson and Dover, 1979) or service (Parasuraman, Zeithaml and Berry, 1994) that act as reference levels against which a product/service performance is judged”. The literature review illustrated that previous research offered three ways to conceptualise expectation: as ‘a point estimate’, as ‘a distribution’ and as ‘a range or zone’. Most scholars have conceptualised expectation as a point estimate. One example of this is the gap model of service quality developed by Parasuraman et al. (1985), in which service quality was computed as a gap between the point estimates of expectation versus service perception. On the other hand, some studies have conceptualised the reference level as “a continuous distribution of an infinite number of reference points, where the expected reference level is computed as the mean of the distribution” (Sivakumar et al., 2014, p.46).

Boulding et al. (1993) developed a framework for understanding the form of consumers’ expectations about what they expect will happen in their next service experience versus what they expect they deserve to get (will and should expectations). Their empirical findings, over two studies, indicated that, the two different types of expectations affected the perception of service quality and as result had an impact on intended behaviour. However, their developed model did not consider other important aspects of the process (e.g. emotions elicited by failing to meet each type of expectation and an understanding of what determined these expectations).
However, Zeithaml et al. (2006) stated that consumers judge service encounters based on their expectations of service delivery versus perceived levels of actual service. Parasuraman (2004, p.47) referred to this as the “zone of tolerance”. According to Berry and Parasurman (1991) consumers held a span of expectations as opposed to only one ideal service expectation. This span of expectations highlighted two aspects of consumer service expectations. The first aspect is ‘desired service’, which refers to the level of consumer expectation of service performance. The second aspect is ‘adequate service’, which is defined as the minimum level of service performance that a consumer is willing to accept (Zeithaml et al., 2006). To clarify, when the level of service performance exceeds the ‘desired’ service, the consumer is satisfied with the experience (Schneider and Bowen, 1999). On the other hand, when the perceived level of actual service performance falls below the perceived ‘adequate’ level the consumer is frustrated and dissatisfied (Zeithaml et al., 2006). Hence, the zone of tolerance illustrates the idea of consumer willingness to accept a lower level of service performance. In other words, consumers are willing to accept some levels of variation within service when performance either exceeds or fails expectations (Johnston, 1995). Yet, intangibility surrounding the accepted level of service failure has made the evaluation of service performance difficult (Berry, 1995; Murray and Schlacter, 1990).

Many authors within the services marketing field of study have applied the concept of the ‘zone of tolerance’ and the distinction between expected and actual service to a number of evaluative constructs and themes, including consumer satisfaction, service quality, consumer dissatisfaction, unfairness and service failure (see Liljander and Strandvik, 1993; Nadiri and Hussain, 2005; Teas and DeCarlo, 2004; Weun et al., 2004; Yap and Sweeney, 2007).

### 2.7.5 Expectations versus psychological contract breach

According to Gilmore and Carson (1993), customers have two expectations about a product or service performance, which are instrumental and psychological expectations. These expectations relate to hard data and soft data. Hard data are concerned with performance and reliability standards or any tangible dimensions. On the other hand, soft data related to descriptions of and knowledge about consumers’ feelings, perceptions and requirements (Gilmore and Carson, 1993). Service organisations offer economic and social resources such as goods, services and respect in exchange for consumer resources such as payment and loyalty (i.e. they have a reciprocal relationship) (Guo et al., 2015; Shore et al., 2006). Hence, a breach occurs when the service provider fails to fulfil one of the transactional, relational and/or reciprocal
obligations to its consumers. Guo et al. (2015) stated that a breach could occur within one of the two aspects of a psychological contract. The first aspect is that the psychological contract represents the consumers’ mental knowledge structure of their relationship with a service provider. The second aspect is the contractual breach aspect, which concerns the agreed upon terms and conditions when one party receives a product or service in return for valuable considerations from another party.

The literature review suggested that disconfirmation and breach/violation are closely related yet different concepts (Theotokis et al., 2012). The former derives from unmet expectations whereas the latter derives from the breach of the psychological contract (Goles et al., 2009; Malhotra et al., 2017; Wang and Huff, 2007). In other words, a breach occurs when a consumer perceives that the provider’s failure has violated the psychological contract between them. According to Fullerton and Taylor (2015), previous literature traditionally focused on a very basic level when studying expectations, that is that there was no distinction between obligations and expectations in relation to the disconfirmation processes (see also Hui and Tse, 1996). The question remains: what if this is not the situation? What if a consumer believes that a service provider has obligations to fulfil (e.g. they have made a specific promise in regard to on time delivery, or have promised special and competitive offers after a two year contract)? According to Montes and Zweig (2009), although perceived promises might influence some expectations, they are different from expectations. The consumer might believe that they have a psychological contract with the service provider; however, this is not the same as the expectations stated within the service context (Fullerton and Taylor, 2015). Psychological contracts reflect prior expectations of perceived promises and obligations, while expectations are general beliefs (Robinson, 1996).

Furthermore, according to Rousseau (1989), beliefs and obligations were the core of the existence of psychological contracts in exchange relationships. With psychological contracts, one party believes they were entitled to certain obligations, which is different than making a prediction about what might happen during an encounter. When consumers build expectations, there is a probability attached to what they expect to obtain from a service encounter (Zeithaml et al., 1993). In contrast, consumers who perceive obligations believe that they will get something in return from the other party of the exchange as certainty of performance is the main characteristic of the promise (McDougall et al., 1998). Thus, from the perspective of psychological contract theory, only one party in the exchange relationship needs to believe/perceive that the contract exists for it to be valid (Robinson, 1996). Hence, the evaluation of incidents that lead to the perception of breach of the terms and conditions of a contract might be unrealistic or significantly biased.
(Thompson and Hart, 2006). Therefore, in the context of the consumer, these conditions make the psychological contract hard to manage as breach is subjective and defined by only one party of the two-way of exchange. In the area of marketing, that one party is the consumer.

In addition, Zhao et al. (2007) contended that expectations and psychological contracts had different outcomes when things went wrong. They stated that, when the terms and conditions of a psychological contract were not fulfilled, the cognitive state that resulted was breach not disconfirmation. Disconfirmation of expectations is considered to be less significant than psychological contract breach. This can be emphasised by having a conceptual distinction between violation of the psychological contract and dissatisfaction. Under a psychological contract breach situation, one party believes that the other party is obligated to deliver and meet some obligations and it has failed to do so (Robinson, 1996). In short, service failure is an unmet expectation where the responsibility is not known. Psychological contracts are also unmet expectations, but where the responsibility for the failure is attributed to the service provider (Goles et al., 2009; Malhotra et al., 2017). Hence, expectations are not rooted in promises made, rather than breach (Morrison and Robinson, 1997).

According to Malhotra et al. (2017), most studies of service failure have concentrated on examining the negative outcomes of either the type or the severity of service failures on consumer attitudes and behaviour (see Sajtos et al., 2010; Wang et al., 2011). As the psychological contract can damage the bond between consumers and organisations, due to contract breach and violation, one of the current investigation proposes that psychological contract breach, as a source of service failure, would lead to negative affective states and behavioural intentions during a service encounter.

2.8 Applicability of the psychological contract construct in the context of marketing

As the psychological contract is unlike expectations and promissory in nature, both real and perceived violations of unmet expectations of obligations can cause psychological contract breach (Malhotra et al., 2017; Rousseau and Tijoriwala, 1998). Previous literature on psychological contract theory has suggested that psychological contract breach and violation are inevitable within contractual relationships (Rousseau, 1995; Robinson and Morrison, 2000). Although most literature has concentrated on employment relationships, many authors have expanded the theory to test relationships in other areas and contexts (see Blancero and Ellram, 1997; Guest, 1998; Kingshott and Pecotich, 2007). According to Chih et al. (2017, p.103), “the
service industry is imbued with a high degree of operational uncertainty. When consumers buy products and services from a business, the purchase constitutes an economic contractual relationship between the two parties. At the same time, both parties harbor a subtle and implicit mutual expectation called psychological contract.” Lövblad et al. (2012) stated that the psychological contract needed to be tested in a new context and that further studies were needed to understand its role and scope.

Many marketing studies that have been conducted, have provided empirical evidence for the acceptability of applying the psychological contract construct in the marketing field of study. One of the first studies was conducted by Bavik and Bavik (2005), which examined the effect of employee incivility on customer revenge through psychological contract breach in the context of upscale restaurants. Findings of their investigation showed that psychological contract breach mediated the positive relationship between employee incivility and three types of customer revenge behaviours. When customers experienced rude behaviours in upscale restaurants, they felt compelled to revenge because they perceived a violation of their psychological contract. Pavlou and Gefen (2005) used the concept of psychological contract violation in online B2C marketplaces. They investigated psychological contract breach in buyer–seller relationships. They argued that every buyer–seller engagement could be encompassed by a psychological contract. The psychological contract is characterised the consumer’s perceptual beliefs about the organisation’s contractual obligations, which may not be stated in the formal legal terms of the exchange (Pavlou and Gefen, 2005).

Kingshott (2006) and Kingshott and Pecotich (2007) examined how psychological contract influenced trust and commitment in the motorised vehicle industry. The authors measured the direct effect of psychological contracts on relationship commitment and trust, in order to assess relationships between suppliers and distributors. This research was the first to introduce the variable to a marketing relationship study. Wang et al. (2007) evaluated buyers’ responses to sellers’ violation of trust, while Hill et al. (2009) led an investigation that proposed a model to test the mediating effect of psychological contract violations of unethical activities and trust between a buyer and a supplier within a partnership. Their results showed how a supplier’s perception of the psychological contract breach either partially mediated or fully mediated the relationship between the buyers’ unethical activity and the suppliers trust in a buyer setting. Moreover, Goles et al. (2009) applied the construct to study the consequences of contract violation of continued purchases on the internet.
In Sweden in 2010, a study of B2B relationships was completed by Lövblad and Bantekas who were empirically able to support a link between relational orientation, fulfilment of psychological contract and affective commitment. Lövblad et al. (2012) published a conceptual paper that aimed to develop the construct of affective commitment in B2B relationships between consumers and suppliers. Their paper introduced the psychological contract as a core antecedent to affective commitment. Theotokis et al. (2012) also explored the construct in relation to pricing and promotional literature. Their study found evidence to indicate that psychological contract violation perceptions provided the underlying mechanism for exploring consumer reactions to expiration date-based pricing. Fang et al.’s (2014) study also analysed the buyer-seller relationship and linked the theories of psychological contract violation, emotion and online coping from the power perspective to explore the double deviation scenario in e-auction markets. Finally, a study by Malhotra et al. (2017) examined the impact of psychological contract violation on consumer intention to reuse online retailer websites, using trust and satisfaction to test mediating and moderating mechanisms.

Thus, it can be noticed that prior studies indicate the existence of the psychological contract, fulfilment or breach, within retail, buyer–seller (B2B) relationship and online (B2C) relationship. However, to the best of author’s knowledge, no previous study has investigated how perceived psychological contract breach might affect consumers’ emotion and outcomes, along with considering how coping behaviour can play a role in affecting the final service outcomes. According to Malhotra et al. (2017), since the construct of the psychological contract is a rarely investigated area in marketing, there is a need to explore the construct within the context of marketing.

As stated earlier, consumers may experience different types of emotions during service encounters (Anaya et al., 2016). Emotions such as anger, delight and regret have been extensively investigated in previous services marketing literature (Funches, 2011). However, the impact of feelings of violation resulting from psychological contract breach, as a specific emotion, is less understood. It is clear that in a service encounter, the consumer holds a set of expectations that may or may not vary from the expectations understood by the service provider. Hence, the essence of the psychological contract might be implied or assumed and, thus, may suffer from discrepancies between the two parties of the exchange. A perceived breach of the psychological contract can be an emotional event. To illustrate, breach is often accompanied with feelings of violation; a sense of having been betrayed by the overall relationship (Morrison and Robinson, 1997). These perceptions can result in negative outcomes, such as a lack of trust or job
dissatisfaction within an employment relationship (Robinson and Rousseau, 1994; Robinson, 1996) and, thus, similar unfavourable results are expected within service failure encounters. The context of service encounters is a unique and useful context within which to evaluate consumer feelings of violation. In a typical service exchange, a service provider offers an intangible service, which can be delivered to many consumers (Bitner, 1992). This service exchange could be subject to many sources of failures since it may fall under the psychological contract dimensions and is usually delivered based on contractual agreements.

2.9 Summary

In summary, this chapter reviewed the concept and definitions of the psychological contract, with a specific focus on psychological contract fulfilment and breach. Furthermore, the chapter presented an overview of current service marketing literature regarding sources of service encounter and occurrences of service failure. In addition, the chapter explained the distinction between contract violation and the disconfirmation theory to clarify that psychological contract breach and expectation are sources of service failure and that they are two relative, but different concepts. Chapter 3 will discuss the theoretical foundations of the psychological contract as well as the antecedents and outcomes of psychological contract breach, primarily from a marketing perspective.
Chapter Three

Antecedents and Outcomes of Psychological Contract Breach
3.1 Introduction

Chapter 2 provided an overview and an introduction to the psychological contract. The aim of this chapter is to examine extant literatures which provide insight into the antecedents and outcomes of psychological contract breach during service encounter failure. This review subsequently informs the proposal of a conceptual model in Chapter 4. Research which explicitly investigates the antecedents and outcomes of psychological contract breach in a holistic and cohesive fashion is lacking (see section 1.2.8). Hence, the current chapter will draw on research from a wider frame of study, which offers insight into the antecedents and outcomes of psychological contract breach and violation. In doing so, this chapter draws on multiple literatures from diverse disciplines and perspectives which further our understanding of the antecedents and outcomes of perceived psychological contract breach and feelings of violation.

This chapter draws on four prominent disciplines. First, the chapter will provide a discussion about the theoretical foundations of the psychological contract. Second, the antecedents of psychological contract and specifically, attribution of blame and feelings of violation, are drawn on in reviewing psychology, relationship marketing and service marketing literature. Third, the outcomes of perceived breach and violation from a marketing perspective are considered. Finally, extant research which acknowledges the antecedents of perceived breach and violation from a psychological perspective (i.e. coping behaviour) are explored. Therefore, the current chapter aims to elicit a number of theories and constructs that are useful in understanding the antecedents and outcomes of psychological contract breach and violation within service marketing.

3.2 Theoretical foundations of the psychological contract

Numerous theoretical perspectives have been applied to elucidate the psychological contract and its related constructs within organisational behaviour and management literature. The psychological contract has some common characteristics with several other approaches, including social exchange, organisational behaviour and socialisation theory (Conway and Briner, 2009). Thus, this section will discuss the most five important theoretical frameworks in more detail. In addition, it will reflect upon the theoretical approaches relative to this thesis and justify the rationale for their consideration.
3.2.1 Social exchange theory

According to Aryee et al. (2013), social exchange theory was developed to test the improvement and maintenance of interpersonal relationships within a workplace. Yet, it has also been applied to understand the nature of the relationship between employers and employees since its development. Cropanzano and Mitchell (2005) believed that the notion of social exchange emerged when an employer showed concern for his/her employees and when this concern resulted in a positive outcome for the organisation. In other words, positive social exchange relationships have been shown to lead to positive employee attitudes and behaviour.

Additionally, social exchange theory has been widely applied as a lens to study the relationship between HRM practices and psychological contract fulfilment (Katou and Budhwar, 2012). Social exchange theory suggests that when employees view HRM practices as being supportive, they will perceive higher levels of psychological contract fulfilment. Thus, HRM practices are expected to influence the psychological contract since they form part of employer’s obligations towards their workers (see Suazo et al., 2009; Uen et al., 2009).

There are two common features in social exchange theory and psychological contract theory: reciprocity and the exchange relationship. The concept of reciprocity (Gouldner, 1960) is considered a core element used to describe the nature of the psychological contract. Researchers have supported the notion of the psychological contract as an exchange construct, where reciprocity is an essential feature used to demonstrate the relationship between the perception of the psychological contract and employees’ attitudes and behaviour (see Bal et al., 2013; Conway and Briner, 2002; Robinson and Morrison, 1995; Rousseau, 1995; Shore and Tetrick, 1994; Turnley et al., 2003; Uen et al., 2009). Social exchange theory also helps in understanding the negative effects of psychological contract breach on employee attitudes and behaviours (e.g. Aselage and Eisenberger, 2003; Coyle-Shapiro and Conway, 2004; Morrison and Robinson, 1997; Rousseau, 1995; Turnley et al., 2003; Zhao et al., 2007).

3.2.2 Socialisation theory

Researchers have examined the formation of the psychological contract as a sense-making process that occurs within organisational socialisation (Louis, 1980). The socialisation period is considered as an essential phase in the formation of employees’ psychological contracts (e.g. Anderson and Thomas, 1998; Rousseau, 1995). Socialisation research has reported that sense making plays an important role in the adjustment of the newly hired staff to the organisation,
particularly during the first months after entry (Morrison, 1993; Rousseau, 2001). De Vos et al. (2003) contended that socialisation theory was widely applied to evaluate the psychological contracts of newly hired staff during the encounter and acquisition stage of socialisation. Thus, socialisation theory is more suited to a study of the mechanism of the formation of the psychological contract, rather than an evaluation of the perception of the psychological contract.

3.2.3 Control theory

Control theory has been used to analyse employee responses to the psychological contract and the results have been found to be beneficial to organisations (Ng et al., 2010; Bernhard-Oettel et al., 2013). According to this theory, employees hold unfavourable attitudes or behave negatively (e.g. absenteeism and intention to quit) when their employer fails to fulfil what the employees perceived to be owed to them due to promises given by the organisation (Carver and Scheier, 1982). This theory has been applied to understand the psychological contract in cases where discrepancies have occurred (i.e. breach and violation). From the employee perspective, such discrepancies reflect imbalances in the social exchange relationship between employees and their organisation. Control theory suggests that employees work towards eliminating or at least lowering such imbalances. This theory is more in line with psychological contract investigations which measure discrepancies, breach and violation and their related outcomes. Thus, control theory lends itself to an investigation of psychological contract breach rather than fulfilment.

3.2.4 Cognitive dissonance theory

The negative reciprocity perspective is when an employee perceives a violation of the psychological contract (i.e. when the organisation has failed to fulfil its promised obligations to their employee), which may make the employee perceives the broken promise as a violation. In these cases, employees believe that they have been subject to inequity and/or have been betrayed by the company during the hiring process. As a result, the perceived broken promises may cause the employee to become dissatisfied with the employment relationship and to experience cognitive dissonance (Ho et al., 2004). This may lead the employee to decrease their positive behaviour (e.g. organisational citizenship behaviour) and/or misbehave (e.g. employee deviance) as a form of direct retaliation (Uhl-Bien and Maslyn, 2003) in order to obtain equity and manage the cognitive dissonance in the employer/employee relationship. Similar to control theory,
cognitive dissonance theory is also beneficial and helpful for studies considering breach and violation, rather than fulfilment.

3.2.5 Social information processing theory

Salancik and Pfeffer's (1978) social information processing theory proposes that the information that workers obtain from other parties in the firm (e.g. supervisors and colleagues) plays an essential role in how they shape their beliefs of the obligations that they owe to the firm and are owed in return. There are two basic principles of social information processing theory. The first principle implies that the social environment provides indications as to which aspects of the work environment should be considered salient or weighted heavily. The second principle reflects employee evaluation of the work environment. In other words, it concerns the reasons why ‘employees’ assess the work environment positively or negatively, which can be perceived from the social context (Pfeffer, 1981). For instance, supervisors could provide information about the management style and treatment of employees within the firm. Rousseau (2004) discussed the notion of multiple contract makers and how employee interpretation of the psychological contract could be affected by different sources of information (see section 2.2.3).

This theoretical review provides a framework to inform the study of the psychological contract and likely uncover varying theoretical perspectives. To clarify, most prior psychological contract research, within the field of organisational behaviour and management, has drawn on one theoretical perspective: social exchange (for an exception, see Aselage and Eisenberger, 2003). The argument for studying the connection between service marketing practices, the psychological contract and consumer outcomes, to contribute to current service marketing literature hinges upon the notion of control and cognitive dissonance theories. In other words, in the context of the consumer, psychological contract theory has many similar features to social exchange theory, such as reciprocity and resource exchange within the relationship between service organisations and consumers (see section 2.4). This thesis is positioning psychological contract building on features of control and cognitive dissonance processing theory. Hence, this study will apply the cognitive appraisal theory to the study of antecedents and outcomes of psychological contract breach and violation with the extend of marketing literature. This theory is more in-line with psychological contract measures, which emphasise breach, violation and their related outcomes. Thus, the cognitive appraisal theory lends itself to an analysis of psychological contract breach.
3.2.6 Cognitive appraisal theory

Cognitive appraisal theory is “an especially relevant approach for understanding the emotional responses of consumers in the marketplace” (Johnson and Stewart, 2005, p.3). Bagozzi et al. (1999) suggested that a cognitive appraisal approach offered a comprehensive understanding of consumer behavioural responses to emotions. According to cognitive appraisal theory, users who experienced service failure would first attempt to determine whether the failure was relevant to them. This process involved two key components: goals and their importance. Service failure experiences generally elicit negative emotions, which range from neutral to extremely negative (see Berkowitz, 1993; Smith and Bolton, 2002; Weiss and Cropanzano, 1996).

Two schools of thought have used cognitive appraisal theory to understand people’s responses to a situation. First, the personal well-being approach. Theorists such as Lazarus (1991a; 1991b) believed that appraisal was an evaluation of the person-environment relationship. The second school is the goal-oriented approach. Theorists, such as Frijda (1987) believed that appraisal was a motivational response to a relationship (Ben-Ze’ev, 1994) and provided a motivation to reach personal goals (Averill and More, 1993). There are four key appraisals that can help predicting a wide range of felt emotions, when emotions are applicable as in service encounters: outcome desirability, certainty, fairness and agency (Watson and Spence, 2007). Building on insights from cognitive appraisal theory, this study will empirically test a developed comprehensive model to examine the impact of perceived contract breach on consumer primary appraisal that leads to feelings of violation and their effect on four affective states and behavioural intentions (i.e. regret, dissatisfaction, desire for revenge and loyalty intentions). Furthermore, the model will examine the mediating effect of the secondary appraisal process (i.e. implementation of coping strategies) on the four service outcomes. Hence, the next sub-section will provide a discussion about each antecedent primary appraisal that affects emotions and the rationale for testing each chosen antecedent appraisal for this study.

3.2.7 Antecedent appraisals that affect emotions

The first antecedent appraisal is outcome desirability. Outcome desirability refers to the initial cognitive appraisal of a situation in terms of its outcome (i.e. positive or negative) related to an individual well-being (Watson and Spence, 2007). Outcome desirability evaluates how positive or negative (desirable/undesirable) an event is and how relative it is to a personal benchmark. In other words, whether it is driven by personal goals or by an overall evaluation of satisfaction.
However, outcome desirability appraisals alone are not sufficient when trying to distinguish between specific emotions (Watson and Spence, 2007).

The second key appraisal is certainty (Watson and Spence, 2007). Certainty represents the perceived likelihood of a specific situation where past events are certain (e.g. failing an exam) and future events are uncertain (e.g. the possibility of death from smoking). The level of certainty about a consequence will play a role in how a person might feel (Frijda, 1987; Roseman, 1984; Smith and Ellsworth, 1985). For example, there is a strong relationship between high levels of uncertainty and the emotions of hope and fear (Watson and Spence, 2007). Ruth et al. (2002) found that certainty was statistically associated with various consumption emotions. However, outcome desirability and agency appraisals overpowered it. Therefore, certainty is an essential appraisal for studying experienced emotions in situations where consumer decision-making and expected decision consequences are the focus.

The third appraisal is fairness (Watson and Spence, 2007). Fairness concerns how morally appropriate a person perceives an event to be (Frijda, 1986; Scherer, 1988; Smith and Ellsworth, 1985). It has been connected to another popular and huge literature, which is justice literature (Skitka and Crosby, 2003). As appraisals might take into account past or future events in the evaluation process, the classification of fairness can be either retributive justice and/or positive justice (Watson and Spence, 2007).

The last key antecedent appraisal is agency (Watson and Spence, 2007). The causal agent is the individual or entity that has control over the stimulus situation. The appraiser might perceive the agent to be him/herself (internal), someone else (external) or circumstance (third-party) (Ortony et al., 1988; Roseman, 1991; Smith and Ellsworth, 1985). According to Peeters and Czapinski (1990), agency is more applicable in incidents involving negative, and not positive, emotions and in reactions to failure, and not success, as unexpected or unfavourable events more often motivate the appraiser to explain why the event happened and, therefore, attribute blame (Folkes, 1988; Weiner, 2000).

Various coping strategies are associated with blame attribution in response to product failure (Yi and Baumgartner, 2004). Blame attribution and negative emotions (e.g. anger) lead consumers to complain and switch to another brand, especially in cases where service failure is not seen as circumstantial (Folkes et al., 1987). Agency is derived from attribution theory and linked to controllability. To clarify, controllability determines if an agent had control over the cause of an act. Generally, when an external party is responsible for an incident, they are believed to
have had control over it; otherwise, the event would usually be attributed to external circumstances (Watson and Spence, 2007).

Blame attribution is a retrospective evaluation of the responsibility for events (Roseman, 1991; Stephens and Gwinner, 1998). Thus, it is a hindsight appraisal of a situation (Weiner, 1985). Furthermore, attribution of blame has been adopted by attribution theorists (e.g. Folkes, 1984) and appraisal theorists (e.g. Roseman, 1991) to explore emotions triggered by causal inference. Attribution of blame is the most influential event antecedent that demonstrates an emotion (see Ortony et al., 1988; Roseman, 1991; Smith and Ellsworth, 1985; Watson and Spence, 2007). Therefore, this study will focus on blame attribution (Roseman, 1991) and coping (Lazarus, 1991a) as they are both influential and responsible for strong negative emotions (i.e. violation in this study) (Gelbrich, 2010; Grégoire and Fisher, 2008).

3.3 Antecedents of psychological contract breach

Appraisal refers to “the process of judging the significance of an event for personal well-being” (Bougie et al., 2003, p.378). To generate an emotion, an event must be appraised as having somehow affected an individual. An understanding of appraisals is essential because it may help marketers to explore why valence/specific emotions emerge. Therefore, there are a large number of conceptual and empirical studies on appraisals in the field of marketing (e.g. Bagozzi et al., 1999; Ruth et al., 2002). As given in section 2.8, prior studies have investigated consequences of psychological contract violation within the contexts of the buyer-seller relationship and online services (see Lövblad et al., 2012; Malhotra et al., 2017; Pavlou and Gefen, 2005). Other studies have examined different norms of consumer-firm relationships, considering self and other obligations fulfilment and breach, but have not conceptualised the psychological contract (see Wan et al., 2011). However, further research is required to explore the antecedents and outcomes of psychological contract breach and violation within service marketing literature. Malhotra et al. (2017) contended that other outcome variables of the psychological contract, such as word of mouth and consumer rage, could be tested to determine to what extent contract breach and violation impact consumer perceptions and behaviour within consumer settings.

In the event of service failures, blame for the negative encounter is often attributed to the firm, which could make consumers experience negative emotions (Folkes, 1984). Based on research of Gelbrich (2010), Grégoire and Fisher (2006), Joireman et al. (2013) and Zourrig et al.
(2009), this study argues that in service situations where consumers draw upon negative emotions, their attribution of blame could positively influence their feelings of violation. Previous studies have also examined the role of the attribution of blame within the relationship between negative emotions and the coping process in service failure situations (see Albrech et al., 2017; Tao et al., 2016). Therefore, the next sub-sections will offer a review of the blame construct and its link to negative emotions.

### 3.3.1 Attribution theory

Attribution theory was substantively applied in social psychology in the years 1950-1960, with researchers aiming to better understand the foundations related to social perception. In psychological literature, attribution theories have proven to support an understanding of how people decide to react emotionally to the causes of a given incident or outcome (Klein et al., 2011). As pioneered by Heider (1958), Jones and Davis (1965) and Kelly (1987), attribution theory helps explain the way that an individual causally explains incidents, as well as the behavioural outcomes or consequences of those explanations. According to Kelley (1973, p.107) attribution theory is “a theory about how people make causal explanations, about how they answer questions beginning with ‘why?’”. Attribution is focused on drawing causal interpretations of certain experiences, which, in turn, determines attitudes and behaviour. Individuals make attributions in order to better evaluate the context of the stressor experience and to seek a higher control over it (Harvey and Weary, 1984). Blame attribution is an established cognition. Grégoire et al. (2010, p.742) defined it as “the degree to which consumers perceive a firm to be accountable for the causation of a failed recovery”.

Kelley and Michela (1980) proposed a broad model of the attribution field, which encompassed both the antecedents and outcomes of attributions that impacted upon individual’s responding behaviour. Kelley and Michela (1980, p.458) defined blame attribution as “the perception or inference of cause”. Consumers attribute blame when they judge that a negative incident could be controlled and managed, but that the provider did not prevent the failure episode from happening (Weiner, 2000); therefore, attribution of blame is a judgement about whom or what is the cause of a certain outcome or situation. Kelley and Michela (1980) stated that the attribution process began with an assessment of the antecedents via an evaluation of the environment and conditions that led to the event (Kelley and Michela, 1980). They suggested that the antecedents could be information, beliefs or motivation (Kelley and Michela, 1980). Once the reasons behind the event occurrence were realised, people were expected to manifest responses
related to the attribution. The consequences could be associated with, behaviour (e.g. switch), affect (anger, frustration, self-esteem or pride) or expectancy. Hence, attribution refers to the process by which people can explain causes of particular incidents. Accordingly, in the case of this study, attribution of blame is the process through which consumers make sense of the cause of the psychological contract breach.

Previous studies have analysed several cases of blame attribution. From the social psychology perspective, Kelley (1967) proposed that blame could be attributed to the self, the provider, a third-party or a combination of the three parties. In other words, consumers may blame themselves, the service provider, someone else or something (e.g. circumstances) for the failure. In addition, Weiner’s (1982) model argued that people rationalised the locus of causality for the blame. The model suggested that if blame was attributed to another party, the attribution was external. Later, Weiner (1985) defined three dimensions for attributions: locus, stability and controllability (see also Weiner, 2000). They stated that locus was concerned with determining whether the attribution was internal or external, in other words, whether the causes came from within the person and his/her decisions or from the external environment (Weiner, 1985). Stability related to the idea of whether the factors were constant or temporary (Weiner, 1985), while controllability referred to the perception of control over the event (Weiner, 1985). On the other hand, Lazarus (1991b) suggested that self-blame leads to internal attribution. However, Bitner (1990, p.70) provided a simpler way to view the three dimensions of attribution, by suggesting an explanatory question for each dimension. She stated that locus could be defined by asking the question: ‘who is responsible?’; stability could be comprehended by asking the question: ‘is the cause likely to recur?’ and controllability could be understood by asking the question: ‘did the responsible party have control over the cause?’.

People may differ in their appraisal (or attribution) of a particular incident, but similar patterns of appraisal typically arouse similar emotions. For example, negative emotion (e.g. frustration) in response to a service failure elicited when consumers evaluate an event as unfair, when there is evidence of the service provider having control over the service failure and a stable reason for the service failure (Bougie et al., 2003; Folkes et al., 1987; Ruth et al., 2002). Hence, perceptual bias is a critical issue within the subjective attribution process. Similar to any other decision-making processes, bias might have an impact on the decision to attribute blame. There are many types of bias. The self-serving bias states that people will attribute success to themselves and failure to others (Campbell and Sedikides, 1999). In service failure incidents, it is likely that consumers may blame the provider, or any other external sources, rather than
themselves, especially in situations where little information is available (Laczniak et al., 2001). Yen et al. (2004) found that users who regularly engaged in failed service encounters were more likely to blame the provider and not themselves. The second type of bias is defensive attribution (Salminen, 1992), where people defend themselves against adverse events by attributing external blame. Burger (1981) also found that people were more likely to blame others when the experience became more severe. On the contrary, Ross and Sicoly (1979) found that when users believed they were fully responsible for service failures due to their control over outcomes, even if this was not always the case, an ego-centric bias occurred. Put differently, users who interact with a provider may believe they have more influence over the outcome of the event than they actually do.

These arguments suggest that attribution is very much a subjective state. Consumers are most likely to make their own judgments about failure (i.e. whether the failure occurred because of the provider’s actions, the actions of the user, an external cause or something else systemic to the service) (Bitner et al., 1990; McColl-Kennedy and Sparks, 2003). In many cases, a consumer would not have enough detail about the real cause of the failure. Accordingly, consumers often use the information available along with previous experiences to attribute blame (McColl-Kennedy and Sparks, 2003). Moreover, different attributions determine people’s responses to an event leading to specific emotions and behaviour. Weiner’s (1986) attribution theory of motivation and emotion suggests that affect and behavioural intentions following an incident are reflected in the subsequent consequences and attributions. Empirical research largely supports his prediction (Weiner, 2014). In addition, differences in blame attribution can help predict consumer responses to service failures and the potential different outcomes (Van Vaerenbergh et al., 2014).

According to van Vaerenbergh et al. (2014), consumers tend to evaluate their environment when they experience a service failure event in order to identify the causal explanations that led to the failure. Attribution theory has been used in other area besides psychology. The theory has been applied in numerous marketing studies that aimed to investigate how consumers attributed blame in product or service failures (e.g. Bitner, 1990; Dong et al., 2016; Folkes, 1984; Meuter et al., 2000), whether attribution of blame played a role in the service recovery process or not (Harris et al., 2006; Heidenreich et al., 2015; Swanson and Kelley, 2001) and the impact of attribution of blame on consumer satisfaction and behavioural outcomes (Iglesias, 2009). According to Weiner (2000), attribution theory has been largely utilised in service failure literature as it has been reported that individuals are more apt to make attributions in the situation of dissatisfactory situations than in the situation of successful ones.
Prior studies have also applied the attribution theory to concentrate on interpersonal services. For example, Maxham III and Netemeyer (2002) studied attribution in the context of two or more serial failures and found that consumers who experienced multiple failures and poor recoveries tended to attribute blame to the service provider and to perceive the failures to be a constant characteristic of the service provider; and Swanson and Kelley (2001) found that consumers had higher repurchase intentions and positive word-of-mouth when the recovery after a service failure was successful.

Studies have also investigated the influence of consumer-firm relationships on attribution of blame and satisfaction after a service failure incident. Hess et al. (2003) contended that consumers who intended to continue their relationship with a firm believed that the failure episode was not constant and they showed higher degree of satisfaction with the service after recovery took place. Moreover, attribution studies, within consumer-firm relationship, have shown the impact of a failure on a firm’s perceived image. In cases where the cause of the failure was attributed to the firm and its employees, the negative effects perceived by the consumers altered into a halo effect and impacted the impression of quality delivered by the firm (Iglesias, 2009).

In addition to service research studies, Folkes (1984) revealed how attribution played a role in consumer responses to product failure. Folkes (1984) examined all three dimensions of attribution (i.e. locus, stability and controllability) and found that consumers were more likely to experience anger and have a desire for revenge if the failure was attributed to the firm and the firm should have been able to control or prevent the failure. Furthermore, consumers felt entitled to compensation (e.g. a refund) and an apology more when the cause was external. These findings were supported by later studies, which revealed that consumers assigned more responsibility to the firm, the less control consumers felt they had over a service (Hui and Toffoli, 2002; Pittman and Pittman, 1980). External attributions that were controllable were more damaging as consumers who experienced the failure were less passive and more likely to react negatively and to take strong unpleasant action against the firm (Fred van Raaij and Pruyn, 1998; van Vaerenbergh et al., 2014, Weiner, 2000).

Furthermore, literature has discussed the role of blame attribution in other contexts. Researchers have provided evidence that the coping process is significantly affected by attribution style (Poon and Lau, 1999). As explained previously (see sections 3.2.6 and 3.2.7), cognitive appraisal theory, which focuses on blame, is well established in the literature on consumer coping behaviour. The secondary appraisal process includes three related appraisals:
blame, coping potential and future expectations (Stephens and Gwinner, 1998). Internal or external blame distinguishes between emotions, such as anger and guilt and eventually influences consumer coping strategies. The precise emotion felt is partly dependent on whom the consumer attributes the blame (Smith and Ellsworth, 1985; Weiner, 1986). According to Yi and Baumgartner (2004, p.315), “the assignment of blame to the self or another party will influence whether the consumer will attempt to manage the emotion or fail to change his or her emotional state”. In other words, consumers who have no one to blame for the failure episode do not progress through the cognitive appraisal process to require a coping mechanism (see Stephens and Gwinner, 1998).

Accordingly, attribution theory explains how people decide who is responsible for the event, as well as the behavioural outcomes or results of those casual decisions (Kelley, 1987). Most studies within service settings use simple conceptualisations of attribution, building on Weiner’s (1980) locus of control concept (Nijssen et al., 2016), in which explanations of a positive or negative experience might be assigned to service management, the consumer or some combined sources. However, attribution theory also suggests another form of attribution: dispositional attribution, where there is potential for inference about the motives and traits of an entity or individual. Dispositional attributions require an observer to concentrate all inferences on the motives of others rather than him or herself. Thus, if the motive is considered positive, the observer assumes positive traits of the actor and may react positively, and vice versa, even if there are some implications for his or her well-being (Allen and Leary, 2010).

Thus, blame attribution is an important concept within service failure episodes. Several perceptual biases explain the likelihood of a person attributing self-blame or external blame to the provider or other external parties (Van Vaerenbergh et al., 2014). Social psychology literature has also demonstrated that blame attribution can influence emotion in service failures. The next subsection will discuss this in more detail.

**3.3.2 Attribution of blame and emotions**

Averill (1982; 1983) proposed that the antecedents of negative emotion were the appraisal and resulting actions of an individual in a social situation. Averill (1982; 1983) researched anger-inducing situations. The results showed that in 59% of the total situations conducted for the study the cause of anger was attributed to a voluntary and unjustified act by another individual. According to Averill (1983, p.1150) anger “more than anything else, is an attribution of blame”.
Betancourt and Blair (1992) contended that feelings of negative emotion were caused by the attribution process that encompassed the assessment of an actor's intentions and whether the actor had control over the situation or not. Betancourt and Blair (1992) believed that blame attribution strongly forecast negative emotion. However, Zillmann and Cantor (1976) found that prior justification played a role in muting or increasing the experience of negative emotions (e.g. anger and frustration) felt. Baumeister et al. (1990) reported that actions leading consumers to become angry were both deliberate and unjustified.

Empirically, Smith et al. (1993) found a positive association between blaming an offending party and negative emotions towards that party. They added that users were angrier when they attributed blame to the provider and not themselves. Additionally, previous studies showed that attributing responsibility for what was happening to someone else (external attribution) produced anger, disgust or contempt emotions; whereas blaming oneself for the situation (internal attribution) generated emotions of shame and guilt (see Folkes et al., 1987; Stephens and Gwinner, 1998; Westbrook, 1987).

Researchers have reported that severe harm leads to both stronger attribution of blame and stronger feelings of negative emotion. Schwats et al. (1978) added that the greater the harm suffered, the more responsibility was attributed to an external or a third-party. Ohbuchi et al. (1989) found more negative outcomes when a person suffered a great amount of harm than when little harm occurred. Rule and Ferguson (1984) suggested that negative emotions (e.g. anger) and blame shared common antecedent conditions. When the result of an individual's action was perceived as harmful, then the perceiver's attribution of blame was further differentiated thorough assessing three factors of the action: avoidability, intentionality and appropriateness. Rule and Ferguson (1984) proposed that the natural reactions towards these three norms would be blame, anger and aggression.

The strong relationship between blame and negative emotions may lead to the assumption that they are similar and interchangeable concepts. However, Quigley and Tedeschi (1996) examined the relationship between anger and blame and found that anger and blame were distinct. They stated that the former was an affective (emotional response), while the latter was an established cognition. Their findings were consistent with other studies which suggested that blame is cognition (see Berenbaum et al., 1995; Grégoire et al., 2010). Grégoire et al. (2010) found that blame increased consumers' anger. In addition, Smith (1992) discussed that frustration arises from thoughts of others' inferiority. Frustration may also arise when consumers consider
external parties unworthy or inferior in some way. Hence, in service failure episodes, frustration is most likely to arise when users blame the provider.

### 3.4 Consumer emotions in service failure

Service providers strive to make service encounters pleasant for consumers, to reinforce consumer satisfaction and increase consumer loyalty (Balaji et al., 2017). However, as services and the service delivery process are complex, service failure is inevitable and may lead to consumer dissatisfaction and unfavourable behavioural outcomes (Reynolds and Harris, 2009; Tsarenko and Strizhakova, 2013). Extant service literature proposes that consumers experience a variety of emotions after service failures (see Tombs et al., 2014). However, according to Balaji et al. (2017), consumers experience some specific emotions straight after a service failure encounter (i.e. post-failure emotions). As a result, consumers may try to manage or regulate the emotional responses that emerge due to stressful encounters (Gabbott et al., 2011; Tsarenko and Strizhakova, 2013).

It is intuitively reasonable and possible to feel more than one emotion as a result of a particular event (Ruth et al., 2002; Scherer and Ceschi, 1997; Sullivan and Strongman, 2003). To clarify, when one or more elements of an event are ambiguous, this can cause vague or mixed emotions. In most cases, consumers experience a strong emotion along with other, less prominent, feelings. Different methods can measure this effect. One method is to ask respondents to remember a previous event where they felt one or more particular emotion (Smith and Ellsworth, 1985). Another method can be employed by asking participants to collect their emotional responses to a specific scenario (Scherer and Ceschi, 1997). A third method is to check for coinciding emotions (Ruth et al., 2002). The use of these methods ensured that the strongest emotion and/or the last emotion felt during the critical incident, was the most prominent emotion recalled, as the peak-end rule suggests (see Redelmeier and Kahneman, 1989). Griffin et al. (2002) suggested that memories of mixed emotions tend to enhance memories of pure emotions and become more polarised over time.

According to Watson and Spence (2007), there are three accepted approaches to explore emotions in marketing studies: ‘categories’, ‘dimensions’ and ‘cognitive appraisals’. The categories approach does not aim to understand the causes of emotions, but rather organises emotions relying on their similarities. For example, Plutchik (1980) defined eight categories of emotion, using one basic emotion (e.g. anger) in each category as an exemplar to determine what
other emotions would be grouped in that category. Batra and Ray (1986) and Batra and Holbrook (1990) applied this approach in the marketing field to study the effect of emotional responses on attitudes towards advertisements. However, there has been no attempt to explore the reasons why there are similarities between emotions in each category. As a result, this approach is not preferable when attempting to demonstrate why a particular emotion will be felt.

The second approach is the dimensions approach. This approach utilises valence and arousal to distinguish between emotions (Athiyaman, 1997; Mano, 1990). These dimensions reflect inherent characteristics of felt states (i.e. qualities that all feelings have). Therefore, this approach has been and continues to be quite popular (Watson and Spence, 2007). Yet, there are limitations to the dimensions approach as it is not able to differentiate focally between emotions when valence and arousal levels are similar, such as the highly negative emotions of fear and anger (Watson and Spence, 2007). The third approach is the cognitive appraisals approach. Cognitive appraisal offers the ability to deeply understand and explain the differences in emotions. As an existing theory, it helps to predict which types of emotions should be evoked in a specific context, as well as how emotions influence behaviour. Hence, using Lazarus’s (1991a; 1991b) cognitive appraisal theory as the fundamental framework, this study will evaluate of feelings of violation evoked during incidents where consumers experienced loss. The initial evaluation is critical because it determines the emotions that consumers will experience. A specific evaluation of the situation determines each emotion. These emotions then influence how consumers will react to and manage the situation (Funches, 2011).

However, the cognitive appraisal theory only investigates emotions and not moods. Typically, moods are less intense than emotions, less enduring and less likely invoke a response (Watson and Spence, 2007). According to Bagozzi et al. (1999), emotions are important for marketers, unlike moods, since they are tied to a specific referent and they encourage and stimulate specified response behaviours. The pre-cognitive school of effect suggests that an initial feeling response, a general positive or negative affective state to a stimulus, falls under the primary appraisal phase (Zajonc, 1980). In addition, Weiner (2000) theorised a third dimension of attribution, alongside the locus of causality and controllability: stability. Stability takes into account the problem’s duration and whether it is expected to occur in the future. Some studies concerned with post-purchased issues have used this dimension, but it is a rarely-used dimension generally (Watson and Spence, 2007).
The posited role of emotions in service failure encounters has also been applied and underpinned by the theory of social exchange (Lawler and Thye, 1999). This theory states that emotion is an essential element of interactions, suggesting consumer emotion affects the social exchange process. Emotions affect social exchange outcomes and consumers react differently to an evoked emotion depending on the nature of the social exchange (Lawler and Yoon, 1996). Thus, when service encounters are successfully delivered, consumers feel positive emotions and react positively. Conversely, when service failure occurs, consumers often feel negative emotions, leading to unfavourable responses towards the firm. For example, perceived injustice by consumers in a service encounter may lead consumers to experience emotions, which subsequently impact their behavioural responses, due to their reaction to these emotions (Watson and Spence, 2007).

A substantial amount of service failure research has reported that consumer emotions create an evaluation bias (Dolan, 2002), that often results in consumer dissatisfaction and negative behavioural outcomes (Bhandari et al., 2007; Joireman et al., 2016). The next section will discuss the related outcomes of feelings of violation resulting from service failure encounters (i.e. perceived psychological contract breach).

3.5 Outcomes of perceived psychological contract breach: The direct effect of feelings of violation on perceived service outcomes

As stated previously (in section 2.7.5), psychological contracts differ from expectations because they are based on perceived promises of reciprocal exchange and they occur when one party believes that another party is obligated to deliver certain promises or actions (Rousseau, 1995). Psychological contracts are much broader than economic and legal contracts due to perceptual aspects that cannot be formally included into legal contracts (Hannah et al., 2016; Malhotra et al., 2017). It is worth noting; however, that the terms ‘psychological contract breach’, ‘violation’, and ‘service failure’ are related terms and the distinctions between the three terms are determined during concept development (Goles et al., 2009). Service marketing literature has centralised the role of consumer expectations to an understanding of consumer reactions to service failure (Zeithaml et al., 1993).

This study posits that such episodes are manifested through negative feelings associated with contract violation (Ford, 1980). As perceived contract breach and feelings of violation have the potential to impact upon the service encounter, the direct and indirect effects of feelings of violation upon related service outcomes need to be tested. Implicit and explicit promises generate
solid expectations of good faith and fair dealing through implicit and/or explicit communications of future intent (Guo et al., 2015; McLean-Parks and Schmedemann, 1994; Rousseau, 1995). Thus, the foundation of the psychological contract is based on three sets of factors: promises, external messages and the terms and conditions of contractual agreements. According to Lövblad et al. (2012), rather than focusing on the actual conditions of the relationship and the activities performed within it, the focus should be on an individual’s perception and mental picture of the obligations of the relationship in the case of psychological contracts.

Service failures can be understood as unpleasant service encounters that cause consumers to be dissatisfied (Bitner et al., 1990). Palmer et al. (2000, p.515) defined service failure as “any situation where something has gone wrong, irrespective of responsibility”. Hence, service failure is an unmet expectation where the responsibility is unknown (Goles et al., 2009). While consumers understand and may be willing to accept that service failures are inevitable (Joireman et al., 2013), consumers who experience psychological contract breach attribute the responsibility for the service failure to the firm directly (Malhotra et al., 2017). Application of psychological contract to this discussion within marketing literature further strengthened this view. In the evaluation of the psychological contract, the individual compares the results of the interaction with his/her prior expectations. When the outcome does not meet or exceed the items of the psychological contract, this will lead to negative affective and behavioural outcomes (Lövblad et al., 2012).

Marketing research has paid great attention to how psychological contract violation affects both trust and satisfaction. These constructs are considered the two key variables for successful B2C relationships and can impact consumer rebuy intentions directly (Kim et al., 2009). In addition, buyer-seller relationship literature has considered perspectives on the connection between psychological contracts and affective commitment found in organisational research related to the fulfilment or breach of the psychological contract. In addition, Bunderson (2001) contended that breach of psychological contract reduced commitment and, therefore, provided an association between fulfilment/breach of the psychological contract and affective commitment within the context of marketing. Sturges et al. (2005) found a positive relationship between psychological contract fulfilment and affective commitment, confirming the prior results of earlier studies (e.g. Coyle-Shapiro and Kessler, 2000; Johnson and O’Leary-Kelly, 2003; Lester et al., 2002). In a study of community-based auction websites, Pavlou and Gefen (2005) indicated that if a consumer experienced psychological contract violation in a community, the consumer’s trust toward the community would be weaker. Further, Kingshott (2006) and Kingshott and Pecotich
(2007) investigated how psychological contract influences trust and commitment in the motorised vehicle industry. The authors explored the direct effect of psychological contracts on relationship commitment and trust by studying the relationship between suppliers and distributors. Their findings revealed that psychological contract violations could significantly decrease the level of trust in the supplier.

Moreover, Goles et al. (2009) found that the maintenance of psychological contracts was essential to maintaining trust. In other words, psychological contract violation negatively impacted consumer intention to reuse the brand, word of mouth and transaction behaviour by directly affecting trust. Also, Hsieh et al. (2012) believed that the fairer the consumer perception of the services of providers, the lower the perceived level of psychological contract violation. Additionally, if the provider was responsible for a failure (e.g. a problem with a returned purchase) and if the consumer recognised this, they would experience a high level of negativity towards the service and the perceived level of psychological contract violation would increase. Lövblad et al. (2012) argued that different affective commitment antecedents (e.g. trust and satisfaction) were mediated by the psychological contract. They further suggested that the psychological contract affected affective commitment both directly and indirectly (Lövblad et al., 2012). Additionally, Malhotra et al. (2017) examined the impact of the psychological contract breach on intention to reuse in relation to online consumers by considering both trust and satisfaction in a single model. Their investigation demonstrated that investment in perceived structural assurance was essential for preserving consumer trust of online retailers when psychological contract violation occurred.

Relationship marketing research has argued that a strong relationship between a consumer and his/her service provider is more likely to lead consumers to react more negatively to service failure (Wan et al., 2011). According to Wan et al. (2011), consumers tend to perceive service failure as a betrayal when other obligations (i.e. firm’s obligations) are established within the consumer-firm relationship and thus, participants react more negatively to the failure. Hence, in the conditions of concern in this study, consumers who consider a service encounter failure to have taken place from their own perspective are likely to perceive the provider’s failure to fulfil his or her obligations to satisfy their needs a negative incident, thus ensuring a negative reaction to the failure. A psychological contract between a consumer and service provider is an important reflection of good or bad service encounters, as it is the best method to help consumers experience service functions (Ma and Deng, 2012).
Outside buyer-seller relationship and e-retailing literature, Theotokis et al. (2012) argued that consumer expectations regarding the quality of perishable goods took the form of a psychological contract, as expressed by their expiration date. They introduced the concept of psychological contract breach and suggested that expiration date-based pricing induced psychological contract violation related perceptions. They argued that due to the nature of the psychological contract (i.e. transactional or relational contracts), different consumer groups were likely to perceive different types of psychological contracts with a brand. Theotokis et al. (2012) stated that psychological contract violation had a stronger impact on the evaluation of loyal consumers, who felt betrayed or treated unfairly. On the other hand, Fang and Chiu (2014) considered the theories of psychological contract breach, emotion and coping from a power perspective to study the ‘double deviation’ situation in online auction marketplaces. They argued that poor service recovery intensified the negative outcomes of a failure, producing a “double deviation” effect. This double deviation effect could arise from the provider’s misuse of power (e.g. violating a consumer’s psychological contract), which could elicit consumer negative emotions and lead to consumer coping behaviour. Their findings revealed that dissatisfaction and anger were two outcomes of the psychological contract.

Bavik and Bavik (2015) conducted a study to investigate the effect of employee incivility on three forms of consumer retaliation, which are vindictive complaining, third-party complaining and negative word-of-mouth, through psychological contract breach in the context of upscale restaurants. They found that worker incivility was positively related to consumer psychological contract breach. Furthermore, the three forms of retaliation were found to be antecedents to psychological contract violation. Generally, contract violations are perceptual in nature and produce strong emotional feelings; however, the resulting behavioural responses depend upon whether this perceived failure occurred due to perceptions associated with either reneging or incongruence (Morrison and Robinson, 1997).

Attribution theory claims that people are likely to look for causal explanations when encountering surprising and/or negative events (Grégoire et al., 2010). Thus, as clarified earlier in section 2.5, Morrison and Robinson (1997) conceptually distinguished between perceived contract breach as a perception and feelings of contract violation as an emotional response that may or may not affirm the perception. They argued that, following the perception of a contract breach, employees immediately engaged in a cognitive process, in which they made inferences about motives regarding this breach. Thus, the cognitive process influences the relationship between perceived breach and feelings of violation. Therefore, causal attributions regarding
psychological contract breach play a significant role in intensifying the negative emotions that employees may feel (Robinson and Morrison, 2000).

Feelings of violation refer to “emotional distress and feelings of betrayal, anger and wrongful harm arising from the realisation that one’s organisation has not fulfilled a highly salient promise” (Raja et al., 2004, p.350). The perception of psychological contract breach creates a powerful affective response of violation (Freese and Schalk, 2008). Responses to psychological contract breach usually involve powerful negative emotions (i.e. feelings of violation) directed towards the responsible party. Feelings of violation refer to significant emotional distress, betrayal and wrongful harm experienced due to a broken promise or obligation by another party.

This study will take a valence-based approach to measure feelings of violation related to perceived psychological contract breach and the impact on consumer affective states and behavioural intention outcomes. Given that the feeling of violation is a frequently experienced negative emotion following the perception of contract breach and a strong driver of behaviour (Robinson and Morrison, 2000), this study will focus on four affective states and behavioural responses to contract breach and violation (i.e. regret, dissatisfaction, desire for revenge and loyalty intentions) that have not been investigated within service failure encounter when studying antecedents and outcomes of psychological contract breach. These four affective states and behavioural outcomes are relevant to the context and domain of service marketing literature. In addition, prior studies have called for further research to examine the selected service outcomes when investigating antecedents and outcomes of psychological contract breach within consumer-firm relationship factor (see sections 1.2.8 and 2.8). It should be noted that the service marketing literature has established links between satisfaction, regret, misbehaviour and loyalty, however, the four outcome variables in the model are not being used to evaluate the association and relationships among the four outcome variables, but rather to investigate the direct association between each of the outcome variable and feelings of violation, an affective response to perceived psychological contract breach.

3.5.1 Regret

Regret is a prominent outcome in such situations. Typically, regret reflects wrong decisions, and, as such, is easily associated with a sense of responsibility for the outcome (Zeelenberg et al., 2002). Regret theory (Bell, 1982; Loomes and Sugden, 1982) suggests that users assess their choices against the alternatives by evaluating the inherent performance of the
picked alternative, as well as by taking into account and evaluating the lost utility of the alternatives they did not select. Regret makes consumers experience a negative emotional state. In addition, regret fosters strong feelings of self-blame and hurts people’s self-esteem. They usually associate such events with increased personal responsibility for the wrong choice of product/service (Lee and Cotte, 2009; Zeelenberg and Pieters, 2007). As a result, consumers anticipating possible regret tend to make choices to minimalize this possibility (Bleichrodt et al., 2010). Furthermore, if they make a sub-optimal decision, they regulate the regret felt (Zeelenberg and Pieters, 2007).

Regret not only generates negative consequences for consumers, it is also highly threatening for the regret-eliciting brand (Davvetas et al., 2017). Prior research has empirically found that, following a regretful purchase, consumers engage in unfavourable behaviour. For example, Zeelenberg and Pieters (2004) found that consumers were dissatisfied with their brand choices because of their feeling of regret. In addition, Tsiros and Mittal (2000) found that consumers are less likely to repurchase and recommend brands that have exposed them to regret. Moreover, customers may display stronger intentions to switch to other brands and are more likely to engage into unpleasant behaviour to hurt the brand image (e.g. complaining and requesting refunds) (see also Inman et al., 1997; Keaveney et al., 2007; Tsiros, 2009).

When consumers realise that other alternatives exist, they are likely to switch service providers (Mattila and Ro, 2008). Mattila and Ro (2008) investigated how specific emotions (anger, disappointment and worry) affected consumer behavioural intentions. They found that consumers with a feeling of regret were likely to engage in various unpleasant responses (e.g. switching). Two approaches have conceptualised the manifestation of these negative outcomes of regret: the ‘valence-based’ approach and the ‘specific-emotions’ approach (Zeelenberg and Pieters, 2004). The former approach highlights the role of consumer satisfaction as an essential source for the impacts of positive and negative emotions following a purchase decision and argues that regret affects consumer loyalty intentions toward a firm indirectly, by adversely impacting the overall evaluation of their buying/using decision (Bui et al., 2011; Zeelenberg and Pieters, 2004). The latter approach uses the theory of emotion specificity (see DeSteno et al., 2000; Lerner and Keltner, 2000), which posits that each emotion is a distinct phenomenon. Therefore, regret affects consumer behavioural tendencies toward a firm above and beyond the negative effect of overall purchase satisfaction. Prior research has provided evidence to support both approaches. Thus, both valence-based and emotion-specific emotions influence consumer behaviour (Davvetas et al., 2017; Zeelenberg and Pieters, 2004).
There are alternative views on the relationship between regret and cognitive dissonance (Roese et al., 2007). Zeelenberg (1999, p.103) stated that regret is “a particular sort of [cognitive] dissonance”. A discomforting psychological state appears due to conflicting cognitions, which in turn, triggers consumer dissonance and low motivation, as well as reinforces the actions of regret regulation strategies (Zeelenberg and Pieters, 2007). While Landman (1987) suggested that regret is an outcome of dissonance reduction failure. According to Zeelenberg (1999), the support for regret theory seems to be mixed (see also Davvetas et al., 2017).

3.5.2 Dissatisfaction

Oliver (1981, p.29) defined consumer satisfaction as the “summary psychological state resulting when the emotion surrounding disconfirmed expectations is coupled with the consumer's prior feelings about the consumption experience”. Conversely, Spreng et al. (1996, p.17) defined satisfaction as “the emotional reaction to a product or service experience”. According to Bhattacharyya (2001, p.354), this definition highlights

*A psychological or affective state related to and resulting from a cognitive appraisal of the expectation performance discrepancy (confirmation)*. Marketers have also offered various definitions of service encounter satisfaction and dissatisfaction. For instance, Oliver (1996, p.13) defined satisfaction as “the consumer’s fulfilment response. It is the judgment that a... service ... provides a pleasurable level of consumption-related fulfilment (Bhattacharyya, 2001, p.354).

Service encounter dissatisfaction is “distinguished from attitude, overall service satisfaction and quality based on this narrower, more focused definition” (Bitner and Hubbert 1994, p.74). Consumers often become dissatisfied when service performance does not meet their expectations. Definitions of satisfaction and dissatisfaction represent the different views of the two major theoretical traditions that conceptualize satisfaction and dissatisfaction. The first tradition is a conceptualisation of dissatisfaction as a judgment that results from positive and negative emotions, over and above the effect of cognitive antecedents. The second tradition conceptualizes dissatisfaction as a consumption emotion (Bougie et al., 2003).

Historically, the nature of dissatisfaction has not been emphasised (Fang and Chiu, 2014). To illustrate, Storm and Storm (1987, p.811) posit dissatisfaction as "a negative term, related to anger, hatred and disgust". Folkes et al. (1987) found strong correlations between negative emotions and dissatisfaction, while Bougie et al. (2003) and Zeelenberg and Pieters (2004) found
distinct differences between negative emotions and dissatisfaction. Nyer (1997b; 1998) provided evidence to show that satisfaction, and by implication dissatisfaction, was an emotion. Like emotional research, marketing research has mainly focused on cognition or appraisal based dissatisfaction (Bougie et al., 2003). However, cognition of negative disconfirmation, unmet expectations and inequity have also been associated with consumer dissatisfaction (e.g. Mano and Oliver, 1993; Oliver, 1996; 2000). Such cognitions are associated with failure to meet expectations. The negative outcome of an event stimulates those engaged (i.e. the consumer) to decide who is responsible for the event (Hastie, 1984; Weiner, 1986). Bougie et al. (2003) stated that dissatisfied people had feelings “of un-fulfilment”, and thoughts “of what they had missed out on”.

Thus, dissatisfaction is not entirely an emotion as it is deeply rooted in both emotional and cognitive mechanisms. Dissatisfaction is a cognitive and emotional reaction to failure. Oliver (1981) also added that dissatisfaction was attitude-like, but better reflected the overall evaluation of experiences. Westbrook et al. (1983) contended that positive emotions, such as interest and excitement, were highly correlated with satisfaction, while dissatisfaction also had cognitive components. Early scales of dissatisfaction appeared to assess cognition, evaluating the nature of the dissatisfaction (Westbrook et al., 1983), while Cadotte et al. (1987) argued that satisfaction and dissatisfaction were more an appraisal of whether a service met certain standards and not whether it was a pleasurable or disagreeable experience. Van Dijk and van der Pligt (1997) added that disconfirmation is the antecedent condition of the emotion disappointment, which is consistent with developments in emotion theory.

It is widely accepted that there is a relationship between service failure and dissatisfaction (see Bearden and Teel, 1983; Spreng and Chiou, 2002). In addition to causing dissatisfaction, service failure episodes often elicit negative emotions such as anger, frustration and betrayal (see Bougie et al., 2003; Kalamas et al., 2008; Gelbrich, 2010). Grégoire and Fisher (2008) stated that negative emotions, such as anger and dissatisfaction, can be felt without reference to any relational context. However, breach involves more extreme cognitions than expectation disconfirmation and it is not the same thing as dissatisfaction (Fullerton and Taylor, 2015; Raja et al., 2004).

Nevertheless, not all failures lead to dissatisfaction (Kowalski, 1996). Previous literature has demonstrated that users either have a zone of tolerance (Zeithaml et al., 1994), or a threshold for dissatisfaction (Kowalski, 1996; Tronvoll, 2012). The threshold concept claims that consumers
may overcome, or “withstand”, a particularly severe failure episode without becoming dissatisfied. When users have a high threshold, only severe failures cause dissatisfaction.

Malhotra et al. (2017) found that violation of the psychological contract might have an impact on intention to reuse an online retailer through serial mediation tests. Psychological contract breach affects the trust between the buyer and the seller, which influences satisfaction, which, in turn, affects the intention to reuse. They found that psychological contract breach negatively affected online consumer satisfaction. Malhotra et al. (2017) recommended that future research incorporate other outcome variables, such as consumer rage, to determine the impact of psychological contract violation on consumer behaviour.

3.5.3 Desire for revenge

According to Reynolds and Harris (2009), consumer dissatisfaction and disaffection with service leads to misbehaviour. Huefner and Hunt (2000) and Goodwin et al. (1999), argued that consumer dysfunctional behaviour occurred due to a response to dissatisfaction with the service delivered. Harris and Reynolds (2003) added that consumer misbehaviour involved direct action and psychological and physical abuse, such as verbal or physical violence and aggression. Aggression is defined as “any behaviour carried out with intent to cause harm” (Lennon, 2011, p.123). On the other hand, aberrant behaviour can be indirect, for example when a consumer makes an illegitimate complaint. These actions can be executed intentionally or unintentionally. According to Harris and Reynolds (2003), the impact of consumer misbehaviour is huge. It influences employee performance, firms and other consumers.

There are many reasons why consumers misbehave. For example, a long waiting time with no reason in a checkout line might lead to aggressive behaviour. Also, poor service delivered is a source of consumer misbehaviour. In addition, rude employees can be a cause of consumer aggression (Rose and Neidermeyer, 1999). Daunt and Harris (2012b) argued that there were four main motivators of consumer misbehaviour: financial gain, ego gain, revenge and variance across motives. It is worth noting that consumers often deny their act, along with any false claims, damages and responsibilities after their misbehaviour (Daunt and Harris, 2012b).

Previous marketing literature has shown that consumer emotions and cognitions are the most considered antecedents of consumer misbehaviour (Daunt and Greer, 2015). Dysfunctional behaviour is a reactive behaviour enacted to respond to a service failure. In addition, as stated, consumer dissatisfaction is associated with consumer misbehaviour (see Fisk et al., 2010;
Grégoire et al., 2010; Harris and Reynolds, 2004). In a service context, customer unethical behaviours could have a direct negative effect on the business firm as well as they indirectly influence other customers’ experience (Schaefers et al., 2016). The role of emotions in understanding this facet of consumer misbehaviour is a great important (Singh et al., 2018; Vitell et al., 2013). Several research studies have analysed different types of consumer misbehaviour, such as retaliation, desire for revenge and direct and indirect revenge behaviour used to deal with service failure incidents (see Bavik and Bavik, 2015; Grégoire and Fisher, 2008; Grégoire et al., 2010).

Revenge has several antecedents, such as dissatisfaction with products, disappointment due to service delivery failure, perceptions of betrayal of loyalty and/or relationship norms, perceptions of unfairness or dissatisfaction with procedure and consequences of the firm’s complaint management (see Obeidat et al., 2017). Thus, the result of consumer dissatisfaction and powerful negative emotions is an unpleasant situation. According to Bougie et al. (2003, p.390), “angry consumers may express their feelings in negative, (verbally) aggressive ways”. After misbehaving, consumers usually deny their involvement, along with any claims, injuries and/or responsibilities. Hence, it becomes difficult to handle such cases (Taska and Barnes, 2012). Academic research reveals several forms of customer misbehaviours, such as cheating (Wirtz and Kum, 2004), physical attack (McColl-Kennedy et al., 2009), stealing (Tonglet, 2002), vandalism (Fisher and Baron, 1982), verbal abuse (Grandey et al., 2004), (de)shopping (King et al., 2008), grudge holding (Aron et al., 2007), ‘illegitimate’ customer complaining (Reynolds and Harris, 2005), online deviance (Freestone and Mitchell, 2004) and sexual abuse (Yagil, 2008). Huang (2008) investigated how and why such behaviour influences firms and has a negative impact on other consumers, such as causing them switching to a different provider. Previous research has also shown that perception of inadequate complaint action, or experience of strong negative emotions (e.g. a feeling of helplessness), has resulted in consumers exiting the relationship and experiencing reactions, such as retaliatory behaviour and acts of revenge (Joireman et al., 2013; Reynolds and Harris, 2009; Zourrig et al., 2009).

Grégoire and Fisher (2006, p.33) defined desire for revenge as a consumers’ “need to punish and make a firm pay for what has happened”. Walster et al. (1973), Bechwati and Morrin (2003) and Grégoire and Fisher (2008) considered consumer cognitive appraisal, rather than spontaneous action, as the main trigger for revenge or coping intentions and for actions in response to service failures. It is, therefore, essential to understand any potential consumer retaliation.
3.5.4 Loyalty intentions

Loyalty intention is “the degree to which a consumer exhibits repeated purchasing behaviour from a service provider, possessing a positive attitudinal disposition toward the provider, and considering using only this provider when a need for this service exists” (Caruana, 2002, p.813). Oliver (1999, p.34) defined loyalty as “a deeply held commitment to repurchase or re-patronise a preferred product/service consistently in the future, thereby causing repetitive same-brand or same brand-set purchasing, despite situational influences and marketing efforts having the potential to cause switching behaviour”.

Two main approaches have evolved: behavioural and attitudinal approaches (Yi and La, 2004). The behavioural approach defines loyal consumers as those who repurchase from a certain brand and do not seek information about other related brands. The loyalty variable is not only a behavioural dimension, but also an attitudinal one (Brunner et al., 2008). Oliver (1999) described four sequential phases of loyalty: ‘cognitive’, ‘affective’, ‘conative’ and ‘action’ loyalty. Cognitive loyalty relies on brand belief. The attributed information available to the consumer means that one brand is favourable over other alternative brands. Affective loyalty depends on prior satisfactory experiences; therefore, a liking of, or positive attitude toward, the brand is required. Conative loyalty shows a commitment to repeat purchasing and, as a result, connects consumers more strongly to a brand than affective loyalty. However, the desire to rebuy may be an expected, yet unrealised step. Action loyalty occurs when a motivated intention is transformed into a willingness to behave, along with a desire to overcome obstacles that might affect buying behaviour (Oliver, 1999).

Loyalty, in the behavioural sense, is captured using repurchasing intentions, long-term choice probability or switching behaviour; whilst within the attitudinal sense, loyalty takes into account brand preference or emotional commitment. As a result, attitudinal loyalty measures repurchase probability, resistance against other alternative brands, price sensitivity and probability to recommend the product or service (Yi and La, 2004). The main method for profiling customers’ loyalty used behavioural data. However, Gilmore and McMullan (2003) have developed a loyalty scale that it utilizes both attitudinal and behavioural data. The developed measurement scale aimed to offer practitioners the advantage to identify and manage customers’ loyalty within the firm.

According to Sarkar et al. (2014), service failure elicits an internalization process of coping, by which consumers evaluate the characteristics of a service failure and assess the perceived
stress related to the given situation (Gabbott et al., 2011; Lazarus and Folkman, 1984). During service failure, consumers engage in a profile of coping strategies, such as active coping, denial and support-seeking, to manage the stressful state (Duhachek and Kelting, 2009; Lazarus and Folkman, 1984), thus, attempting to reduce the stress associated with negative events. The appraisal process influences the use of different coping strategies to manage negative emotions. In addition, the stress encountered is contingent upon consumer expectations about the service experience. This indicates that consumers might use different coping strategies depending upon the expectation associated with the provider that has failed to deliver an appropriate service.

3.6 Coping potential

Coping potential is a person’s perceived ability to handle or change a situation. Coping potential is a prospective appraisal (Lazarus, 1991b) that refers to an individual’s evaluation of solutions to overcome an adverse situation in the future (Folkman et al., 1986). Once stimuli have occurred and been appraised they fall into three main categories: benign-positive, neutral and stressful (Lazarus, 1991b). The emotion elicited determines if something is positive, neutral or stressful (Watson and Spence, 2007). Stressful events could be previous negative experiences, or future threats or challenges. A stimulus will be further appraised if it is perceived as stressful and requires some types of coping behaviour. Coping strategies follow an initial cognitive appraisal and its related emotional response.

3.6.1 Coping behaviour

Lazarus and Folkman (1986, p.108) defined coping as “the thoughts and acts that people use to manage the internal and/or external demands posed by a stressful encounter”. From this perspective, coping is a process of restoring positive experiences from negative experiences. The core function of coping is reducing tension and restoring equilibrium. Coping has been also introduced as “the set of cognitive and behavioural processes initiated by consumers in response to emotionally arousing, stress inducing interactions with the environment aimed at bringing forth more desirable emotional states and reduced levels of stress” (Duhachek, 2005, p.42). The term “stress” is broadly known as a stimulus and/or response. Thoits (1995, p.54) defined stress as: “any environmental, social or internal demand which required people to adjust his/her usual behaviour patterns”. Lazarus and Folkman (1984) added that coping played a significant role in the adaptation outcome.
Folkman et al. (1986) introduced two major coping approaches: trait-oriented and process-oriented. The appropriate approach to use in order to deal with a situation depends on the psychological and environmental context in which coping takes place. In the trait-oriented approach, coping is primarily a property of a person and variations in the stressful event are less important. While coping is a response to the psychological and environmental stresses of specific stressful incidents, Folkman et al. (1986, p.993) stated that coping is process oriented, meaning that it focuses “on what the person actually thinks and does in a specific stressful encounter, and how this changes as the encounter unfolds”.

Lazarus and Folkman's (1984) transactional theory model of coping has been widely used to study coping behaviour (Duhachek and Kelting, 2009; Duhachek, 2005; Mathur et al., 1999). This theory is an appraisal-based model of coping, which posits that personality traits and situational factors play a significant role in individual cognitive appraisals and coping behaviour processes. According to the Lazarus and Folkman (1984) model, there are two phases of the cognitive appraisal process that a person goes through to make a final decision about how to decide upon a coping strategy. First, the primary appraisal phase, where a person decides whether a perceived stimulus has motivational outcomes (goal relevance), for example, “does this situation affect me?” Another aspect assesses positive and negative outcomes (goal congruence), for example, “is this situation helpful or harmful?” When a person encounters an incident considered negative (i.e. goal incongruence), they experience stress.

The second phase is the secondary appraisal process, where a person determines their potential behavioural response to an observed stimulus. The process of secondary appraisal encompasses assessments of the ability to cope with a stimulus (coping confidence) and future expectations regarding the stimulus. In other words, secondary appraisals often consider a person’s potential and ability to cope and decrease perceived stress. Research has consistently confirmed that these two phases of the appraisal process result in more successful decisions and more adaptive coping strategies (see Duhachek and Iacobucci, 2005; Luce, 1998). Hence, the appraisal process is central. It connects perceptions of stress to emotional responses and coping behaviour.

Lazarus and Folkman (1984) proposed two dimensions of coping: emotion-focused and problem-focused. Emotion-focused coping included “thoughts and actions directed at regulating one’s emotions, such as avoiding a situation and engaging in activities to get one’s mind off a problem”. Problem-focused coping included “activities that focus on altering one’s environment
(trying to change a stressful situation) and activities directed at the self” (Mathur et al., 1999, p.235). In other words, problem-focused coping occurs when an individual utilises strategies to change the situation so that it becomes more congruent with their goals (Smith and Kirby, 2009). Therefore, problem-based coping strategies are associated with active strategies used to resolve a situation (Folkman and Lazarus, 1988). To measure the two dimensions of coping, Lazarus and Folkman (1984) proposed a checklist of 68 items, termed “ways of coping”. However, according to Duhachek and Kelting (2009, p.475), “one theoretical approach to the transactional model involves specifying the goodness of fit of the coping strategies that people select as a function of environmental constraints”.

The goodness-of-fit theory (Cheng, 2001, 2003; Cheng and Cheung, 2005) suggests that if a stressor is controllable, the best effective way to resolve the problem is to engage in a problem-focused coping strategy. In contrast, if a stressor is uncontrollable, the best effective way to reduce stress is to adopt emotion-focused coping (Duhachek and Kelting, 2009). However, according to Nielsen and Knardahl (2014), emotion-focused and problem-focused coping are not opposite strategies that are only used individually, they can occur concurrently. In a stressful situation, where the source of stress is changeable, people are more likely to employ problem-focused coping strategies. In contrast, when it is believed that it is hard to change the situation people tend to employ emotion-focused coping behaviour, such as support seeking or distancing (Folkman and Lazarus, 1980; Folkman et al., 1986).

Although the Lazarus and Folkman (1984) classification of coping strategies is considered the most adopted typology used to conduct stress research (Thoits, 1995), it has limitations when attempting to differentiate between processes that are problem-focused and those that are emotion-focused, as these are all coping processes employed to manage emotions fostered from stressful experiences (Duhachek and Oakley, 2007). Along the years, several competing models have developed in the coping literature. Krophne (1993) and Roth and Cohen (1986) models have used two dimensions (approach-avoidance coping, assimilation-helplessness coping and voluntary-involuntary). Other authors have expanded their ideas to use three dimensions. For example, Moos and Billings (1982) used problem-focused, emotion-focused and appraisal-focused dimensions. Heckhausen and Schulz (1995) utilised primary control, secondary control and relinquishment of control dimensions. Also, Skinner et al. (2003) developed autonomy, competence and others coping dimensions. Carver et al. (1989) developed a competing model, based on previous research applying four dimensions: the COPE inventory, which included 14
distinct scales to assess coping strategies. Further, Ayers et al. (1996) developed a five-dimensional model (see also Carver and Connor-Smith, 2010; Duhachek and Oakley, 2007).

Coping mechanisms have received attention in consumer research as a method of exploring consumer coping behaviour related to stress in different consumption situations (Duhachek and Kelting, 2009). The existing dimensions and scales were employed in psychology literature to elucidate the types of activity consumers undertook in their efforts to handle stress. For example, Gabbott et al. (2011) examined the impact of emotional intelligence on coping strategies employed by consumers in the event of failure episode. Gabbott et al. (2011) used the two-dimensional model of problem-focused and emotion-focused coping behaviour, like most consumer behaviour coping literature. In addition, Whiting (2009) proposed that consumers adopted distancing, avoidance, social support, rational thinking, action, escape, positive thinking and emotional venting dimensions, when managing crowded retail surroundings.

However, the two-dimensional model (i.e. emotion-focused and problem-focused) has been found to over-simplify the coping phenomena. Therefore, researchers have developed new models of coping that are more applicable to the context of stress in consumption episodes. For example, Yi and Baumgartner (2004) formulated a new classification of coping strategies. The advantage of the new conceptualisation was that it was adaptable to the context of consumer behaviour. Yi and Baumgartner (2004) analysed how consumers coped with purchase-related problems by testing several negative emotions, such as anger, disappointment, regret and worry. The eight forms introduced were planned problem-solving, confrontative coping, seeking social support, mental disengagement, behavioural disengagement, positive reinterpretation, self-control and acceptance. According to Duhachek (2005, p.42)

*Coping research constitutes a prolific area of study, attracting researchers from clinical, social, and personality psychology as well as sociology and anthropology. A recent Social Citations Index search on "coping" produced in excess of 17,000 articles published over the past 25 years. In contrast, a similar search of consumer research publications produced only six articles (Duhachek, 2005, p.42).*

Duhachek (2005) found an opportunity for theoretical contribution by intersecting consumer behaviour with coping. As a result, he constructed a comprehensive model by extracting the top ten widely used coping instruments from the literature. He then captured over 85 dimensions of coping strategies that represented a variety of theoretical perspectives. Duhachek’s (2005) model represented a model better suited to consumer behaviour settings and
consisted of three dimensions: active coping (action coping, rational thinking and positive thinking), expressive support-seeking coping (emotional venting, instrumental support and emotional support) and denial/avoidance (denial and avoidance). The model covered three different responses that consumers might use to reduce stress: rational thinking to try to deal with the situation, voicing their problem to gain external support or denying the stressful situation (Duhachek, 2005). Several marketing researchers have adopted this scale to study coping behaviour related to service failure (see Jun and Yeo, 2012; Sengupta et al., 2015; Strizhakov et al., 2012; Tsarenko and Strizhakova, 2013).

When people become hurt or experience a negative emotion, they seek information companionship and emotional support. They can achieve this through expressive support. In many cases they wish to share their negative experiences to better understand them (see Greenberg and Ruback, 2012; Kowalski, 1996). Furthermore, people use avoidance strategies to cope with stressful events. According to Lazarus and Folkman (1984) avoidance coping means avoiding engagement with the specific stressor that is responsible for causing the negative emotions. There are cognitive and behavioural forms of coping (see Tiet et al., 2006). Behavioural avoidance coping is when a person removes themselves from a negative event, while cognitive avoidance occurs when people use different strategies like avoiding thinking about the event, cognitive reappraisal, or suppression of negative thoughts. In summary, previous coping literature has outlined different types of behaviour, which a person can adopt to cope with adverse incidents.

The descriptions provided above do not represent an exhaustive list of coping behaviour. Indeed, the types of coping behaviour mentioned show that multiple strategies are apparent and utilised simultaneously. They also vary from one case to another depending on the appraisal process, situational and personality factors and the service recovery.

*Although we can make predictions about someone we know well, such as a spouse, child, parent, or associate, much that this person will do is not predictable in typical social transactions. Appraisal and coping are mediational concepts because they are not completely predictable but depend on how the environment, as perceived and evaluated by an individual person, behaves (Lazarus, 1991b, p.832).*

Although there are many models that measure coping in social psychology literature and consumer research, there is no agreement upon a predominant coping model. The literature revealed that most instruments used in prior studies reflected similar aspects; the most important
being the application of both emotion-focused and problem-focused coping strategies. Each scale is eligible for use in a particular context; from capturing coping with stressful events related to work, family and health in social psychology (Lazarus, 1980), to coping with product or service failures in business research (Sengupta et al., 2015; Yi and Baumgartner, 2004). The next section will discuss the three-dimensional coping strategies designed by Duhachek (2005) that will be used in this study (see also chapter 5, section 5.1.1.3).

3.7 Coping strategies

Coping behaviour is the cognitive and behavioural effort that people use to deal with situations that tax or exceed their resources (Lazarus and Folkman, 1984). Folkman et al. (1986, p.933) contended that coping was the “constantly changing cognitive and behavioural efforts to manage specific external and/or internal demands that are appraised as taxing or exceeding the resources of the person”. According to Lazarus and Folkman (1987), an individual employs coping strategies aimed to alter the distressed consumer-environment relationship by either changing the relationship and/or by regulating the emotions. As stated previously, most coping research uses Folkman and Lazarus's (1985) classification of coping that considered two distinct strategies: emotion-focused coping and problem-focused coping (Sengupta et al., 2014).

Among different coping responses, this study will utilise Duhachek’s (2005) framework, consisting of three-dimensional coping (active coping, expressive support-seeking coping and denial/avoidance coping) as typical reactions to perceived contract breach-induced feelings of violation. Duhachek (2005) contributed to emerging consumer coping literature by enriching existing theoretical conceptualisations of consumer coping processes and validating a scale for use in consumer research. Many consumer behaviour and marketing studies have considered Duhackek’s (2005) model (see Bose et al., 2015; Duhachek and Iacobucci, 2005; Duhachek and Kelting, 2009; Gelbrich, 2010; Sengupta et al., 2015; Strizhakova et al., 2012). Additionally, the distinction between problem-focused and emotion-focused coping strategies is too simplistic and is not sufficient to capture the variety of coping strategies used by consumers to manage stressful encounters (Lazarus, 2006). The active strategy is a problem-focused coping strategy in which a consumer strives to handle the problem. On the other hand, the expressive strategy includes support-seeking behaviour that consumers employ to manage negative emotions (i.e. sharing emotions with others and seeking comfort). The denial strategy is a passive way of coping through problem dismissal. The next three sub-sections will provide an introduction to each coping strategy.
3.7.1 Active coping

Active coping consists of “direct, objective attempts to manage a source of stress” (Duhachek, 2005, p.45). Consumers, who use action coping as strategy, make a plan of action, generate potential solutions, think about the best way to handle things and concentrate their efforts on doing something about the problem (Duhachek, 2005). Consumers will likely blame the service provider for the failed encounter (Strizhakova et al., 2012). This results in the consumers directly confronting the service provider to express their dissatisfaction and to attempt to solve the problem (Sengupta, 2014); or in some cases, they might think the failure is controllable and try to engage in problem solving (Jin and Hong, 2010).

3.7.2 Expressive support-seeking coping

Seeking social support entails “explaining the marketplace problem to another person to obtain informational, emotional, or tangible support” (Stephens and Gwinner, 1998, p.184). Duhachek (2005, p.45) defined expressive support-seeking coping behaviour as an attempt “to marshal social resources to improve one's emotional and/or mental state”. Consumers opting for this coping strategy seek others for support. Consumers aim to manage the service failure encounter by telling others how they feel. They also talk to others that they trust and respect, to feel better and disclose their feelings. This strategy differs from instrumental support-seeking as consumers rely on others as a way of expressing their feelings (Yi and Baumgartner, 2004). According to Gelbrich (2010), consumers attribute the service failure to situational factors. Therefore, they try to regulate their emotions by sharing their feelings with others. Also, a consumer may try to ask for advice from friends with similar experiences about what to do, or look for a friend to assist in fixing the problem (Yi and Baumgartner, 2004). Hence, the assistance or advice they seek from other consumers or friends is in relation to the complaint process and/or the remedy.

In addition, consumers let their feelings out in some way, either by venting their emotions or expressing their feelings. Consumers who experience a stressful encounter may try to vent their feelings to alert the service provider. Consumers appraise the situation and decide to regulate their emotions by expressing their feelings of violation to the service provider. Parlamis (2012) adds that consumers are more likely to vent their anger when they associate internal and controllable attribution with the unpleasant encounter. Generally, consumers show different coping strategies, such as active coping and expressive support-seeking coping or denial coping. Consumer adoption of one or another coping strategy is often dependent upon individual abilities,
which influences their decision to seek emotional support or not (Duha chek, 2005; Tsarenko and Strizhakova, 2013).

3.7.3 Denial coping

Denial is a passive way of coping, defined as an attempt “to completely close off oneself mentally from a source of stress” (Duhachek, 2005, p.46). Denial consists of a complete refusal to believe that a problem has occurred. Therefore, consumers cope by pretending that the failure incident never happened. Denial serves the function of managing emotions (Duhachek, 2005). Consumers show greater unresolved emotional distress with the denial coping strategy (Strizhakova et al., 2012).

Stress-and-coping theory (Lazarus and Folkman, 1984) posits that negative emotions are elicited in reaction to stressful encounters that foster activation of emotional, cognitive and behavioural resources, leads to the use of different coping strategies, such as active coping, expressive support-seeking coping and denial coping (Duhachek, 2005). Application of these coping strategies further results in varied outcomes (Aldwin and Revenson, 1987; Duhachek, 2008). Strizhakova et al. (2012) proposed that rumination was an important factor to explore how consumers coped with service failures and the ways in which rumination impacted upon service outcomes. They evaluated the three dimensional consumer coping strategies (i.e. active coping, expressive support-seeking coping and denial coping) along with rumination about the failure as mediators of anger on two consumer behavioural outcomes: positive behavioural intentions and negative word-of-mouth (WOM). Their research contributed to an understanding of consumer emotions in relation to service failures by developing and examining a coping model that tested consumer emotional, cognitive and behavioural adaptations in relation to stressful events. Particularly, they investigated the mediating role of coping and rumination using rumination as a core predictor of behavioural outcomes toward a firm. Their results suggested that service managers should encourage consumers to use active coping measures and prevent consumers from using expressive coping or denial coping measures, even if this meant obtaining a solution via other service providers (i.e. competitors) to resolve the problem.

Consumer complaining was suggested to be a consequence of the coping process (Chebat et al., 2005), but the confirmed relationship between coping behaviour and consumer complaining was not determined until the study of Tsarenko and Strizhakova et al. (2013). Tsarenko and Strizhakova et al. (2013) drew on the theory of personality to investigate the
antecedents and outcomes of consumer coping in relation to incidents of service failure. Specifically, the authors focused on the effects of emotional intelligence and self-efficacy (i.e. two antecedents of coping behaviour) on three coping styles (i.e. active coping, expressive support-seeking coping and denial coping). The authors further investigated the effects of coping strategies on consumer intention to complain. They found positive associations between emotional intelligence and both active coping and expressive support-seeking coping strategies, but a negative association with denial. They further added that expressive support-seeking coping led to more incidents of complaint, while denial decreased the likelihood of consumer complaints. Furthermore, consumer self-efficacy mediated the relationship between emotional intelligence and active coping behaviour. By contrast, they found that self-efficacy had a negative effect on expressive behaviour.

In addition, Tsarenko and Strizhakova's et al. (2013) findings showed that both emotional intelligence and self-efficacy stimulated the use of the active coping strategy by consumers in relation to service failures. By contrast, the impacts of emotional intelligence and self-efficacy on expressive support-seeking coping behaviour were asymmetrical. In other words, a greater degree of emotional intelligence was positively linked to individual expressive support-seeking coping strategies, possibly indicating consumer acknowledgment of the importance to manage their emotions under given situations. On the other hand, expressive support-seeking coping behaviour is social in nature and assumes that consumer support-seeking behaviour and expression of emotions are related (Tsarenko and Strizhakova et al., 2013). Hence, the stronger the consumer self-belief in handling stressful events, the less likely consumers are to express or vent their frustration and anger, regardless of the initial motive for emotional expression. Tsarenko and Strizhakova et al. (2013) argued that service providers had an exceptional opportunity to alter the behaviour of consumers who immediately expressed/vented their emotions, into active problem solvers by listening to them, taking extra care and rapid action to solve their complaints and encourage their self-abilities. Dealings with consumers who gave high priority to their own emotional state suggested that service employees or managers should first “fix” the consumer and then the problem. In reality, service recovery does not guarantee consumer satisfaction (Tsarenko and Strizhakova et al., 2013).

With regards to denial coping behaviour, Tsarenko and Strizhakova et al. (2013) found a negative relationship between emotional intelligence and the denial coping strategy, while they reported no association between self-efficacy belief and denial. They contended that consumers who were better capable of understanding and controlling their emotions, as well as fixing a
service failure problem, avoided denial coping and alternatively concentrated on more productive strategies, such as active coping and expressive support-seeking coping. They also added that denial coping reduced complaining, which made it difficult for service firms to solve consumer problems or restore their emotions, as well as being able to predict whether consumers will continue to do business with the provider or not.

Jun and Yeo (2012) conducted a study to identify the coping process of negative emotions derived from purchasing mobile phones. The study developed an extended model to test the impact of cognitive appraisal on negative emotions and coping behaviour. They analysed consumers who felt angry and used expressive support-seeking strategies or avoidance, and those who felt fearful and who used only expressive support-seeking strategies. They also discovered that the consequence of expressive support-seeking and active coping was a positive emotional change. In addition, self-efficacy appraisal was a key factor in active coping and had a negative effect on fear; thus, they suggested that there was a need to educate and train consumers in the purchase of new mobile phones in order to reinforce self-efficacy. Their investigation also discovered no difference in the influence of anger and fear on the choice of coping strategies, which opposed the finding of prior studies (Duahchenk and Iacobucci, 2005; Folkman and Lazarus, 1985; Yi and Baumgartner, 2004). To illustrate, the study found that consumers who were angry did not employ anger coping strategies, but instead employed expressive support-seeking or avoidance coping strategies. In addition, consumers who were fearful also executed expressive support-seeking coping strategies. In other words, consumers who felt negative emotions (i.e. anger or fear) when purchasing mobile phones, asked others for help despite their emotional feelings. Therefore, according to Jun and Yeo (2012) the type of negative emotion is not crucial to the choice of coping strategy.

Jun and Yeo (2012) also examined emotional change as a coping outcome. Jun and Yeo (2012) found that a positive association between emotional change and expressive support-seeking and active coping was consistent with prior studies that emphasised that each strategy could be helpful to consumers (Duahchenk, 2005; Laux and Weber, 1991; Lazarus, 1996; Yi and Baumgartner, 2004). Expressive support-seeking resulted in the most desirable emotional change. Jun and Yeo (2012) anticipated that consumers who felt angry or fearful were more likely to redress these negative emotions by sharing their feelings with family or friends as a rapid and easy coping strategy compared to active coping. Moreover, they also added that consumers who felt angry chose avoidance, a lesser used coping strategy, to effect change in their negative emotions, which was contrary to previous studies (Carver and Scheier, 1994; Duahchenk, 2005;
Luce and Kahn, 1999; McCrae, 1984). They also concluded that managers and front-line staff should find ways to help angry consumers to utilise active coping strategies rather than avoidance/denial coping strategies.

It is worth noting that since coping is aimed at dealing with stressful events, no single strategy is superior. When consumers have the potential to fix the problem, obtain emotional stability or distance themselves from the failure episode, they are able to restore their suppressed emotions and change the consumer-provider environment into a better and pleasant environment (Strizhakova et al., 2012).

3.8 Summary

This chapter provided a review, based on diverse literature, of the antecedents and outcomes of psychological contract breach (i.e. attribution of blame, feelings of violation, coping behaviour and the four related service outcomes). The chapter started with discussing the theoretical foundations of the psychological contract. The chapter also provided a review of the literature concerned with the cognitive, emotional and behavioural constructs of the appraisal process utilised within this study. The chapter introduced the concept of blame and reviewed the link between failure (i.e. perceived contract breach), blame and negative emotions. In addition, the chapter covered the direct associated negative outcomes of contract breach and violation. In addition, the chapter reviewed the coping literature relevant to this study, particularly; it clarified the conceptualisation approaches used to study coping behaviour in psychology, consumer behaviour and marketing fields of study. The next chapter will explain the various cognitive appraisal models and outline the conceptual research framework and hypotheses that will guide this thesis.
Chapter Four

Conceptual Model and Hypotheses Development
4.1 Introduction

Chapter 2 provided an introduction to the psychological contract. Chapter 3 offered an overview of the theoretical foundations of the psychological contract and provided a literature review of antecedents and outcomes of psychological contract breach and violation. This chapter will discuss the theoretical and empirical rationale for the relationships included in this investigation. This study will focus on psychological contract breach from a consumer perspective, to investigate feelings of violation and several service outcomes. Furthermore, it will evaluate the mechanism of consumer coping behaviour as a mediator to test the direct and indirect effects of feelings of violation on the expected service outcomes. Therefore, the current chapter will propose a model underpinned by cognitive appraisal theory and develop hypotheses for the research. Hence, the chapter will explain and justify the rationale behind the two antecedents selected (i.e. attribution of blame and feelings of violation) to assess the cognitive process in this study. Thus, the research hypotheses will test the relationship between psychological contract breach, blame and feelings of violation. Moreover, this chapter will provide hypotheses that will examine the direct effects of feelings of violation on the four service outcomes (i.e. regret, dissatisfaction, desire for revenge and loyalty intentions), as well as the indirect effects, via three sub-dimensional coping behavioural patterns (i.e. active coping, expressive support-seeking coping and denial coping), in response to psychological contract breach and violation.

4.2 Research model and definitions

This thesis applies the cognitive appraisal theory, with the extend of service marketing literature, to investigate the antecedents of psychological contract breach and examine the direct and indirect effects of feelings of violation on related service outcomes via coping behaviour during service failure encounter by testing several variables (see Figure 1). To begin, consumers must have experienced a stressful situation to be eligible for the study (see also section 5.5.1.4). In this study, the perceived contract breach will be the stimulus event. Without this, people would not need to engage in the primary cognitive process (i.e. blame attribution) which, in turn, is associated with negative emotion generation (i.e. feelings of violation) towards the service provider. Thus, psychological contract breach is a psychological process that evokes blame and feelings of violation, which eventually relates to affective states and behavioural outcomes (i.e. regret, dissatisfaction, desire for revenge and loyalty intentions). Hence, the model will test the impact of the feelings of violation on consumer affective states and behavioural intention
outcomes, by examining these relationships directly and indirectly using a coping process as a mediator to provide a holistic view of the mechanism in a service setting.

Accordingly, the conceptual model used in this study differs from the disconfirmation model (Boulding et al., 1993). In this model, people assess the overall service failure, and thus cognitive, emotional and behavioural outcomes are affected by their current perception of the service not their current expectations. This perception, in turn, is the result of prior expectations regarding obligations derived from different sources, such as promises and terms and conditions of the legal contract. This study will utilise the theoretical basis and measurement approaches of prior research studies on psychological contract and violation to offer a comprehensive model of cognitive appraisals and emotional elicitations that will contribute to current service marketing literature. This chapter will now define the constructs involved in this study:

*The psychological contract* is “an individual’s relational schema regarding the rules and conditions of the resource exchange between the firm and the person” (Guo et al., 2015, p.4). Obligations of the service provider and the consumer are an economic exchange, a relational exchange, and/or reciprocity. Hence, building on Guo et al.’s (2015) conceptualisation, this study defines psychological contract breach as the failure to meet prior expectations of obligations about the stated and unstated terms and conditions of the resource exchange between consumers and the service provider.

*Blame attribution* is “the degree to which consumers perceive a firm to be accountable for the causation of a failed recovery” (Grégoire et al., 2010, p.742).

*Feelings of violation* refer to “emotional distress and feelings of betrayal, anger, and wrongful harm arising from the realisation that one’s organisation has not fulfilled a highly salient promise” (Raja et al., 2004, p.350).

*Coping behaviour* refers to cognitive or behavioural efforts to release stress (Duhachek, 2008).

*Regret* is a response to bad decisions and is easily associated with a sense of responsibility for the outcome (Zeelenberg et al., 2002).

*Consumer dissatisfaction* occurs when the service performance does not meet expectations (Oliver, 1980).

*Desire for revenge* is the event of consumers causing harm to firms after unacceptable service encounters (Zourrig et al., 2009a).
Loyalty intentions are “the degree to which a consumer exhibits repeat purchasing behaviour from a service provider, possesses a positive attitudinal disposition toward the provider, and considers using only this provider when a need for this service exists” (Caruana, 2002, p.813).

### 4.2.1 Feelings of violation and related service outcomes

The model used in this study integrated Lazarus and Folkman’s (1984) cognitive-phenomenological model of coping and Lazarus's (1991a; 1991b; 1993) theory of emotions. Lazarus and Folkman's (1984) original theory of coping did not specifically consider emotions (see also Stephens and Gwinner, 1998). The choice of coping strategies used in the model in this study is based on Duhachek’s (2005) investigation of coping behaviour. Duhachek’s results uncovered three high order coping strategies: active coping, expressive support-seeking coping and denial coping. Duhachek’s (2005) model resulted in the first validated measure of coping applicable to the consumer context. Duhacheck’s (2005) conceptual model analysed consumers within the context of a stressful encounter with a service company. Duhachek (2005, p.41) aimed to provide a “more diverse set of strategies than accounted for in consumer literature on coping” (Whiting, 2009). Furthermore, the model has been largely accepted, and adopted, within consumer behaviour and marketing literature (see Bose et al., 2015; Duhachek and Iacobucci, 2005; Duhachek and Kelting, 2009; Gelbrich, 2010; Sengupta et al., 2015; Strizhakova et al., 2012).

According to Surachartkumtonkun et al. (2013), during a service failure, mistakes such as core service failure can potentially make consumers perceive service failure as a threat to their important human needs (e.g. well-being and sense of control) and lead them to feel rage. Hence, consumers engage in a set of coping tactics including active coping, expressive support-seeking coping or denial coping to handle the stressful state (Duhachek and Kelting, 2009; Lazarus and Folkman, 1984). However, the stress experienced depends on the expectations consumers have of the service provider (Buchanan et al., 1999). Consumers engage in an appraisal processes to evaluate stressful encounters and use this evaluation to choose a suitable coping strategy (Sengupta et al., 2015) depending upon the obligations that the service provider has failed to fulfil.

This study will develop current service failure literature to examine three coping strategies that consumers employ to manage perceived contract breach and feelings of violation (i.e. a source of service encounter failure) to determine the role of coping in service encounters that lead to feelings of violation. Based on precedent research papers that applied the cognitive appraisal
theory to the study of consumers’ coping behaviour within service failure, this study will propose that appraisal of the perceived contract breach triggers different coping strategies that influence evaluation of the service encounter (Strizhakova et al., 2012).

4.3 The relationship between psychological contract breach and attribution of blame

Prior research shows that more extreme cases of dissatisfaction, disappointment and breakdown of relationships will stimulate cognitive appraisals of the event and most likely negative emotions (see Grégoire et al., 2010; Surachartkumtonkun et al., 2013; Zourrig et al., 2009). Consumers might believe their responses are justified depending on their assessment of the failure incident and the attribution of blame and betrayal to the provider (Grégoire and Fisher, 2008). Furthermore, as perceived psychological contract breach is associated with greater economic or social losses (Surachartkumtonkun et al., 2013), as well as mutual or self-interest violation, cases of failure to meet obligations could be the initial stimulus for resulting negative outcomes (Obeidat et al., 2017). Thus, perceived contract breach is the starting point of this study’s model of appraisals and emotions that lead to blame attribution and feelings of violation.

Both Morrison and Robinson (1997) and Forrester and Maute (2001) argued that if one party of exchange has a high level of trust and expects that the other party will not behave in a way detrimental to his or her interests, the more likely that violation would be attributed to an external, or third-party, and not the violator. However, Peng et al. (2016) found that psychological contract violation was stronger for individuals with an external locus of causality attribution than for those with an internal one. Morrison and Robinson (1997) contended that perceptions of psychological breach did not necessarily foster feelings of violation. Instead, they found that emotional experience resulted from the sense-making process that occurred following the perception of a breach.

Morrison and Robinson (1997) noted that as part of the sense-making process, the person evaluated the outcome itself (the alleged breach), as well as considering why the situation occurred. When faced with an unfavourable or unexpected outcome, people tend to search for explanations that will enable them to determine the reasons for the result. These attributions have a strong impact on the emotional intensity that a person feels (Ortony et al., 1988). Robinson and Morrison (2000) found that a relatively strong relationship caused perception of contract breach and violation, but they empirically proved that they were two distinct constructs, as discussed earlier. However, they argued that the relationship between perceived breach and violation
depended on causal attributions. Blame attribution demonstrates that psychological contract breach does not automatically result in feelings of violation. Individuals may perceive a psychological breach, yet experience relatively little sense of violation.

Consistent with the psychological contract paradigm in organisational relationships, individual responses to violated norms of fulfilment of a promised obligation may be similar despite the promise content in a consumer-firm setting being potentially different from that in an employee-firm setting. If consumers are less likely to perceive that the service provider has reneged on their promise, they attribute the failure to themselves and, thus do not perceive a breach even though there is a psychological contract. Moreover, consumers are unlikely to perceive a contract breach and violation if they have no psychological contract, regardless of the source of fault (Robinson and Morrison, 2000; Theotokis et al., 2012).

In service settings, previous service marketing research has also addressed a wide range of issues, such as consumer affective states and cognitive responses to service failure episodes and consumer evaluations of service delivery including blame attribution (Singh and Crisafulli, 2015). Consumers are likely to feel betrayed; particularly when they believe the normative standards (e.g. violating one of the terms and conditions in the contractual agreement) have been violated (Grégoire and Fisher, 2008). This is particularly true when there is a direct attribution of agency following an evaluation of the circumstances (Soscia, 2007). When consumers feel that they cannot control the service and they feel they are not able to influence its delivery or outcome, they re-assign responsibility from themselves to external parties. In many cases of service failure, consumers usually overestimate the control of the firm and they show strong negative responses towards the responsible factor for the failure and those who control its outcomes (Raaij and Pruyn, 1998; Van Vaerenbergh et al., 2014). Consumers still blame the service provider for encounter failures when they have no control over the cause.

Additionally, Zourrig et al. (2014) stated that when consumers experienced an issue with a product/service, they blamed the problem on the firm (external blame) and not themselves. Joireman et al. (2013) noted that when a consumer experienced a problem, they searched for answers to questions about the inconvenience of the initial service failure (severity) and to whom they should attribute blame. Disconfirmation is an unmet expectation where responsibility is unknown. However, violation of a psychological contract is similar to unmet expectations, but in cases of psychological contract violation, the firm is attributed responsibility for the failure (Goles et al., 2009; Malhotra et al., 2017). This leads to:
Hypothesis 1: Psychological contract breach has a positive association with external attribution of blame (i.e. towards the service provider).

4.4 The relationship between blame attribution and feelings of violation

Strong negative emotions occur due to externally attributed blame (Smith and Ellsworth, 1985). Powerful negative emotions are negatively valenced emotions that occur when another person or entity is blamed for the problem (Lazarus, 1991; Ortony et al., 1988; Smith, 1991). According to Roseman (1984) and Smith and Ellsworth (1985), consumers became angry with their provider when they believed they had suffered from a problem caused by the provider. In addition, Folks (1984) added that users who strongly blamed the firm for service-related problems were more likely to be angrier than those attributed less blame to the firm. Averill (1983) contended that people became angry when they believed the failure was a result of a controllable outcome. Weiner (1985) also believed anger was positively associated with external blame. Furthermore, Forrester and Maute (2001) contended that when attribution of blame was assigned to the violator, which was more likely to happen early in the relationship, then negative emotion, the likelihood of exit and negative word of mouth would be greater.

From a marketing perspective, when consumers focus on the provider’s obligations, they elicit feelings of betrayal when there is a service failure incident. According to Wan et al. (2011), customers tend to perceive service failure as a betrayal of the relationship when the failure is viewed from their own perspective or when firm’s obligations are highlighted. According to Kingshott and Pecotich (2007), the nature of contract breach is that it is perceptual and engenders strong emotions. However, behavioural response depends upon whether the perceived failure occurred due to perceptions of either reneging or incongruence.

In the case of service encounter failures, most service failure research that measured attributions found consumers experienced many negative emotions due to failures. Anger was the most common negative state explored across all studies, followed by offense and disappointment (van Vaerenbergh et al., 2014). The specific type of emotion relies on appraisal dimensions (Ortony et al., 1988). According to Roseman (1991), blame attribution fosters negative emotions (e.g. frustration). When a consumer attributes the blame, the primary negative emotion is otherwise directed (Gelbrich, 2010; Rosenman, 1991). Examples of negative emotion include dislike, anger, frustration and revenge (Gelbrich, 2010). Hence, feelings of violation, as powerful negative emotions, are likely to be stronger and fostered from casued attributions, for example, if
delivery of a promised service did not take place, or in the case of a violated one of the contractual agreements. Therefore, blame attribution, in terms of psychological contract breach, determines the intensity of the feelings of violation that the other party will experience (Robinson and Morrison, 2000; Theotokis et al., 2012).

In the specific event of psychological contract breach in the workplace, people will experience more intense feelings of violation following a perceived breach when they attribute it to reneging (i.e. an action on the part of the firm) and not incongruence (i.e. their own misunderstanding). The former attribution will make the person blame the firm, while the latter will decrease blame and make the relationship between perceived breach and violation weaker (Robinson and Morrison, 2000). Likewise, the relationship between perceived contract breach and violation will be stronger if the consumer attributes the situation to reneging. According to Theotokis et al. (2012), casual attributions are an important variable that help determine the reasons or motives for psychological contract violation. They are also an essential factor when predicting the outcomes of psychological contract breach (e.g. feelings of violation). Likewise, in a consumer context, feelings of violation in response to a perceived contract breach elicited when consumers evaluate an event whereby a service provider fails to meet prior expectations of obligations (Morrison and Robinson, 1997; Bavik and Bavik, 2015). Smith and Lazarus (1993) suggested that blame attribution was a core driver of negative emotions (e.g. anger). This leads to:

_Hypothesis 2: Attribution of blame to an external party (i.e. the service provider) has a positive association with feelings of violation._

### 4.5 The direct effects of feelings of violation on service outcomes

According to Morrison and Robinson (1997), psychological contract breach is thought to be a process that may negatively change attitudes and behaviours. Lazarus’s (1991a; 1991b) cognitive-motivational relational theory of emotion further supported the speculation that violation will impact the relationship between perceived psychological contract breach and individuals affective and attitude-based responses. Dulac et al. (2008) extended this theory to consider the psychological contract and proposed that perceived psychological contract breach took place when an individual cognitively evaluated that one party of exchange had failed to fulfil its promises and how that individual comprehended that breach in terms of his or her own well-being led to feelings of violation. Additionally, they argued that when an individual assessed the behaviour of
others, this assessment influenced their affective responses towards that behaviour. Consequently, attitudes and behaviour towards others was affected (Dulac et al., 2008).

Consumers believe that they are justified in responding negatively to a service failure episode based on their attribution of failure, blame and betrayal to the provider (Grégoire and Fisher, 2008). Previous literature indicated that experiencing a stressful and unpleasant event had negative effects on consumer psychological states, which directly affected their behavioural intentions (i.e. their reactions) in relation to using a service (Bagozzi, 1992; Bagozzi et al., 1999). In addition, the literature showed that service failure led to dissatisfaction, which, in turn, affected behavioural outcomes (Balaji et al., 2017; Reynolds and Harris, 2009; Tsarenko and Strizhakova, 2013). The theory related to the psychological contract and subsequent feelings of violation (Morrison and Robinson, 1997; Robinson and Morrison, 2000) appears to be consistent with the view that personal service failure episodes based on perceived psychological contract breach have the potential to lead to unfavourable outcomes and could severely damage the overall consumer-firm relationship (Malhotra et al., 2017).

4.5.1 Regret

Regret is more likely to occur when a consumer feels more responsible for a service failure (Zeelenberg et al., 1998). According to Van Dijk et al. (1999), regret occurred when people perceived that they had made a poor decision that was within their control. Thus, as the level of responsibility increased, coupled with poor quality decision making, regret was likely (Sugden, 1985). These findings were consistent with studies that showed that poor quality decision making related to highly controllable situations, as opposed to uncontrollable ones, caused regret (see Gilovich and Medvec, 1994). Regret indicates that there was another better alternative. According to regret theory (Bell, 1982; Loomes and Sugden, 1982), consumers experience regret when they compare ‘what is’ (i.e. the actual outcome) with ‘what might have been’ (i.e. possible alternative outcomes).

Davvetas et al.’s (2017) study contributed to regret theory in the context of marketing by suggesting that the experience of regret differed across brands depending strongly on the consumer-brand relationship and to what extent consumer and brand schemas overlap. Regret occurs when a consumer realises or imagines that their current situation would have been better if they had acted differently. Previous marketing literature suggests that regret influences some consumer behavioural patterns, such as their purchase intentions (Bonifield and Cole, 2007) and
it is strongly associated to switching providers (Zeelenberg and Pieters, 2004; Zeelenberg et al., 2002). This leads to:

Hypothesis 3: Feelings of violation have a positive association with regret.

4.5.2 Dissatisfaction

Unexpected experiences, such as perceived psychological contract and violation, are likely to change a consumer’s mind-set from that of favourability to negativity (Pavlou and Gefen, 2005). As satisfaction is primarily a factor in the perceived relationship between what one expects and what one perceives as the offering (Oliver, 1981), violation, as an outcome of unmet obligations, is likely to negatively impact upon consumer satisfaction (Malhotra et al., 2017). Turnley and Feldman (2000) suggested that the perception of psychological contract violation led to dissatisfaction. Kickul and Lester (2001) also reported that satisfaction was negatively related to psychological contract violation.

In addition, according to Weiner (2000), most previous service failure studies share the belief that external attribution, especially within the realm of a service provider, decreases consumer satisfaction and result in negative emotion and behaviour, such as anger and frustration. Moreover, external attribution also leads to higher dissatisfaction with the service and with the service provider (Dabholkar and Spaid, 2012; Dong et al., 2008). Furthermore, given the outcome-dependent characteristic of dissatisfaction (Weiner, 1986), feelings of violation should be related to dissatisfaction due to its outcome-orientation in terms of perceived breach of mutual obligations of resources exchanged and explicit terms and conditions (Conway and Briner, 2005). Concurrently, perceived psychological contract and violation, the discrepancy between promised and received inducements, is likely to lead to dissatisfaction (Lövblad et al., 2012; Zhao et al., 2007).

It has been reported that consumer emotions strongly impact the degree of satisfaction (Oliver, 1997). In evaluating a specific consumption experience, the current emotional state of a consumer (Hennig-Thurau et al., 2006) and a change in his/her emotions influences the appraisal of satisfaction (Baron, 1987; Sinclair and Mark, 1995). This is in accordance with studies that have shown that consumers who experienced a positive emotion in service encounters had a higher degree of satisfaction with a service encounter (Mano and Oliver, 1993; Oliver, 1993; Price et al., 1995; Wirtz et al., 2000; Söderlund and Rosengren, 2004). However, research has also indicated that service failure episodes, especially severe cases, negatively influenced consumer
satisfaction and loyalty intentions (Smith and Bolton, 1998). In other words, service failure can become a means for consumers to decrease their level of satisfaction. According to De Matos et al. (2012), unpleasant experiences derived from failure episodes affects future evaluation of consumer satisfaction.

According to Komunda and Osarenkhoe (2012), service failure leads to three negative consequences: consumer dissatisfaction, cost increase and profit decrease. Dissatisfaction is a dependent outcome related to the stressful event, but not to its cause (Weiner, 1986). The expectancy-disconfirmation paradigm dictates that the more occurrences of negative disconfirmation of expectations, the greater the consumer dissatisfaction (Bearden and Teel, 1983; Cronin and Taylor, 1992; Spreng and Chiou, 2002). As service failure, especially in severe cases, represents this gap, failure is positively associated with dissatisfaction. The common view in satisfaction research is that emotions, such as anger and frustration, may lead to dissatisfaction (Mano and Oliver, 1993; Smith and Bolton, 2002; Zeelenberg and Pieters, 2004). Furthermore, behaviour and behavioural outcomes of powerful negative emotions (e.g. anger and betrayal) and dissatisfaction differ (Fang and Chiu, 2014; Grégoire and Fisher, 2008). This leads to:

_Hypothesis 4: Feelings of violation have a positive association with dissatisfaction_
Figure 1: Conceptual Model
4.5.3 Desire for revenge

Violation of the expected service obligations and terms and conditions of legal contracts was likely to lead to a perception of psychological contract breach among consumers. Consumer perception of contract breach may in turn induce a desire to take revenge via cognitive responses (Funches et al., 2009; Grégoire and Fisher, 2008). Consistent with social exchange theory and cognitive dissonance theory, psychological contract breach results in both negative affective and cognitive responses, which influences subsequent consumer behaviour to restore inequity (Rousseau, 1995; Zhao et al., 2007). Consumers may adopt retaliatory behaviour to diminish the stress and frustration caused by their experience of unfairness (Gelbrich, 2010; Porath et al., 2010; Tripp and Bies, 1997). Grégoire and Fisher (2008) conducted a field study with 226 travellers who were asked to recall a service failure incident that associated with an airline company. Their findings revealed that feelings of betrayal were directly linked to consumer retaliation.

People behave differently when exposed to service failure. Some will explicitly vent their negative emotions on the firm, while others will respond with rage, retaliation or avoid to communicate with the offender (Daunt and Greer, 2015; Zourrig et al., 2009). When consumers blame the service provider for a service failure, they experience negative emotions (e.g. frustration, anger, betrayal), which increase their desire for revenge against the service provider (Bonifield and Cole, 2007). Grégoire and Fisher (2006) found that the desire for retaliation in a service context was substantively higher than the desire for retaliation in the context of workplace and personal relationships. According to Gelbrich (2010), powerful emotions foster reactions and aim to enact revenge against a firm. Grégoire and Fisher (2008) and Grégoire et al. (2010) noted that consumers exhibit dysfunctional behaviour to harm and punish firms that have not delivered equitable service provision. To restore fairness and re-establish a form of social order, betrayed consumers believe revenge is a justified action (Grégoire and Fisher, 2008). This leads to:

Hypothesis 5: Feelings of violation have a positive association with a desire for revenge.

4.5.4 Loyalty intentions

Previous literature has generally linked psychological contract breach to a number of negative outcomes. Psychological contract breach has diminished organisational citizenship behaviour (Robinson and Morrison, 1995), developed perceived feelings of injustice (Pate and Malone, 2000) and generated feelings of betrayal, resentment, and anger (Rousseau, 1989;
Robinson and Morrison, 2000). In addition, psychological contract breach has degraded the level of individual’s satisfaction, commitment, trust and retention (see Sels et al., 2004). Colgate and Hedge (2001) identified potential antecedents that affect behavioural intentions. Some of these antecedents are: service failures, denied services, low quality customer service and high price. Consumers are more likely to have negative behavioural intentions toward service providers due to a bad service performance (Xavier and Ypsilanti, 2008). Burnham et al. (2003) contended that the psychological and emotional distress caused by the breaking of bonds influence consumers’ behavioural intentions which, in turn, cost the service firm.

Past research in service and management literature has indicated an association between consumer emotions and behavioural intentions. For example, consumers who experienced positive emotions in relation to service encounters tended to see the bright side of things and were more willing to rebuy from a store and to enjoy the same pleasant experience (Robert and John, 1982; Gardner, 1985; Tsai and Huang, 2002). Furthermore, Nyer (1997a) also demonstrated that people with positive emotions were more likely to engage in positive word of mouth. Therefore, it is expected that positive consumer emotions in relation to service encounters will lead to positive behavioural intentions and vice versa (Lin and Lin, 2011).

According to Bougie et al. (2003), negative emotions affect customers’ behavioural intentions. They found that negative emotions were a significant predictor of negative behavioural intentions. Malhotra et al. (2017) reported that psychological contract violation influenced intention to reuse through serial mediation, whereby psychological contract violation affected trust, which influenced satisfaction, which, in turn, impacted upon consumer intention to reuse. Psychological contracts can damage the bond between consumers and firms, due to perceived contract breach and violation (Theotokis et al., 2012). Mamonov et al. (2017) found a significant relationship between feelings of violation and exit intentions. Given the theoretical principles of psychological contract, it is reasonable to expect that when psychological contract breach occurs and negative associations formed (i.e. attribution of blame and feelings of violation), consumers would be more likely to have negative behavioural intentions. This leads to:

Hypothesis 6: Feelings of violation have a negative association with loyalty intentions.

4.6 The mediating role of coping behaviour

Emotions are “complex, organised and psychophysiological reactions consisting of action impulses, feelings, and somatic reactions” (Folkman and Lazarus, 1991, p.209).

...
Emotions are multidimensional factors (Weiss and Cropanzano, 1996). A particular person-situation transaction evokes emotions such as anger or guilt, which in turn leads to the application of several coping strategies. This study will focus on negative, and not positive, emotions (i.e. feelings of violation) in the current context, as service failures (i.e. perceived contract breach) tend to create stress for consumers (Duhachek, 2005).

Negative emotions trigger coping strategies as people strive to decrease their emotional distress and induce a more favourable emotional state (Duhachek, 2005; Lazarus, 1991b). Service encounters, especially failed ones, often elicit specific negative emotions, which partly lead to subsequent behavioural outcomes. Similarly, previous psychology studies have shown that different emotions can result in different methods of coping (Lazarus, 1991b) and behavioural outcomes (see Frijda et al., 1989). In addition, Yi and Baumgartner (2004) examined coping behaviour related to four different negative emotions (anger, disappointment, regret and worry). Their findings indicated that consumers used several coping strategies with different emotions, or the stressors that caused these emotions. The affective/emotional reactions of psychological contract breach largely involve powerful negative emotions directed towards the party that is responsible for the breach (Fullerton and Taylor, 2015). Rousseau (1989, p.129) described violation as involving “feelings of betrayal and deeper psychological distress [whereby] ... the victim experiences anger, resentment, a sense of injustice and wrongful harm”. Watson and Spence (2007) contended that there was not enough supporting evidence to recommend considering coping as an essential appraisal; instead, they believed that coping was best thought of as an emotional outcome.

Feelings of violation refer to “emotional distress and feelings of betrayal, anger, and wrongful harm arising from the realisation that one’s firm has not fulfilled a highly salient promise” (Raja et al., 2004, p.350). According to Robinson and Morrison (1997), violation is an emotional experience and arises from a cognitive process. Violation reflects an “an emotional blend” or combination of first-order feelings. More specifically, violation combines frustration and anger. Furthermore, “central to the experience of violation are feelings of anger, resentment, bitterness, indignation, and even outrage that emanate from the perception that one has been betrayed or mistreated” (Robinson and Morrison, 1997, p.231). Thus, feelings of violation include a range of powerful negative emotions, including anger, extreme frustration, and betrayal (Robinson and Morrison, 2000).

A powerful negative emotion can trigger coping behaviour (Strizhakova et al., 2012). Coping theory (Lazarus and Folkman, 1984) states that angered consumers may complain to restore emotional balance. In addition, betrayal can also increase the likelihood of confrontational coping behaviour (Gelbrich, 2010; Gregoire and Fisher, 2008). Negative
emotions may also encourage support-seeking behaviour (Duhacheck, 2005). They may also increase the likelihood of a desire to vent about a stressful event (Kowalski, 1996), as well as highlighting heightened expressive tendencies (Bonifield and Cole, 2007; Kalamas et al., 2008). Strong negative emotions and various forms of emotion-focused coping are directly related.

Lazarus (1991b) proposed that negative emotions were readily transformed by emotion-focused coping strategies. According to Robinson and Morrison (1997), a series of actions accompany feelings of violation. First, the consumer will keep thinking about the issue that caused the emotion, causing external expressions of anger and distress (e.g. facial gestures, venting emotion and tone of voice) and bodily trouble involving the nervous system (e.g. high blood pressure and heart rate). According to Strizhakova et al. (2012), it is difficult to dismiss and ignore negative emotions in high-stress encounters. Strong negative emotions evoke both problem-focused and emotion-focused coping strategies (Scheck and Kinicki, 2000). Moreover, Sengupta et al. (2015) reported that consumers used coping strategies, such as action coping and instrumental support seeking, in cases of high severe service failure, while they used denial in cases of less severe service failure. As such, feelings of violation, as a powerful emotion, will likely preclude consumers from denying the psychological contract breach and, instead, engaging in more active and expressive support-seeking strategies.

Coping strategies aim to change the person–environment relationship for the better. As coping strategies aim to manage stressful situations, no single strategy is superior. Luce et al. (2001) demonstrated that people cope with stressful situations in different ways that result in different behavioural outcomes. Like other forms of stress, people cope with stress from contract breach and violation. Thus, evaluation of the outcomes of contract breach within a coping framework will likely illustrate that different coping responses used to deal with stressful failure decisions resulted in different future cognitive and behavioural outcomes, depending on the form of coping used.

Complications arise when predicting consumer responses and coping strategies for perceived contract breach and violation as personal experiences and context, along with individual personalities and situational factors, help shape their expectations and the appraisal process (Duhachek and Kelting, 2009). As coping aims to deal with stressful situations, no single strategy is superior. The most common behavioural response to strong negative emotion is attack (Smith, 1991). Laux and Weber (1991) found that anger led to people openly expressing their feelings. Therefore, confrontive coping, which refers to aggressive efforts to change the situation and usually includes negativity towards the source of the problem, is the primary form of coping associated with consumer anger. Yi and Baumgartner’s (2004)
empirical study suggested that when blame was attributed to another party for a situation that could have been avoided, users adopted the confrontive coping method. Furthermore, according to Tsarenko and Strizhakova, (2013), in most service failures cases where blame is attributed to the providers, consumers react emotionally (e.g. venting and complaining). If consumers are able to solve the problem, release their emotional distress or avoid the incident, they are able to regain their emotional balance and make the consumer-provider environment more harmonious (Strizhakov et al., 2012). Specifically, people who engage in problem-solving coping strategies have lower levels of stress and stronger well-being (Aldwin and Revenson, 1987). On the other hand, expressive support-seeking coping has evoked both positive and negative effects on well-being based on the severity and nature of the service failure episodes (Tsarenko and Strizhakova, 2013). Further, there are links between denial coping and severe depression (Duhachek, 2008).

Gabbott et al. (2011), suggested that consumers used active coping strategies because they assessed service encounters as unfavourable due to high stress, and as a result, were expected to encounter less satisfaction and more unfavourable outcomes, whereas expressive support-seeking coping included a reinterpretation of stressful encounters, which resulted in more favourable evaluations of service encounters. Thus, expressive support-seeking coping led to greater consumer satisfaction and behavioural intentions. Similarly, when consumers engaged with denial, where they ignored the negative experiences, their negative effects on the consumer’s satisfaction and behavioural intentions were reduced (see Duhachek, 2005; Gabbott et al., 2011; Lu et al., 2012).

However, Tsarenko and Strizhakova (2013) argued that when consumers use active coping, they evaluate the whole experience rationally. They concentrate on finding a satisfactory solution to the problem. Although they may feel violated, the priority for them is to focus on a rational cognitive assessment of the experience. Although feelings of violation lead to dysfunctional and vengeful behavioural patterns (Gellbrich, 2010; Grégoire and Fisher, 2008), they can also stimulate actions to deal with the situation and change the relationship between the individual and environment (Herrald and Tomaka, 2002; Yukawa, 2005). In other words, active consumers alter their stressful environment by engaging in problem-solving activities rather than emotion. They are likely to make an effort to communicate and cooperate with the service provider and to perceive the service recovery as an option under the existing conditions. Thus, not only it is expected that feelings of violation will be associated with active coping in contract breach incidents, but also that active coping rejects expressive support and, instead, takes actions to overcome the negative experience and remedy the problem.
As a result, active coping is likely to lead to favourable service outcomes. This leads to:

*Hypothesis 7: Active coping partially mediates the relationship between feelings of violation and regret (H7a), dissatisfaction (H7b), desire for revenge (H7c) and loyalty intentions (H7d).*

Conversely, expressive support seekers focus on the pain and what is lost, and not gained, from service failures (Tsarenko and Strizhakova, 2013). According to Duhachek (2005), powerful negative emotion drives expressive behaviours, such as emotional venting and support seeking. Hence, feelings of violation cause a tendency towards expressive behaviour. Terry and Hynes (1998) contended that psychological research suggested that expressing negative emotions and communicating to others were adaptive strategies when one party blamed the other party. Accordingly, consumers utilising expressive support-seeking coping behaviour aim to express their negative emotions and talk to others as alternative strategies for emotional release from their induced stress.

In service failures, consumers engage in emotional expression and venting when they attribute blame to providers (Tsarenko and Strizhakova, 2013). Consequently, the desire for revenge, and switching, might become a way that consumers redress the problem. Hence, expressive support-seeking coping increases the likelihood of regret, dissatisfaction, desire for revenge and intention to switch providers, especially when consumers inadequately address their lingering negative emotions (Strizhakova *et al.*, 2012). Furthermore, when consumers use emotion-focused coping strategies, the unhappy situation still exists; only their feelings about the problem have changed (Lazarus and DeLongis, 1983). According to Tsarenko and Strizhakova (2013), ineffective social support, as well as repetitive emotional venting, decrease well-being and prolong stress. Given these points, expressive support-seeking coping is likely to result in negative affective states and behavioural outcomes. This leads to:

*Hypothesis 8: Expressive support-seeking coping partially mediates the relationship between feelings of violation and regret (H8a), dissatisfaction (H8b), desire for revenge (H8c) and loyalty intentions (H8d).*

Finally, the denial coping strategy is a passive, emotional and cognitive, response to stress. When consumers engage in denial behaviour, they ignore the negative incident (Duhachek, 2005). Psychological contract breach is an experience where the perceived level of stress is highly subjective. To clarify, some consumers may prefer not to respond to or
interact with the external environment to gain internal recovery and healing. Consumers who use denial to cope with stressful events distance themselves from the whole experience (Yi and Baumgartner, 2004). Hence, taking actions to solve the problem, seeking support, or re-establishing contact with the provider means re-engagement, which would lead to a less successful denial of the incident (Tsarenko and Strizhakova, 2013). According to Duhachek (2005), denial consists of complete rejection of stressors to reduce the negative effects on the consumer. Thus, it is expected that denial will lead to less dissatisfaction and no desire to switch to another provider. In other words, stressful events do not affect the cognition and intentions of those who deny the problem as they refuse to believe that the problem ever occurred.

Nevertheless, while denial can be a protective and healthy strategy to manage some issues, medical research suggests that suppressing feelings decreases well-being, in addition to increasing depression and alcohol abuse (Brewer and Hewstone, 2004; Ehring et al., 2010). In addition, behavioural research has shown that suppressing feelings leads to depression and anxiety, which, in turn, affects consumer behaviour (Amstadter, 2008). Denying negative emotions elicited by unpleasant incidents leads to lingering overwhelming emotional tension, which eventually leads to aberrant behaviour (Wenzlaff and Rude, 2002). According to (Strizhakova et al., 2012, p.416), “failure denial does not guarantee anger dismissal, and inadequately addressed negative feelings prolong lingering of the failure in one’s mind”. Prior studies have shown a link between regret and denial (Zeelenberg and Pieters, 2004) as well as revenge and denial (Zourrig et al., 2014). Thus, in the case of psychological contract breach and violation, consumers are expected to exhibit greater regret as well as a desire for revenge when they engage in denial due to suppressed feelings and overwhelming emotional tension. This leads to:

_Hypothesis 9: Denial coping partially mediates the relationship between feelings of violation and regret (H9a), dissatisfaction (H9b), desire for revenge (H9c) loyalty intentions (H9d)._  

Table 1 summarises the nine hypotheses of this study.
Table 1: Summary of hypotheses

<table>
<thead>
<tr>
<th>Hypotheses</th>
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<tbody>
<tr>
<td>H1: Psychological contract breach has a positive association with external attribution of blame (i.e. towards the service provider).</td>
</tr>
<tr>
<td>H2: Attribution of blame to an external party (i.e. the service provider) has a positive association with feelings of violation.</td>
</tr>
<tr>
<td>H3: Feelings of violation have a positive association with regret.</td>
</tr>
<tr>
<td>H4: Feelings of violation have a positive association with dissatisfaction.</td>
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<tr>
<td>H5: Feelings of violation have a positive association with a desire for revenge.</td>
</tr>
<tr>
<td>H6: Feelings of violation have a negative association with loyalty intentions.</td>
</tr>
<tr>
<td>H7: Active coping partially mediates the relationship between feelings of violation and regret (H7a), dissatisfaction (H7b), desire for revenge (H7c) and loyalty intentions (H7d).</td>
</tr>
<tr>
<td>H8: Expressive support-seeking coping partially mediates the relationship between feelings of violation and regret (H8a), dissatisfaction (H8b), desire for revenge (H8c) and loyalty intentions (H8d).</td>
</tr>
<tr>
<td>H9: Denial coping partially mediates the relationship between feelings of violation and regret (H9a), dissatisfaction (H9b), desire for revenge (H9c) and loyalty intentions (H9d).</td>
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</tbody>
</table>

4.7 Summary

This chapter provided a synthesis of the extant literature used to develop a conceptual model of the antecedents and outcomes of psychological contract breach by testing the direct effect of feelings of violation on four service outcomes (i.e. regret, dissatisfaction, desire for revenge and loyalty intentions), as well as the indirect effects via coping behaviour strategies. In doing so, the chapter provided an overview of the conceptualised model utilised, along with definitions of the theoretical and empirical variables. The chapter also described the relationship between psychological contract breach and blame; followed by a conceptualisation of the resulting experienced emotion (i.e. feelings of violation) with regard to the relationship between attribution of blame and violation.

Moreover, the chapter discussed the affective states and behavioural intention outcomes (i.e. regret, dissatisfaction, desire for revenge and loyalty intentions) and the mediating role of the three coping strategies (i.e. active coping, expressive support-seeking coping and denial coping). The chapter then used the antecedents and outcomes of psychological contract breach and violation to develop nine main hypotheses.
Chapter 5 will provide details of the empirical methodological approach used to examine each of these hypotheses. Chapters 6 will provide a descriptive analysis and evaluation of the measurement model. Thus, the chapter will summarise the participants’ demographic profiles and the constructs investigated in this study, as well as an analysis of the validity tests used. Then chapter 7 will report and discuss the study’s empirical findings. Finally, chapter 8 will draw the final discussion and conclusion of the study.
Chapter Five

Research Methodology
5.1 Introduction

This chapter will discuss the research methodology applied in this study to investigate the relationship between psychological contract breach, violation, coping behaviour and service outcomes. Furthermore, the chapter will examine the research design, the instruments used, the pre-study results, the context of the study and the research sample. It will also explain the strategies used to administer the questionnaire, the data collection procedures and the analysis scheme.

5.2 Research Paradigm and Philosophy

According to Bogdan and Biklen (1998, p.22), research paradigms are a “collection of logically related assumptions, concepts or propositions that orient thinking and research”. Research philosophy refers to “a system of beliefs and assumptions about the development of knowledge” (Saunders et al., 2016, p.124). The choice of a paradigm is essential to any study as it helps to provide a specific view of the world, the topic of research and how the researcher understands the world. A paradigm consists of three components: ontology, epistemology and methodology (Grix, 2002). Popkewitz et al. (1979) contended that these components are a critical factor in any social science research investigation as they shape and define an inquiry.

According to Burrell and Morgan (1979), a researcher makes a number of assumptions at each phase of a research project. These include assumptions about human knowledge (epistemological assumptions) and about the realities encountered in the research process (ontological assumptions) in addition to assumptions about the extent to which the researcher’s own values will impact the research process (axiological assumptions). Hence, these assumptions reflect the way that the researcher understands their research questions, the methods they select and how they interpret their results (Crotty, 1998, p.2). Saunders et al. (2016, p.125) added that a set of assumptions that are carefully considered and consistent will lead to a credible research philosophy that will underpin methodological choice, research strategy, data collection planning and scheme of analysis. Business and management researchers need to take into account the philosophical commitments they make whilst choosing a research strategy as these commitments will have a huge impact on what they do and how they understand what it is they are exploring (Johnson and Clark, 2006).

May and Williams (1996, p.9) stated that “both philosophy and social science aim to improve our knowledge of the world”. According to May and Williams (1996, p.11), a methodological decision relies on ontological and epistemological assumptions. They added that a philosophical perspective of the research procedure helps a researcher to explore the
basis of reasoning applied in the practice of social research and highlights the implications of the methodological commitments that a social researcher brings to their investigation of social phenomena (May and Williams, 1996, p.153). According to Saunders et al. (2016, p.127), ontology refers to “assumptions about the nature of reality”, while epistemology “concerns assumptions about knowledge, what constitutes acceptable, valid and legitimate knowledge, and how we can communicate knowledge to others”. There is no widely agreed definition of a research paradigm, but the concept is usually understood in accordance with the topic of investigation (Saunders et al., 2016, p.126). However, Saunders et al. (2012, p.140) defined a research paradigm as “a way of examining social phenomena from which a particular understanding of these phenomena can be gained and explanations attempted”.

5.2.1 Ontology

Generally, ontology is “the study of being” (Crotty, 1998, p.10). There are two aspects of ontological assumptions in business and management studies: subjectivism and objectivism (Saunders et al., 2012, p.130). Subjectivism “incorporates assumptions of the arts and humanities, asserting that social reality is made from the perceptions and consequent actions of social actors (people)” (May, 2011, p.13). Subjectivity aims to understand the meaning that people give to their environment, but does not aim to understand the environment itself. In addition, it aims to explore how humans understand their world (May, 2011, p.13). By contrast, objectivism incorporates natural science assumptions, arguing that the social reality “is external to us and others (often referred to as social actors)” (Saunders et al., 2016, p.128).

This study selected objectivism as its ontological assumption as the social phenomena under investigation was independent of social actors. According to Payne and Payne (2004), objectivism in social science was a philosophy introduced in relation to the concept of positivism in which a researcher had to maintain an objective stance. “Objectivism is the epistemological view that things exist as meaningful entities independently of consciousness and experience, that they have truth and meaning residing in them as objects (objective truth and meaning, therefore), and that careful (scientific) research can attain that objective truth and meaning” (Crotty, 1998, p.5-6). Therefore, findings should be based on an exploration of the nature of what is under examination, rather than relying on the “personality, beliefs, and values” of the researcher (Saunders et al., 2016, p.128). Objectivity is a fundamental characteristic of science (May, 2011, p.8). When working under an objective assumption, a researcher may choose between two types of data, in order to determine which type of researcher they wish to be. They can choose to be a “resources researcher” who considers
objects, such as computers, trucks, machines and actual employees to be real data resources; or a “feelings researcher” who seeks to understand and measure feelings and attitudes (Saunders et al., 2012, p.134-135).

In relation to this research investigation, it is believed that there is a reality that can be comprehended or understood; feelings of violation and consumer regret, dissatisfaction, desire for revenge and loyalty exist externally around consumers who perceive these to be realistic reactions to service failure incidents. To clarify, consumers feel negative emotions when they experience service failure that drives consumer dissatisfaction and unfavourable behavioural outcomes (see Balaji et al., 2017; Joireman et al., 2016; Reynolds and Harris, 2009; Tombs et al., 2014). When failure incident triggers negative emotions, consumers tend to attribute the blame to the firm. As a result, negative emotions lead to negative outcomes (Fiske and Taylor, 2013). A great deal of previous research has studied the role of consumer emotions in failed service transactions (see Bonifield and Cole 2007; De Witt et al., 2008; Gabbott et al., 2011). Consumers may try to manage the emotional responses elicited due to their cognitive appraisal of the service failure event and they evaluate events against their own personal goals and/or well-being during cognitive appraisal (see Gabbott et al., 2011; Obeidat et al., 2017; Tsarenko and Strizhakova, 2013). Thus, this study adopted an objectivist method to analyse the social phenomenon of consumer coping behaviour in response to psychological contract breach and feelings of violation. Firms aim to improve their service performance and quality for many reasons, but sometimes they fail to fulfil their obligations towards consumers. The realities of service failure, coping and other related constructs can be identified by analysing consumer experiences of perceived psychological contract breach and feelings of violation.

Structured questions adopted from a perceived psychological contract breach scale and other relevant scales were used to measure the relevant variables, from which participants provided their answers (see section 5.5.1.3). This approach made the investigation objective and addressed the research questions and the study objectives. This strategy was used to examine how each participant behaved when faced with the stressful situation of perceived psychological contract breach and the subsequent feelings of violation. The cognitive and emotional behavioural outcomes employed by consumers towards their mobile phone providers were analysed using well-developed and reliable instruments (see section 5.5.1.3). Their negative experiences, coping behaviour and the outcome levels were measured using the Likert-type scale, where participants reflected their level of agreement to certain statements.
5.2.2 Epistemology

Epistemology refers to “a way of understanding and explaining how [one knows what he knows]” (Crotty, 1998, p.3). Epistemology concerns “the questions of what is or should be regarded as acceptable knowledge in a discipline” (Bryman, 2012, p.27). While ontology aims to address the nature of knowledge, epistemology considers how this knowledge is achieved. Social scientists seek to understand people’s opinions using their responses to situations that have a direct or indirect impact on their lives. Yet, they can also predict people’s behaviour. This generates two social studies’ schools of thought: behaviourism and positivism (May, 2011, p.9). The behaviourism school of thought posits that “only observable and measurable concepts are appropriate foci for scientific study” (May and Williams, 1996, p.53). In contrast, positivism reflects “varied traditions of social and philosophical thought and given that the term is often used in a pejorative sense in social science without due regard to its history, it runs the risk of being devoid of any specific meaning” (May, 2011, p.9). Hollis (1994, p.64) believed that the only way to explain reality was by examining predictions and that predictions could only be obtained by epistemology. May (2011, p.10) stated that positivism was one way to clarify the differences in human behaviour in relation to society. According to Gill and Johnson (2010), when taking a positivist position, a researcher would look for associated relationships in data to offer law-like generalisations similar to those founded by scientists. In addition, a researcher would rely on universal rules and laws in order to predict behaviour and events in firms (Gill and Johnson, 2010).

However, Saunders et al. (2016, p.135) defined four further philosophies in business and management studies. Critical realism concentrates on explaining what people see and experience in terms of the underlying structures of reality that represent observable events Saunders et al. (2016, p.135). Saunders et al. (2016) argued that it was important not to confuse positivism and critical realism. Positivism is known as direct realism, a simple empirical scientific realism. Critical realism consists of two steps: step one - experience the event; step two - think of reasons that may have caused the experience. Another philosophy is interpretivism, which developed as a critique of positivism but from a subjectivist perspective. Another major philosophy is postmodernism. Postmodernism advanced the interpretivists’ critique of positivism by taking into account the role of language. The last major philosophy is pragmatism, which “asserts that concepts are only relevant where they support actions” (Saunders et al., 2016, p.143).
5.2.3 The choice of epistemology

This study will utilise positivist epistemology by taking a positivist position to answer the research questions and represent the study's epistemological stand. According to Crotty (1998), when a researcher adopts an extreme positivist position, they see firms and other social entities as real, likewise seeing that physical objects and natural phenomena are real. Epistemologically, a researcher focuses on studying observable and measurable facts and regularities and only an analysis of phenomena that can be observed and measured will lead to credible and meaningful data (Saunders et al., 2016, p.136). According to Saunders et al. (2012, p.162), quantitative methodology is associated with positivism, particularly if used with predetermined and well-structured data collection techniques. Crotty (1998, p.6) suggested that a research study conducted in a positivist spirit might choose to use surveys and apply a quantitative method of statistical analysis.

Positivism is appropriate for this study as it examines specific relationships among constructs as introduced within a theory of a descriptive model. The positivist assumption that a service firm and a social event can follow universal laws (i.e. a contractual agreement) suits the researcher’s intent to study a specific phenomenon: the effect of feelings of violation resulting from a perceived contract breach on service outcomes. Using cognitive appraisal theory, this study will attempt to determine associated relationships between the following conceptualised variables - perceived contract breach, feelings of violation and service outcomes. This fits well with the philosophy of positivism. Furthermore, a positivist approach enables a researcher to report inconsistencies between the applied theory and proposed hypotheses. In other words, it allows a researcher to discuss study limitations and to provide recommendations for further theoretical research. Finally, to evaluate a particular phenomenon, a researcher should not have any direct involvement with participants to minimise study bias, especially when considering contract breach perception. This is consistent with the objective ontology that guides positivist research.

This study will not seek to explain contract breach and violation from a subjective perspective, but rather it will operationalise these concepts and present them in a way that can be measured and is relevant to other variables. For example, this study will test the relationships between perceived breach and the universally-accepted variables of external blame, violation, coping and service outcomes. Therefore, the concentration will be on the limited number of ways in which contract breach and violation are applicable in service environments. Thus, illustrating that this study is not designed to understand and explain the nature of perceived contract breach and violation empirically. Instead, it will aim to make
specific predictions with regards to relationships between certain variables. This makes positivism and deductive reasoning especially applicable for the purposes of this study.

By adopting positivist epistemology, this study will reject other epistemological perspectives that would provide a different view on the relationship between perceived contract breach, violation and service outcomes. Social constructionism epistemology better suits research that aims to obtain an in-depth understanding of a particular phenomenon within a particular context. Furthermore, establishing new theories is not one of the research objectives; rather, this study will seek to test an existing theory and its related relationships within a particular context. In respect to this, it is extremely important to minimise any possible personal biases that could affect the research process and findings. Positivism, unlike social constructionism, allows a researcher to distance themselves from the subject and reduce subjectivity.

This study will also reject critical realist epistemology. According to Denzin and Lincoln (2003), social structures are considered independent and external to a researcher within the perspective of critical realism. However, this epistemology assumes that these structures themselves, and the knowledge derived, are products of special social relationships and conditioning (Saunders et al., 2016). If a researcher applied a critical realist perspective to a perceived contract breach in a service encounter, the goal would be to analyse mechanisms and structures that underline contract breach practices to determine how these mechanisms and structures change over time and how they empower service providers and their employees as actors. This is a different research direction from the one adopted by this study as it takes an inductive approach to theory building.

5.3 Research design

Saunders et al. (2012, p.159) defined research design as a plan set by a researcher to answer the research question(s). According to May (2011, p.98), the research design is “the framework for the collection and analysis of data from a population”. The population may be clustered into several social groups, chosen according to the research topic, for example, age, gender, education and income. Furthermore, McDaniel and Gates (2010, p.76) added that the purpose of research design is to answer the marketing research objectives. Malhotra and Briks (2007, p.64) stated that research design was “a framework or blueprint for conducting the marketing research project. It specifies the details of the procedures necessary for obtaining the information needed to structure or solve marketing research problems”.
According to Saunders et al. (2016, p.200), research design comprises two essential principles that reflect the time horizon of a research study: cross-sectional and longitudinal. A snapshot time horizon is known as cross-sectional, while a diary perspective is longitudinal. This study used a cross-sectional research design that captured “data at one point in time and selected sufficient cases according to those background characteristics that are then used to detect relationships and associations” (May, 2011, p.98). The timeframe was chosen for a number of reasons. First, although psychological contract breach occurs at a particular point in time (i.e. during a service encounter), it can also occur over a period of time and this study did not aim to consider the measurement of change over time, which made longitudinal data not appropriate and unnecessary. Cross-sectional data is efficient for the comparison of differences among situations or groups of respondents and the formation of relationships, which was the main objective of this study. Furthermore, the cross-sectional horizontal approach is usually characterised by surveys and quantitative methodology (Saunders et al., 2016).

Saunders et al. (2012, p.160) stated that having direct and clear research question(s) would help a researcher select the most appropriate research methodology to conduct a successful research study. Also, it would help determine the tools needed to generate and analyse data. Furthermore, a researcher must consider any possible ethical problems and other difficulties that they might face, such as data collection procedures, time, location and required funds. Two main methodological choices are used to determine the optimum research method: qualitative methodology and quantitative methodology.

When conducting a research study, a researcher can choose a mono-method design, such as a qualitative strategy or a quantitative strategy, or a multiple-methods design (Saunders et al., 2012, p.160). Multiple-methods can comprise multi-method research or mixed-method research. Multi-methods research is when a researcher adheres to a single strategy, either a quantitative or a qualitative, but uses more than one method to collect and/or analyse data. For example, a researcher conducts an in-depth interview and ethnography strategies, both qualitative methods. Conversely, mixed-method research is when a researcher utilises both strategies to collect data, for example, starting with an in-depth interview to gather some information and understand the topic (qualitative strategy) then using a survey to study some relationships (quantitative strategy) (Saunders et al., 2012, p.165). Mixed-methods research is recommended for data generation. May (2011, p.130) stated that “addressing both qualitative and quantitative resolves some of the research difficulties”. Based on Saunders et al. (2016), Table 2 provides some differences between quantitative and qualitative research.
Table 2: Differences between quantitative and qualitative research (Saunders et al., 2016)

<table>
<thead>
<tr>
<th></th>
<th>Quantitative</th>
<th>Qualitative</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Research philosophy</strong></td>
<td>Positivism. May be used within realist and pragmatist philosophies.</td>
<td>Interpretivism. May be used within realist and pragmatist philosophies.</td>
</tr>
<tr>
<td><strong>Research approach</strong></td>
<td>Predominantly deductive.</td>
<td>Predominantly inductive.</td>
</tr>
<tr>
<td><strong>Research objective</strong></td>
<td>Examines relationships between variables.</td>
<td>Studies participants’ feelings and the relationships between them.</td>
</tr>
<tr>
<td><strong>Researcher’s position</strong></td>
<td>Independent from participants.</td>
<td>Plays a more active role.</td>
</tr>
</tbody>
</table>

The first task for a researcher is to decide the type of study. There are three types of study: exploratory, descriptive and explanatory. Sometimes a researcher uses a combination of study types. Exploratory studies are used “when one is seeking insights into the general nature of a problem, the possible decision alternatives and relevant variables that need to be considered” (Aaker et al., 2011, p.72). Saunders et al. (2016, p.174) stated that an exploratory study is a valuable method that uses open questions to explore events and to understand a topic of interest. Questions are likely to begin with ‘what’ or ‘how’. Explanatory studies (causal studies) are recommended when a researcher aims to investigate different relationships among variables (Saunders et al., 2012, p.172). According to Aaker et al. (2011, p.74), a causal study must be used when there is a need to show that one variable (independent variable) determines the value of other variables (dependant variables). Research questions that seek explanatory answers are likely to begin with, or include, ‘why’ or ‘how’ (Saunders et al., 2016, p.176). Descriptive studies ask ‘who’, ‘what’, ‘when’, ‘where’ and ‘how’ questions to gain an accurate profile of events, people or situations (McDaniel and Gates, 2010, p.77; Saunders et al., 2016, p.175). According to McDaniel and Gates (2010, p.77), a descriptive study highlights associations and relationships between two or more variables and it helps a researcher choose the variables for a causal study.

Guest (1999, p.9) argued that the quantitative method often involved “rigorous testing of theoretical claims using survey data”. It is the most commonly used method in psychological studies (see Conway et al., 2016; Katou and Budhwar, 2012). The conceptual model of this study will describe a variety of dependent and independent relationships. This study will use a comprehensive descriptive model to test different associations between perceived psychological contract breach, blame attribution, feelings of violation and related service outcomes. It will also examine how coping strategies mediate the effects of feelings of violation on service outcomes. Therefore, this study is a descriptive one that will utilise quantitative
methodology (i.e. a mono-method quantitative method) via a survey to gather data to answer the research questions and meet the research objectives. Saunders et al. (2012, p.162) stated that quantitative research tests relationships between constructs, which are measured by numbers and analysed through different statistical techniques. The survey research strategy is used when “an interviewer (except in mail and online surveys) interacts with participants to obtain facts, opinion, and attitudes” (McDaniel and Gates, 2010, p.78).

5.4 Research strategy

A research strategy plans how a researcher will answer their research questions (Saunders et al., 2016, p.177). Eight strategies are used to conduct research studies: experiment, survey, archival and documentary research, case study, ethnography, action research, grounded theory and narrative inquiry. The first two research strategies are principally, or exclusively, considered to be linked to quantitative research design. The next two may involve quantitative or qualitative research or a mixed design combining both. The final four strategies are principally, or exclusively, linked to qualitative research design (Saunders et al., 2016, p.178). Since this study was designed as a quantitative research study, it was limited to strategies appropriate to its design.

The experimental strategy is rooted in “natural science, laboratory-based research and the precision required to conduct it means that the ‘experiment’ is often seen as the ‘gold standard’ against which the rigour of other strategies is assessed” (Saunders et al., 2016, p.178). The research questions of this study were designed to inquire into the relationships between variables, rather than to test a predicted relationship, which indicates a difference between experimental and other research strategies. The second strategy that can be used in a quantitative study is archival and documentary research. This is applicable when designing a research project that capitalises on numerous available data sources. There are several disadvantages of using this strategy. The efficiency and effectiveness of archival or documentary research depends on its appropriateness to the research question and a researcher’s ability to get access to a sufficient number of suitable documents, for example, a researcher may be refused access to documents or find that some data is restricted for confidentiality reasons. Also, they may find that documents vary in quality, especially when they come from different sources. Problems with missing data may lead to analytical gaps (Saunders et al., 2016, p.184)

According to Yin (2014), a case study is an in-depth inquiry into a topic or phenomenon within its real-life setting. Case studies are frequently used for many purposes and have many different designs. A case study strategy has the ability to provide insights from intensive and
in-depth research into exploring a phenomenon in its real-life setting, which helps to rich, empirical descriptions and the development of theory (Dubois and Gadde, 2014; Eisenhardt and Graebner, 2007; Ridder et al., 2014; Saunders et al., 2016; Yin, 2014). Case studies have been employed by both positivist and interpretivist scholars, deductively and inductively, and for descriptive, exploratory and explanatory objectives (Saunders et al., 2012, p.185). However, some positivist researchers have advocated against using case studies within inductive or deductive research. Ridder et al. (2014, p.374) argued that case studies were designed to reveal ‘specific attributes’ rather than rich description.

Surveys are considered to be the easiest and best-understood strategy (Saunders et al., 2012). Surveys are frequently associated with a deductive research approach. Furthermore, business and management studies most commonly utilise surveys to answer ‘what’, ‘who’, ‘where’, ‘how much’ and ‘how many’ questions (Saunders et al., 2012, p.176). Moreover, surveys allow a researcher to gather quantitative data that can be analysed using descriptive and inferential statistics. Furthermore, results reached using a survey, if based on correct sampling techniques, usually offer good data generalisation representative of the whole research sample at a lower cost in comparison to collecting data from an entire population. Saunders et al. (2012, p.177) added that one further advantage of using surveys was that they gave researchers the opportunity to control the research process.

A questionnaire is a “set of questions designed to generate the data necessary to accomplish the objectives of the research project; also called an interview schedule or survey instrument” (McDaniel and Gates, 2015, p.271). According to Saunders et al. (2016, p.436), one of the most largely utilised data collection methods within the survey strategy is the questionnaire. It provides an effective and efficient way of gathering responses from a large sample prior to conducting quantitative analysis because each participant is asked to give answers to the same set of questions. Saunders et al. (2016, p.181) stated that surveys that used questionnaires were popular as they allowed “the collection of standardised data from a sizeable population in a highly economical way, allowing easy comparison”. However, authors (e.g. Bell and Waters, 2014; Oppenheim, 2000) have argued that it is not an easy task to design a good questionnaire. The researcher needs to ensure that the questionnaire will collect accurate data that he/she can use to answer the research question(s) and achieve the research objectives.
5.4.1 When to use questionnaires

Saunders et al. (2016, p.439) found that many authors collected data using a questionnaire without taking into account other methods such as examination of secondary sources, observation and semi-structured or unstructured interviews. Researchers should consider different potential data collection methods and pick those best fit to the research question(s) and objectives. Questionnaires are not usually suitable for exploratory or other research that seeks answers to a large numbers of open-ended questions. They are more appropriate when a researcher needs answers to standardised questions that participants will interpret similarly (Robson, 2011). Therefore, descriptive or explanatory research studies are the two types of research to which questionnaires are most suited (Saunders et al., 2016, p.439).

Descriptive studies are usually conducted using attitude, behaviour and opinion questionnaires, as well as questionnaires relating to business practices, and will enable the researcher to evaluate and describe the differences in several phenomena. By contrast, explanatory or analytical research will help a researcher to examine and explain relationships among different variables, particularly, to examine cause-and-effect relationships. Each of these two purposes requires different research design (Gill and Johnson, 2010). It is worth noting that questionnaires can be used as the only data collection method or alongside other data collection methods (e.g. in a mixed or multiple method research design). To illustrate, a questionnaire and in-depth interviews can be used to explore consumer attitudes in order to better understand these attitudes (Saunders et al., 2016, p.439).

5.4.2 Types of questionnaire

The design of a questionnaire varies based on how it is delivered, returned or gathered, and on the amount of contact the researcher has with the participants (Saunders et al., 2016, p.440). Questionnaires that are usually completed by the participants alone are known as self-completed questionnaires and are often referred to as surveys. According to Saunders et al. (2016, p.440), self-completed questionnaires can be distributed to respondents through different delivery channels. Respondents might be invited to use a hyperlink (i.e. web questionnaire) through their web browser or directly scan a QR (i.e. quick response) code into their mobile device (i.e. mobile questionnaire) to complete an internet questionnaire (Saunders et al., 2016, p.440). Another way to distribute a questionnaire is by posting it to respondents and asking them to return it by post after completion (i.e. postal or mail questionnaires) or to deliver it personally to each participant and collect it after completion (i.e. delivery and collection questionnaires). Telephone questionnaires are questionnaires that are answered.
during a telephone conversation. Finally, face-to-face questionnaires refer to questionnaires where researchers physically meet participants and ask the questions face-to-face. These are also known as structured interviews, but differ from semi-structured and unstructured (i.e. in-depth) interviews (Saunders et al., 2016, p.440).

Hence, since this study seeks to assess the relationship between perceived contract breach, blame attribution and feelings of violation, as well as to examine the direct and indirect effects of feelings of violation on service outcomes via three coping strategies, a survey was chosen as the most suitable data collection method as it would allow adequate measurement of antecedents and outcomes of perceived contract breach (i.e. attribution of blame, feelings of violation, regret, dissatisfaction, desire for revenge and loyalty). This study used self-completion questionnaires as they offered the participants the opportunity to independently and anonymously provide answers that reflected their negative experiences. The questionnaire used in this study was adopted from the global measure of perceived psychological contract breach scale developed by Robinson and Morrison (2000). In addition, well-developed, reliable and frequently-used scales were adopted to measure the other variables and factors in this study (i.e. attribution of blame, feelings of violation, coping behaviour, dissatisfaction, regret, desire for revenge and loyalty intentions (see section 5.5.1.3). Factor analysis and SEM analytic techniques were used to provide more robust, reliable and valid results. Since the quantitative method is mainly scientific, biases and values were considered in order to make the findings more replicable. Table 3 summarises the research methodology.

Table 3: Research methodology

<table>
<thead>
<tr>
<th>Philosophy</th>
<th>Objectivity / Positivism</th>
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<tbody>
<tr>
<td>Approach</td>
<td>Deductive</td>
</tr>
<tr>
<td>Type of study</td>
<td>Descriptive study</td>
</tr>
<tr>
<td>Methodological choice</td>
<td>Mono-method quantitative method</td>
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<tr>
<td>Strategy</td>
<td>Survey</td>
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<td>Instrument</td>
<td>Questionnaire</td>
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<tr>
<td>Timeframe</td>
<td>Cross-sectional</td>
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<tr>
<td>Techniques and procedures</td>
<td>Data collection &amp; data analysis: Factor analysis and SEM</td>
</tr>
</tbody>
</table>
5.5 Data collection

This study used primary data to answer the research questions. Primary data is information collected first-hand that is specifically tailored to the research needs (Gates and McDaniel, 2010, p.100). Primary data was gathered using a questionnaire that targeted mobile phone users in the USA. Furthermore, information about the study variables and the structural equation modelling (SEM) approaches were gathered from highly ranked published journal articles in several study fields, for example, service marketing, consumer behaviour, psychology, HRM and organisational behaviour (e.g. Balaji et al., 2017; Duhachek, 2005; Joireman et al., 2013; Robinson and Morrison, 2000). These articles were accessed through databases, such as MetaLib, ABI/Global, Web of Science, Google Scholar and Business Source Premier. The articles were used to critically review the constructs of this study to gain a clear understanding of each concept in terms of what they are, how they are linked to the other variables (especially psychological contract breach and violation) and why they should be measured.

This section will outline the quantitative data collection method used in this study. A questionnaire was generated to collect data via Qualtrics online research panel based in the USA. Section 5.6 will explain the disadvantages and advantages of using research panels. It will also explain the rational for choosing to use a research panel, along with details of the data collection procedures in terms of the experience of the collaboration with an online research agency.

5.5.1 Questionnaire generation

Churchill and Iacobucci (2002) recommended following nine steps to develop and validate a questionnaire. Figure 2 illustrates the process used to design an effective questionnaire in this study.

5.5.1.1 Step one: information sought

The first step was to determine which questions would most clearly reflect the situation being investigated and generate the optimum answers to the research questions. Questions were derived from the constructs of interest covered in the theoretical framework of this study (see chapter 4), in particular, the conceptualisation of the key constructs: psychological contract breach, blame attribution, feelings of violation, coping behaviour, regret, dissatisfaction, desire for revenge and loyalty intentions. Furthermore, to gain a greater
understanding of participant profiles demographic questions were included to make sure that the collected data was representative.

5.5.1.2 Step two: types of questionnaire and method of administration

This study used a structured questionnaire with mainly closed-ended questions. According to Saunders et al. (2012), there are many advantages of using structured questionnaires including the ability to control the length of each questionnaire in comparison to unstructured questionnaires. In addition, all participants were subjected to the same stimulus and asked the questions in the same order consequently ensuring uniform responses.

The study used a self-administered online questionnaire. Self-administered questionnaires can be conducted via post, the internet or by a delivery and collection method. In general, self-administered questionnaires are a very productive and effective data collection method (Saunders et al., 2012). According to Gates and McDaniel (2010, p. 181), self-administered questionnaires are questionnaires completed by informants without the interviewer being present and are a good data collection method for researchers who need
access to a captive sample. Self-administered questionnaires are widely adopted by service business firms, such as hotels, cafes, restaurants and airlines to obtain consumer insight and feedback about services delivered. Therefore, self-administered questionnaires were considered to be the most appropriate method for data collection in this study due to their well-documented benefits.

Qualtrics software was used to design the questionnaire (see section 5.5.1.7). Questions were structured to evaluate the last time that consumers believed that their mobile phone provider had failed to fulfil its obligations to them. Consumers were asked to what extent they blamed their provider and how they felt about the experience. The questionnaire also examined the direct effects of violation on consumers’ affective states and behavioural intentions. In addition, the indirect effects of feelings of violation on consumers’ affective states and behavioural intentions via active, expressive support-seeking and denial coping strategies were tested.

An online research panel was used to collect the data from mobile phone users in the USA. The telecommunications industry increased its spending on advertising by 8.3% in January 2018 compared to January 2017 (Anonymous, 2018c). In the United States, the penetration rate of mobile phones is continually rising. It is predicted that 82.7% of adult Americans will own a mobile phone by 2020 (compared to the figure of 81.4% in 2017) (Anonymous, 2018d). Furthermore, more than 37% of Americans currently own smart phones (Entner, 2011). This thesis will focus on mobile phone users in the USA who have the shortest mobile phone replacement cycle: 21.7 months. According to Entner (2011), most Americans replaced their mobile device after one year and nine months in 2010. Also, in the United States, two-year and three-year contracts are the rule, which includes terms, conditions and early termination fees that are used to protect the operator’s investment (Entner, 2011). Hence, it is expected that American consumers are likely to frequently encounter failed obligation fulfilment based on explicit and implicit contractual agreements. Therefore, they are appropriate respondents for this thesis. Thus, the nature and the importance of the telecom service in the United States of America, and previous marketing research, both provide justification for the geographical location and contextual focus of this thesis.

5.5.1.3 Step three: individual question generation and content

Prior to measuring variables, it was essential to operationalise the variables so that they could be observed and measured. The core objective of this step was to obtain content validity. This step involved translating theoretical concepts to measurable variables. According to Churchill and Iacobucci (2002), single item measures suffered from a number of important
disadvantages. As a result, all constructs measured in this study were multi-item constructs. None of these indicators were developed by the researcher; instead they were extracted from relevant high quality literature (e.g. marketing, management and psychology). Unless otherwise noted, a five-point Likert-type scale was used ranging from 1 (strongly disagree) to 5 (strongly agree), or 1 (did not do this at all) to 5 (did this a lot). In addition, a five-point scale was used to reduce the possibility of biased comparison in favour of either subscale of psychological contract breach and coping behaviour (Cooper and Richardson, 1986). The original instruments used to measure constructs in investigation were adopted from published studies and the statements rephrased to ensure validity. The details of the complete questionnaire are given in Appendix B.

*Perceived psychological contract breach* was measured using global measures developed by Robinson and Morrison (2000). Sample statements used were “My mobile phone provider has broken many of its promises to me even though I have upheld my side of the deal” and “I have not received everything promised to me in exchange for my contribution”. This measure has been widely adopted and used in workplace research (e.g. Autry et al., 2007; Johnson and O'Leary Kelly, 2003; Suazo et al., 2005; Teague et al., 2012).

*Attribution of blame* was measured using Maxham and Netemeyer (2002) scale. The statements used to measure attribution of blame included “Overall, the firm was responsible for the problem” and “I completely blame my mobile phone provider for what happened”. (e.g. Grégoire et al., 2010; Joireman et al., 2013).

*Feelings of violation* were measured using a four-item scale adopted from Robinson and Morrison (2000). The measure assessed the general experience of feelings of violation following the perception of contract breach. One sample statement used was “I felt that my mobile phone provider has violated the relationship between us”. The scale has been used to measure feelings on violation in the organisational behaviour literature (e.g. Autry et al., 2007; Raja et al., 2004; Suazo et al., 2005).

*Coping behaviour* was measured using a shortened version of Duhachek’s (2005) three-dimensional coping scale that included 17 items pooled from all three dimensions and had face validity in the context of our study (see section 5.8.2). Duhachek’s (2005) scale was selected because it resulted in the first validated measure of coping applicable to the consumer context (Whiting, 2009). The scale was developed using consumers within the context of a stressful encounter with a service company. Furthermore, the model has been widely applied and validated in consumer behaviour literature to understand coping strategies (cf. Bose and Ye, 2015; Duhachek and Iacobucci, 2005; Gelbrich, 2010; Sengupta et al., 2015;
Duhachek (2005, p.41) intended to provide a “more diverse set of strategies than accounted for in consumer literature on coping”. Items that measured coping behaviour included active behaviour statements, such as “Did what had to be done”, “Analysed the problem before reacting” and “Tried to look on the bright side of things”; Expressive support-seeking statements, such as “Told others how I felt” and “Asked friends with similar experiences what they did”; and statements of denial, such as “Denied that the event happened”.

Regret is hypothesised as emotional outcome of psychological contract breach and violation and it was measured using Bonifield and Cole’s (2007) scale. Sample statements included “I feel sorry for choosing my mobile phone provider” and “I regret choosing my mobile phone provider”.

Dissatisfaction is hypothesised as cognitive outcome of psychological contract breach and violation and it was measured using a four-item scale adopted from Daunt and Harris (2012a). They adopted the dissatisfaction scale from Bloemer and Oderkerken-Schröder (2002) and Pizam and Ellis (1999). Example statements included “I am dissatisfied with the level of service that I received from my mobile phone provider” and “My expectations are not met”.

Desire for revenge is the third outcome of psychological contract breach and violation and it was assessed using a five-item scale adopted from an established five-item revenge scale that Grégoire and Fisher (2006) adapted to a service context. This scale was first developed by Wade (1989). Then the scale intensively adopted in workplace research (e.g. Aquino et al., 2001; 2006), social psychology (e.g. McCullough et al., 2001), and marketing (e.g. Grégoire et al., 2010; Joireman et al., 2013). Example statements were “I want to make my mobile phone provider get what it deserves” and “I want to punish my mobile phone provider in some way”.

Loyalty intentions are a behavioural outcome of psychological contract breach and violation and their measurement tool was adopted from Daunt and Harris (2012b). They adopted the measure from Zeithaml et al. (1996). The scale encompasses consumer’s word-of-mouth, switching and re-patronage intentions. A sample statement that measured loyalty intentions was “I intend to use this company more in the future”.

Demographics variable questions that related to information about the participants, mainly age, gender, level of education and total household income were also included in the questionnaire.
5.5.1.4 Step four: response form

The next step in the procedure was to choose the form of the responses to be derived from the questionnaire. To begin, to be eligible to participate in this study, consumers must have experienced a stressful situation, in which their mobile phone provider failed to fulfil an obligation that they were expecting. In respect to this, Section A mainly focused to help participants recall the situation. The section also included a one open-ended question, which is question (A4) that was used to ask the participants to explain what went wrong. This recall method was in the vein of the Critical Incident Technique (i.e. respondents were asked to focus in on and recall a particular incident). However, all the questions used for the other sections of the questionnaire were close-ended questions as they were considered easier for participants to answer and they saved time and reduced the cost involved in data processing (Oppenheim, 1992). Most importantly, they fit the methodological approach of this study. The questionnaire included dichotomous questions to which there could only be one of two answers (for example, yes/no), multiple choice questions and scale measurement questions. A five-point Likert-type scale was used to gauge all constructs except in the introductory and demographic sections.

5.5.1.5 Step five: question wording

Reluctance to answer a question or a misunderstanding of the content of questions due to grammar mistakes, technical wording, or phrasing problems can result in poor quality research. Therefore, Churchill and Iacobucci (2005) recommended that a researcher ensure that the wording used within each question was simple, unambiguous and relevant. Due to the sensitivity of the research topic, it was important to focus on question tense and wording. Therefore, the goal was to keep the questions as simple as possible, but also to test questions to ensure that they were not leading or double-barrelled (Malhotra and Birks, 2007).

According to Stathopoulou and Balabanis (2016), two types of participants can affect data quality: speeders (those who do not read the questions thoroughly) and cheaters (those who do not concentrate on the questions, which could be a reason for having incorrect answers). To manage these two types of participants, attention filter items were added in the questionnaire. In order to determine the speed limit and the number of attention filter questions required a pre-test was launched. As a result of the pre-test, the final questionnaire included two attention filter statements and an imposed speed limit in the final sample (see section 5.5.1.9). In short, each word in every sentence was scrutinised.
5.5.1.6 Step six: question sequence

This stage considered the sequence in which the questions were presented in line with the recommendations of Churchill and Iacobucci (2002). First, warm-up questions were used as an opening. Warm up questions should be simple and interesting. Second, classification details were added at the end of the questionnaire to elicit demographic information from participants to maximise the response rate. Third, difficult or sensitive questions were presented within the main body of the questionnaire. The dependent constructs of psychological contract breach and violation were placed at approximately the middle of the questionnaire (Barnett, 1998). Finally, it was important to ensure a logical arrangement. Questions were grouped into several blocks separated by issue to ensure a good flow and to make them easier to answer. Furthermore, items related to independent and dependent variables were placed in different sections to reduce bias since the participants were not able to see the independent and dependent variables simultaneously.

5.5.1.7 Step seven: physical characteristics of the questionnaire

The layout and physical characteristics of a questionnaire play a significant role in the successful data collection and encourage participants to take part efficiently and facilitate the completion of the questionnaire (Churchill and Iacobucci, 2002). As stated, Qualtrics software was used to design the questionnaire taking into account layout and design characteristics (i.e. the look and feel of the questionnaire). Also, each set of related questions were grouped together into a block, thus the questionnaire appeared to take very little time to complete and the participant was encouraged to fully complete the questionnaire (Churchill and Iacobucci, 2002). Each question was given a number to enhance participant cooperation and to facilitate the process of cleaning and analysing the data. In addition, the questionnaire was distributed with a cover letter to inform the participants why the research was being conducted, what it involved and what was required from them. This also ensured participant confidentiality and anonymity. Furthermore, the questionnaire was designed to be mobile friendly so that the participants could choose their preferred device on which to complete the questionnaire: PC, laptop, tablet or mobile phone.

5.5.1.8 Step eight: re-examination and revision

The stage of re-examination and revision is considered fundamental. It proved to be very important for this study, especially when the sample population contained participants from different demographic backgrounds that expressed different levels of understanding towards the question content and wording (Churchill and Iacobucci, 2002). A total of thirteen
people were asked to review the questionnaire and provide feedback; two academics from Cardiff Business School, two academics from College of Business at Jeddah University in Saudi Arabia, four PhD students at Cardiff Business School and five non-academic friends. They were invited to raise queries if there was any confusion or uncertainty related to the questions and/or statements, or to simply to ask questions about the project. With this feedback, necessary changes were made to the questionnaire, where feasible. For example, it was recommended that the approximate time the questionnaire would take to complete be shown on the cover page, a recommendation that was subsequently included. If the same participants complete a questionnaire for a second time this might affect reliability and validity, as they have already viewed and answered the questions, therefore different participants were included in the pre-testing and final questionnaire sample (Saunders et al., 2016).

5.5.1.9 Step nine: questionnaire pre-testing and refinement

As mentioned previously in section 5.5, this study used Qualtrics online research panel for data collection. Hence, this service was used in the pre-testing phase as well. A total number of 273 complete responses were attained from the online agency team to pilot test the questionnaire. The first strategy used was to test the quality of the data to review how people responded to the questionnaire and to consider whether they understood the research aims by providing the expected or hoped-for answers. Subsequently, major descriptive analysis, including mean, median, skewness and kurtosis was applied. Exploratory factor analysis (EFA), confirmatory factor analysis (CFA) and reliability tests were also applied using Cronbach’s alpha score and corrected item-total correlation. Furthermore, to discover whether this small sample fitted with the broader theory results, correlation, linear regression and SEM were applied at this stage. Based on the results, some questions in section A were rephrased using a different tense so that each question clearly urged participants to provide their answers whilst thinking about the problem they had encountered. In addition, questions that showed a factor score of lower than (.60) were reworded as simpler and easier statements. Tables 4 and 5 show the amended questions in section A and the reworded questions:
Table 4: Amended questions in section A

<table>
<thead>
<tr>
<th>Question</th>
<th>Original question</th>
<th>Reworded to</th>
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<tr>
<td>A6</td>
<td>How long did it take to solve the problem?</td>
<td>Change choice (1) to start with: <strong>one day</strong></td>
</tr>
<tr>
<td>A8</td>
<td>Who is your cell phone provider?</td>
<td>Who was your cell phone provider at the time of the problem?</td>
</tr>
<tr>
<td>A9</td>
<td>How long have you been with this provider?</td>
<td>How long have you been/were you with this provider?</td>
</tr>
<tr>
<td>A10</td>
<td>Are you using a:</td>
<td>At the time of the problem, were you using a:</td>
</tr>
</tbody>
</table>

Table 5: Reworded questions

<table>
<thead>
<tr>
<th>Item</th>
<th>Original item</th>
<th>Reworded to</th>
</tr>
</thead>
<tbody>
<tr>
<td>BII4</td>
<td>I blame myself for what happened (Reverse coded)</td>
<td>My cell phone provider was at fault.</td>
</tr>
<tr>
<td>D10</td>
<td>Relied on others to make me feel better. (Reverse coded)</td>
<td>Talked to others to feel better</td>
</tr>
<tr>
<td>E4</td>
<td>I am very satisfied with my cell phone provider. (Reverse coded)</td>
<td>I am very dissatisfied with the cell phone provider.</td>
</tr>
<tr>
<td>E9</td>
<td>I made a good decision in my choice of my cell phone provider. (Reverse coded)</td>
<td>I made a wrong decision in my choice of the cell phone provider.</td>
</tr>
<tr>
<td>E18</td>
<td>I intend to use this mobile phone company less in the future. (Reverse coded)</td>
<td>I am loyal to the cell phone provider.</td>
</tr>
</tbody>
</table>

5.5.2 Data collection procedure

Gates and McDaniel (2010, p.44) suggested that "research suppliers must avoid using biased samples, misusing statistics, ignoring relevant data and creating a research design with the goal of supporting a predetermined objective". The use of online data collection has become more popular due to technological advancements and the high penetration of the internet (Gates and McDaniel, 2015, p.157). Online data collection tools allow easier and faster access to larger data samples or specific participant groups. Research companies have responded to the market need of facilitating online research by designing online research panels to target specific researchers and participants (Gates and McDaniel, 2015, p.149).

Göritz et al. (2000) described an online research panel as a pool of people who signed up to and agreed to participate in online studies. The use of online research panels has
become popular in the last few years in both the academic and practical spheres (Göritz et al., 2000). Like other data collection methods and strategies, online panels have pros and cons, which are summarised in Table 6. In the case of this study, an online panel was used to reach a diverse sample of real consumers, with varied characteristics to obtain rapid, more accurate and more reliable and secure data.

Table 6: Pros and cons of online research panels for academic research

<table>
<thead>
<tr>
<th>Pros</th>
<th>Cons</th>
</tr>
</thead>
<tbody>
<tr>
<td>Internet access has now reached 88.5% of total households in the USA (Anonyms, 2016b) so more participants can now be reached.</td>
<td>No internet access for certain populations.</td>
</tr>
<tr>
<td>Online research panels can reach specialised groups or probability samples (i.e. hard-to-reach groups).</td>
<td></td>
</tr>
<tr>
<td>Online research panels save time. They collect a large sample in a short time period.</td>
<td></td>
</tr>
<tr>
<td>Understand the cost of data collection in advance (sample size and price per complete response).</td>
<td></td>
</tr>
<tr>
<td>Able to collect longitudinal data.</td>
<td></td>
</tr>
<tr>
<td>Fewer ethical problems; participants in panels have already accepted to take part in research studies.</td>
<td></td>
</tr>
<tr>
<td>Online panels cost less than conducting telephone or face-to-face interviews.</td>
<td></td>
</tr>
<tr>
<td>No face to face interaction with participants, which results in an almost minimal social desirability bias.</td>
<td></td>
</tr>
<tr>
<td>1) Online data quality and validity are ensured through an evolving set of guidelines and standards by the agency and professional associations (see the full procedure below)</td>
<td>Some panellists might complete the survey more than once using two different emails or IP addresses.</td>
</tr>
<tr>
<td>2) Assigned expert project managers (PMs) who help with every aspect of project quickly.</td>
<td></td>
</tr>
<tr>
<td>3) Quality and validity issues are shared with the researcher; 10% is sent to the researcher to check the quality of data before proceeding with collecting the remaining 90%.</td>
<td></td>
</tr>
</tbody>
</table>

1 Source: A reflection of this research experience; (Baker et al., 2010, p.3; Dennis 2001, p.4; Göritz, 2004, p.5; Göritz, 2007).
Dennis (2001) argued that psychological mechanisms play a role in these scenarios. For instance, completion of a survey twice increases response bias and may mislead the research findings and results (Dennis, 2001). It is important that a trusting relationship is developed and maintained between a researcher and an online agency whilst working on a project. In the case of this study, an expert project manager was assigned to be the point of communication. They facilitated the data collection from start to finish and helped alleviate the four major concerns associated with every project – data quality and validity, sample members, time, worry and risk. Also, the project manager oversaw project integration, ensured quota fulfilment and monitored redirects. This practice was effective and professional in terms of receiving regular updates.

Data was collected in February, 2017. First, the online agency requested the following from the researcher - target audience description, desired sample size, expected survey length and all other screening criteria. After project expectations were clarified with the researcher, the agency gave an estimate of the timeline for desired deliverables. Participants gained access to the survey by invitation only. Potential participants were sent an email invitation by the research agency informing them that the survey was for research purposes only, expected duration to complete the survey and what incentives were available. Participants were able to disconnect from this service at any time. To avoid the self-selection bias, the survey invitation did not include specific details about the contents of the survey. The agency randomly selected participants for the survey where the participants were highly likely to qualify. Each sample from the panel base was proportioned to general population statistics and then randomised before deployment. The agency worked to guarantee that the population surveyed met the requirements of the specific survey as defined by the researcher’s needs. The online agency maintained the highest quality by using Grand Mean certified sample partners.

To exclude duplication and ensure validity, the agency checked every IP address and ensured that there was no duplication from the pre-test data. To provide data quality and validity, the agency replaced participants who straight-lined through surveys or finished in less than a third of the average survey completion time. In addition, the agency relied on each of its partners and panel providers to confirm participant identity. Each panel had its own
confirmation procedures including, but not limited to TrueSample, Verity, SmartSample, USPS verification and digital fingerprinting. The agency verified participants’ addresses, demographic information and email addresses. The agency sent the researcher 10% of the completed responses to examine the level of missing data, time of completion and data quality to highlight any issues in the questionnaire that could be fixed prior to collecting the final 90% of the data. The pre-testing phase showed that the survey length is 15 minutes and; therefore, the agent added a speeding check that automatically terminated those who are not responding thoughtfully, particularly, if completed in less than 7.5 minutes. After the agency received confirmation from the researcher to proceed, the survey was released as a final phase to complete the data collection process. A total number of 779 out of 1430 questionnaires were returned completed and with no missing values (see section 6.2) and all were fully completed. The agency then provided the researcher with a full report of the results on several files: pdf, SPSS and Excel (see chapter 6, section 6.2).

5.6 Research sample procedure (online research panel)

Before collecting data, it is necessary to have a sampling plan. According to Gates and McDaniel (2010, p.416) there are seven steps to designing a productive sampling plan. Step one - define the population of interest. In this study the population was consumers of mobile phone providers in the USA. The mobile phone industry was selected because the telecommunication sector is one of the largest service industries in the world with more than 250 million mobile phone users (Anonyms, 2016a). In addition, the relationship between mobile phone providers and users is a contractual one based on terms and conditions. This was in line with Churchill’s (1995) argument that the population and the research inquiry should be relevant. Moreover, for reasons of ethics and specificity, all participants resided in the USA and their mobile phone provider had failed to fulfil an obligation that they were expecting. Also, all participants were over 18 years old.

Step two - choose a data collection method (Gates and McDaniel, 2010). A self-administered online questionnaire was the tool used for data collection (as explained in section 5.4). Step three - identify a sampling frame (Gates and McDaniel, 2010). Participants were required only to complete the questionnaire if their mobile phone provider had failed to fulfil an obligation that they were expecting within the past 12 months from the date of completing the survey. However, to mitigate the problem of the timeframe participants were asked to indicate when the problem occurred and additional questions, both open-ended and closed-ended, under Section A were provided to help participants recall the incident (see section A, Appendix B). In addition, the participants were asked to think about their last negative
experience for a number of reasons. First, the last experience would be easier to recall. Second, when asking people to think about negative situations usually they recall an extremely negative experience, so their last experience might not be the worst experience they had suffered with their mobile phone provider. Thus, the concept of the last experience played a role in controlling the sample bias. Furthermore, asking participants to think about their last negative experience in the past 12 months provided a significantly long time frame as this study was only interested in analysing recent negative experiences.

Step four – choose a sampling method (Gates and McDaniel, 2010). A judgment sampling technique was used to target the required population (see section 5.6.1) since the selected criteria for participants were based on the researcher’s judgment about what constitutes a representative sample (i.e. they must have experienced a breach within 12 months, live in the USA and 18+ years old). Step five - determine sample size (Gates and McDaniel, 2010). The size of the study was 779 completed responses. Sample size and decision will be discussed further in chapter 6. Step six - develop operational procedures for selecting sample elements (Gates and McDaniel, 2010) and step seven - execute the operational plan (Gates and McDaniel, 2010).

5.6.1 Sampling method

Selection of a sampling method relies on the objectives of the research study, funds available, time limitations and the nature of the research problem. Generally, sampling methods can be one of two types. Probability samples are those where every element of the target sample has “a known nonzero likelihood of selection” (Saunders et al., 2016, p.279). Nonprobability samples are those where population groups are chosen in a non-random way (Gates and McDaniel, 2010, p.423). Both probability and nonprobability samples have advantages and disadvantages. However, quota sampling and convenience sampling are the most commonly used methods in marketing research (Gates and McDaniel, 2015). According to Gates and McDaniel (2010, p.435) convenience samples are “nonprobability samples based on using people who are easily accessible”. Although one major disadvantage of nonprobability samples is their incapability to gauge sampling error there is a debate that suggests nonprobability samples are growing rapidly (Gates and McDaniel, 2010, p.435).

According to Gates and McDaniel (2015, p.325), users of nonprobability samples must carefully assess the methodology used to generate the nonprobability sample to ensure that the methodology employed will generate representative data from the target population. Quota samples are nonprobability samples in which “quotas, based on demographic or classification factors selected by the researcher, are established for population subgroups” (Gates and
McDaniel, 2015, p.326). With quota samples, the pre-specified quotas have a major impact on the survey findings. There are two main differences between quota samples and other types of nonprobability samples. First, participants for a quota sample are not selected randomly. Second, with quota samples, the sample is not selected based on the existence of certain correlations between the factor and the behaviour of interest. To clarify, the classification factors of interest are determined based on the researcher’s judgment (Gates and McDaniel, 2015, p.326). Quota samples have some advantages and disadvantages. One of the main advantages that they minimize selection bias. However, one of the limitations of quota sampling is that the results of the study are dependent on subjective decisions. As a result, generalisability is an issue when using quota sampling (Shiu et al., 2009, p.482).

This study used different criteria so that the respondent become representative and eligible to complete the questionnaire (see sections 5.5.1.4 and 5.6). In respect to this, judgement sample was used to collect the most appropriate sample for this study. Judgment sample defined as “Nonprobability samples in which the selection criteria are based on the researcher’s judgment about representativeness of the population under study” (Gates and McDaniel, 2015, p.326). Section F included a variety of demographic questions used to review participant characteristics to confirm that those who participated matched the general characteristics of the sampling population. This section was also used for analysis purposes (see chapter 6 section 6.2).

5.7 Data analysis

Two statistical tools - descriptive and inferential analysis - were employed in this study to evaluate different relationships. Hence, instead of running several multiple regression analyses, SEM was used. SEM is a multi-variate technique that combines aspects of factor analysis and multiple regressions to enable a researcher to simultaneously test a series of interrelated dependence relationships among measured variables and latent constructs, as well as between several latent constructs to test the conceptual framework of a study (Aiken and West, 1991; Conway et al., 2016). The benefits of being able to run the model all at is testing a structural relationships by examining two issues a) the overall and relative model fit as a measure to accept or reject the suggested model and b) structural parameter estimates, represented by a one-headed arrows on a path diagram (Hair et al., 2014, p.642). Different software packages analyse quantitative data, some of which are popular and more user friendly, such as SPSS, SmartPLS and AMOS. Both SPSS and AMOS 23 software packages were used for data analysis in this study. Factor analysis was employed to find out whether the psychological contract measure and other measures were valid in the context of the study. SEM was then used to examine the conceptualised relationships in the study.
5.8 Scheme for analysis

The use of well-developed scales that have been validated and frequently used in high ranked journal papers will decrease potential reliability and validity issues. Nevertheless, the reliability and validity of developed scales are not always guaranteed as new research might be conducted in a different setting and context. Therefore, experts (see Anderson and Gerbing, 1988; Hair et al., 2014) have suggested two steps to ensure reliability and validity. The first step is to perform exploratory factor analysis (EFA) as well as reliability analysis via the SPSS statistical software package. The second step is to investigate the measurement model through SEM. Thus, in this study there were various stages of analysis, as outlined in the following section.

5.8.1 Descriptive analysis

Two main techniques were adopted to accurately understand the questionnaire data. First, a description of the sample was provided in order to understand ‘who’ participated in the survey. Then preliminary analysis was implemented, which provided statistical information with regards to normality and data centring that included the standard deviation, mean, skewness and kurtosis of each item. The purpose of employing this type of analysis was to summarise the main features of the investigative data prior to completing inference testing. The results of the descriptive information analysis will be presented in chapter 6.

5.8.2 Validity, unidimensionality and reliability

Garver and Mentzer (1999) and Hair et al. (2014) recommended that prior to modelling four steps should be followed in order to validate the measurement scales employed. These consist of assessing the content validity, unidimensionality, reliability and construct validity of each scale. Each step is explained in detail below.

5.8.2.1 Content validity

The first step was to assess the content validity. According to Churchill and Iacobucci (2005, p.293), content validity refers to "accuracy with which the domain of the characteristic is captured by the measure". Further Hair et al. (2006, p.136) stated that the purpose of these steps was to "ensure that the selection of scale items extended past just empirical issues to also include theoretical and practical considerations". In the context of this study, the theoretical variables and proposed measurement scales were pre-tested (see section 5.5.1.9). The pre-testing results identified the questions and items that had to be reworded which...
helped to raise the content quality of the final version of the questionnaire used for big data collection stage.

5.8.2.2 Unidimensionality

Hair et al. (2014) suggested that the first step of the statistical process of the validation of measurement scales, once the content validity had been achieved, was assessment of the constructs within the measurement model for unidimensionality. According to Hair et al. (1998), no single item was enough to reflect a construct completely and they recommended that each scale investigated should be determined using multiple-item scales. Moreover, according to Hattie (1985, p.49), unidimensionality was "the most critical and basic assumption of measurement theory". Factor analysis is often employed to make an empirical evaluation of the dimensionality of a number of several items (see Gerbing and Anderson, 1988). This study performed item total correlations, Exploratory Factor Analysis using SPSS software (principle component –varimax rotation) and Confirmatory Factor Analysis using AMOS 23 software to assess unidimensionality (see chapter 6, section 6.6).

5.8.2.3 Reliability

Reliability is the measurement of the consistency of a measure (Bryman and Bell, 2007). Generally, reliability is utilised to assess if measures produce consistent results under different contexts (Peter, 1979, p.6). Several general classes of reliability have been introduced (Parasuraman et al., 2004, p.295-296). Churchill and Iacobucci (2005, p.295) introduced reliability as an "index of consistency". In other words, according to Hair et al. (2014) reliability measures evaluate the degree of consistency between items that reflect a variable. Reliability examines the consistency, and not accuracy, of a scale. Therefore, only if the results of unidimensionality are significant, can the reliability of a measure can be assessed (Garver and Mentzer, 1999).

There are many methods used to assess reliability. Traditional methods include test-retest and the split-half methods. The test-retest method refers to respondents being administered identical sets of scales at two different points in time. On the other hand, the split-half method denotes a technique wherein the items of a scale are divided into two halves and subsequently correlated (Malhotra and Birks, 2007). However, the most rigorous and frequently used method of assessing the reliability of a scale is internal consistency reliability. Thus, this study used the calculations of Cronbach's (1951) alpha coefficient, composite reliability, item-total correlation and the average variance extracted of each measure (AVE). According to Saunders et al. (2012, p.192) reliability is essential to determine "whether your
data collection techniques and analytic procedures would produce consistent findings if they were repeated on another occasion or if they were replicated by a different researcher. According to May (2011, p.97) a high reliability score should enable a researcher to reach the same findings when employing the same measurement scales on different occasions.

A measure of construct reliability (Cronbach’s alpha) was applied to examine the reliability of the set of items of each variable. Nunnally (1978) provided the guidelines for basic research (Cronbach’s alpha coefficient ≥ 0.7). As a rule, alphas of (.70) or greater reflect desirable reliability. Therefore, scales achieving an alpha coefficient of above (.70) were considered reliable (Anderson and Gerbing, 1988; Nunnally, 1978). High construct reliability indicates that all of the items are consistent, have the same latent construct and that internal consistency exists (Hair et al., 2014). To complete the measure of construct reliability, the average variance extracted (AVE) measure (Fornell and Larcker, 1981) should be employed. According to Garver and Mentzer, (1999), this is to check the total amount of variance in the indicators, accounted for by the latent variable. When the variance due to measurement error exceeds the variance of the latent construct, a score of (.50) would emerge and there would be doubt about the validity of the construct (Hair et al., 2014). Therefore, a minimum of (.50) is generally advocated (see Bagozzi et al., 1991; Fornell and Larcker, 1981). This study employed alpha reliability and AVE to assess construct reliability (see chapter 6, section 6.6.3).

5.8.2.4 Construct validity

Garver and Mentzer (1999, p.34) stated that "construct validity examines the degree to which a scale measures what it intends to measure". This can be accomplished by applying the four sub-dimensional forms of validity test introduced by Hair et al. (2014). The first sub-dimension is content validity (see above section 5.5.1.3 for information) which should be done prior and separate to any theoretical testing. The second sub-dimension considers convergent validity. Garver and Mentzer (1999, p.34) referred to convergent validity as the "extent to which the latent variable correlates to items designed to measure that same latent variable". In the current study, items that were not deemed significant in EFA and construct reliability tests were removed from further analysis. Once these tests were completed, the retained items for constructs were subjected to CFA.

At the CFA phase, the data was examined in terms of convergent validity by determining whether each parameter estimate (standardised loading) on its underlying construct was statistically significant (Anderson, 1987). This revealed whether the items in a variable load were a single construct or not. Following Hair et al.’s (2014) suggestion,
standardised loadings should exceed a score of (.50). Also, t-values should be greater than (± 1.96) at the 0.05 per cent level of statistical significance or (±2.58) at the 0.01 per cent level of statistical significance (Anderson and Gerbing, 1988). CFA will be presented in chapter 6 to provide evidence of convergent validity for the scales used in this study.

The third sub-dimension of construct validity is discriminant validity. Hair et al. (2014, p.601) stated that discriminant validity was "the extent to which a construct was truly distinct from other constructs". In this study, discriminate validly was completed by examining the chi square differences between all possible pair-wise constructs (see Bollen, 1989). In addition, the square root of the AVE was calculated for each construct. To successfully demonstrate discriminant validity, the Variance Extracted estimates must be greater than the correlation of that factor's measure with all measures of other constructs within the model (i.e. the square root of the AVE versus the correlations) (Fornell and Larcker, 1981). Discriminate validity examination shows how each construct is discriminated from another. The results of discriminant validity for this study will be described in chapter six.

The final sub-dimension of construct validity highlighted by Hair et al. (2014) was nomological validity. Nomological validity can be assessed by examining the correlation matrix in order to explore to what extent the measurement indices make accurate predictions of other concepts in the theoretical framework (Hair et al., 2014). Table 7 illustrates the criteria of measurement model evaluation. Finally, when all of the above examinations were completed (descriptive, validity, reliability and unidimensionality analyses) SEM was executed to support the proposed research questions of this study.

5.9 Ethical consideration

According to Saunders et al. (2012, p.191) ethical consideration is the most sensitive phase when designing a research plan. Every study is subject to ethical and confidentiality issues. These concern researchers as they want participants to feel comfortable whilst undertaking the survey. In this study, any participant under the age of 18 was excluded from taking part. Also, criteria under Section F were used to choose the sample and conduct the analysis.
Table 7: Measurement model evaluation (Hair et al., 2014, p.605)

<table>
<thead>
<tr>
<th>Reflective measurement model evaluation</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Internal consistency reliability</strong></td>
<td>Cronbach’s alpha &amp; composite reliability ≥ 0.70 (0.60 is considered acceptable)</td>
</tr>
<tr>
<td><strong>Convergent validity</strong></td>
<td>AVE ≥ 0.50</td>
</tr>
<tr>
<td><strong>Discriminant validity</strong></td>
<td>The variance extracted (square root of AVE) must be greater than the correlation of that factor’s measure with all measures of other constructs within the model.</td>
</tr>
</tbody>
</table>

The survey began with a welcome page that introduced the study and described the main details of the research process to participants in advance, so that they were informed about what to expect. The participants were informed that they had the option to decide whether to take part in the study or not. However, if they did, they were required to give consent by selecting YES at the end of the cover page. In the bank of questions that measured desire for revenge (see Appendix B, Section E, questions 10-14), no participant was asked to reveal any specific unethical or illegal activities.

The participants were informed that they were free to withdraw from the questionnaire at any time and without giving justification. In addition, they were informed that data would be securely stored and that data storage was password protected and stored in accordance with the Data Protection Act (1998). Only the researcher and supervisors would have access to the data. The anonymity and confidentiality of survey participants was always preserved. Participants were not required to provide their name or any contact details. Finally, the contact details of the researcher and supervisors were available so that the participants could raise any questions or follow up with the project. They were also made aware that the data would be analysed using statistical software packages and that the analysed findings may be published. The required ethical approval form designed by Cardiff Business School was submitted and approved before commencing the data collection phase (see Appendix A).
5.10 Summary

This chapter has provided details on the research methodology applied to meet the research objectives and answer the research questions and hypotheses. This study followed the business research philosophy and was based on a philosophical position of positivism. It defined the purpose of this research as a descriptive study of associated relationships. It used a mono-method quantitative research method of a cross-sectional online survey. The use of an online research survey facilitated the examination of research questions and hypotheses, as well as an explanation of the proposed conceptual frameworks. The chapter illustrated how the questionnaire was generated and how data was collected. The next chapter will provide descriptive analysis of the results and an evaluation of the measurement model.
Chapter Six

Descriptive Analysis and Evaluation of the Measurement Model
6.1 Introduction

This chapter will summarise the participants’ demographic profiles and the constructs investigated in this study. It will begin with an explanation of the demographic testing employed in this study to examine the mean, standard deviation, skewness, and kurtosis of the sample’s characteristics: gender, age, education level, income, ethnicity and descriptive statistics. This will be followed by an analysis of the validity tests used.

6.2 Sample demographic profile

The pre-analysis phase of any research study seeks to obtain an initial understanding of the usable data collected by examining and summarising the data prior to SEM, which is applied at the next stage of the data analysis process. The participants of this research study were recruited by the research panel. The criteria were for a diverse sample that represented the characteristics of the entire population of the USA. The data collection process was conducted over a one month period in 2017. During the soft launch, two hundred invitations were sent and 61 fully completed responses were returned.

The main phase included 1430 invitations. A total of 651 questionnaires were terminated due to them not meeting the research criteria (e.g. not living in the USA) or providing inappropriate responses (e.g. low quality answers). Thus, in total, 779 completed questionnaires were utilised (all passed the research panel quality assurance requirements of no missing data, a completion time of more than 7.5 minutes and a unique IP address), resulting in a response rate of 54.47%. Baruch and Holtom (2008) reviewed the response rate of 17 leading academic journals. They found the average response rate was 52.7%. Table 8 presents a description of the reasons for screened out responses. There are two main reasons to check response rates. The first reason is that a higher response rate represents a larger sample of the population, which leads to more reliable conclusions (Rogelberg and Stanton, 2007), as well as robust statistical results. Second, a low response rate could affect the perceived credibility of the collected data. The online agency offered a period of one week in order to examine the data in terms of quality issues, such as missing values, uncompleted questionnaires, unacceptable sampling. Also, all questionnaires were checked for a set response bias and 50 were rejected due to completion of the same or very similar answers in the scale item and missing value questions.
Table 8: Fields and numbers of screened out participants:

<table>
<thead>
<tr>
<th>Filed</th>
<th>Number of removed participants</th>
</tr>
</thead>
<tbody>
<tr>
<td>Consent</td>
<td>316</td>
</tr>
<tr>
<td>Not living in USA</td>
<td>8</td>
</tr>
<tr>
<td>No bad experience at all</td>
<td>151</td>
</tr>
<tr>
<td>Had a negative experience over 12 months ago</td>
<td>125</td>
</tr>
<tr>
<td>Speeder</td>
<td>1</td>
</tr>
<tr>
<td>(completed the survey in less than 7.5 minutes)</td>
<td></td>
</tr>
<tr>
<td>Quality &amp; missing data</td>
<td>50</td>
</tr>
<tr>
<td>Total</td>
<td>651</td>
</tr>
</tbody>
</table>

In total, six questions were used to gauge participants’ demographic profiles. More specifically, information regarding age, gender, level of education, household income, ethnicity and state of living were collected. A complete description of the sample’s socio-demographic profile is presented in Table 9.

Table 9: Sample demographic profile (n=779):

<table>
<thead>
<tr>
<th>Age</th>
<th>n</th>
<th>%</th>
</tr>
</thead>
<tbody>
<tr>
<td>18-24</td>
<td>66</td>
<td>8.5</td>
</tr>
<tr>
<td>25-34</td>
<td>233</td>
<td>29.9</td>
</tr>
<tr>
<td>35-44</td>
<td>171</td>
<td>22.0</td>
</tr>
<tr>
<td>45-54</td>
<td>153</td>
<td>19.6</td>
</tr>
<tr>
<td>55-64</td>
<td>103</td>
<td>13.2</td>
</tr>
<tr>
<td>65 or older</td>
<td>52</td>
<td>6.7</td>
</tr>
<tr>
<td>Prefer not to say</td>
<td>1</td>
<td>0.1</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Gender</th>
<th>n</th>
<th>%</th>
</tr>
</thead>
<tbody>
<tr>
<td>Female</td>
<td>544</td>
<td>69.8</td>
</tr>
<tr>
<td>Male</td>
<td>235</td>
<td>30.2</td>
</tr>
<tr>
<td>Prefer not to say</td>
<td>0</td>
<td>0</td>
</tr>
</tbody>
</table>
The demographic data indicated that almost half of the sample was between 25-44 years old. 29.9% were aged between 25 to 34 years old, while 22% were aged between 35 to 44 years old. There were more female than male participants, with female participants accounting for 69.8% of the sample. Regarding educational level, the majority of participants (51.2%) were graduates, while 20.9% were postgraduates. There was a nice diversity of income levels; however, the highest percentage (24.1%) of participants had a household income of $50,000 to $74,999. In addition, the sample showed a diverse mix of ethnicities.
6.3 Descriptive analysis

This section will illustrate the descriptive analysis of each item used in the study. Descriptive statistics provide a summary of the mean and standard deviation values, along with a measurement of normality (skewness and kurtosis). Table 10 summarises the descriptive statistics of the individual items analysed in this study. The skewness, kurtosis and outliers values will be discussed in section 6.4. In addition, Appendix C shows the descriptive results for relevant question from Section A of the survey. All items were measured on five-point Likert scales in which 1 denoted strongly disagree and 5 denoted strongly agree except in the coping scale where 1 denoted didn’t do this at all and 5 denoted did this a lot. Table 10 shows that consumers exhibited a high mean (above scale midpoint) for the five perceived psychological contract items as well as for the four feelings of violation. All the standard deviations were over one. The average scores of all psychological contract and feelings of violation items were above 3. This suggests that consumers generally perceived a high level of breach and violation.

This study predicted that attribution of blame to an external provider (i.e. the service provider) was associated with consumer feelings of violation. Table 10 shows that the mean scores of the attribution of blame scale were 3.92 and above, and the standard deviations of each item was over one. Furthermore, this investigation used four constructs to measure the four outcomes of feelings of violation: regret, dissatisfaction, desire for revenge and loyalty intentions. All respondents have experienced service failure; therefore, as expected dissatisfaction reported the highest mean score (above 3). However, the mean score of desire for revenge was less than 3. In addition, the loyalty score (the reversed scale) was about 3. All items exhibited standard deviations of above 1.2, which reflects considerable variations in participant responses to these constructs.

In reviewing the mean and standard deviations across the three dimensions of coping strategies, the data captured a wide range of responses. All standard deviations were over one, the lowest standard deviation was 1.105 and the highest was 1.333 and the mean scores ranged from 1.9 to 3.68, showing substantial variation in the responses captured for each of the coping indicators.
Table 10: Descriptive statistics of questionnaire items

<table>
<thead>
<tr>
<th>10a: Perceived psychological contract breach</th>
<th>Dimension</th>
<th>Item</th>
<th>Mean</th>
<th>SD</th>
<th>Skewness</th>
<th>Kurtosis</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td>1. Almost all the promises made by my mobile phone provider have not been kept so far.</td>
<td>3.04</td>
<td>1.247</td>
<td>-.018</td>
<td>-1.013</td>
</tr>
<tr>
<td>Perceived contract breach (Section BI)</td>
<td></td>
<td>2. I feel that my mobile phone provider has not come through in fulfilling the promises made to me.</td>
<td>3.46</td>
<td>1.240</td>
<td>-.539</td>
<td>-.720</td>
</tr>
<tr>
<td></td>
<td></td>
<td>3. So far my mobile phone provider has not done an excellent job of fulfilling its promises to me.</td>
<td>3.48</td>
<td>1.214</td>
<td>-.514</td>
<td>-1.013</td>
</tr>
<tr>
<td></td>
<td></td>
<td>4. I have not received everything promised to me in exchange for my contributions.</td>
<td>3.43</td>
<td>1.236</td>
<td>-.499</td>
<td>-.720</td>
</tr>
<tr>
<td></td>
<td></td>
<td>5. My mobile phone provider has broken many of its promises to me even though I have upheld my side of the deal.</td>
<td>3.12</td>
<td>1.303</td>
<td>-.152</td>
<td>-1.013</td>
</tr>
<tr>
<td></td>
<td></td>
<td><strong>10b: Attribution of blame</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td><strong>Section BII</strong></td>
<td><strong>Item</strong></td>
<td><strong>Mean</strong></td>
<td><strong>SD</strong></td>
<td><strong>Skewness</strong></td>
</tr>
<tr>
<td></td>
<td></td>
<td>1. Overall, my mobile phone provider was responsible for the problem.</td>
<td>4.05</td>
<td>1.010</td>
<td>-.019</td>
<td>.655</td>
</tr>
<tr>
<td></td>
<td></td>
<td>2. The service failure episode was my mobile phone provider’s fault.</td>
<td>3.99</td>
<td>1.090</td>
<td>-.996</td>
<td>.313</td>
</tr>
<tr>
<td></td>
<td></td>
<td>3. I completely blame my mobile phone provider for what happened.</td>
<td>3.92</td>
<td>1.120</td>
<td>-.870</td>
<td>-.007</td>
</tr>
<tr>
<td></td>
<td></td>
<td>4. My mobile phone provider was at fault.</td>
<td>4.02</td>
<td>1.071</td>
<td>-1.025</td>
<td>.432</td>
</tr>
<tr>
<td></td>
<td></td>
<td><strong>10c: Feelings of violation</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td><strong>Section C</strong></td>
<td><strong>Item</strong></td>
<td><strong>Mean</strong></td>
<td><strong>SD</strong></td>
<td><strong>Skewness</strong></td>
</tr>
<tr>
<td></td>
<td></td>
<td>1. I felt a great deal of anger towards my mobile phone provider.</td>
<td>3.49</td>
<td>1.264</td>
<td>-.538</td>
<td>-.704</td>
</tr>
<tr>
<td></td>
<td></td>
<td>2. I felt betrayed by my mobile phone provider.</td>
<td>3.50</td>
<td>1.300</td>
<td>-.524</td>
<td>-.778</td>
</tr>
<tr>
<td></td>
<td></td>
<td>3. I felt that my mobile phone provider had broken the relationship between us.</td>
<td>3.38</td>
<td>1.279</td>
<td>-.407</td>
<td>-.849</td>
</tr>
<tr>
<td></td>
<td></td>
<td>4. I felt extremely frustrated by how I was treated by my mobile phone provider.</td>
<td>3.73</td>
<td>1.276</td>
<td>-.823</td>
<td>-.368</td>
</tr>
</tbody>
</table>
### 10d: Coping behaviour

<table>
<thead>
<tr>
<th>Dimension</th>
<th>Item</th>
<th>Mean</th>
<th>SD</th>
<th>Skewness</th>
<th>Kurtosis</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Active coping</strong></td>
<td>1. Concentrated on ways the problem could be solved.</td>
<td>3.56</td>
<td>1.154</td>
<td>-.471</td>
<td>-.404</td>
</tr>
<tr>
<td></td>
<td>2. Tried to make a plan of action.</td>
<td>3.52</td>
<td>1.162</td>
<td>-.500</td>
<td>-.484</td>
</tr>
<tr>
<td></td>
<td>3. Generated potential solutions.</td>
<td>3.47</td>
<td>1.155</td>
<td>-.425</td>
<td>-.539</td>
</tr>
<tr>
<td></td>
<td>4. Thought about the best way to handle things.</td>
<td>3.68</td>
<td>1.136</td>
<td>-.629</td>
<td>-.263</td>
</tr>
<tr>
<td></td>
<td>5. Concentrated my efforts on doing something about it.</td>
<td>3.65</td>
<td>1.105</td>
<td>-.578</td>
<td>-.259</td>
</tr>
<tr>
<td></td>
<td>6. Did what had to be done.</td>
<td>3.60</td>
<td>1.211</td>
<td>-.539</td>
<td>-.554</td>
</tr>
<tr>
<td></td>
<td>7. Followed a plan to make things better and more satisfying.</td>
<td>3.46</td>
<td>1.177</td>
<td>-.439</td>
<td>-.565</td>
</tr>
<tr>
<td><strong>Expressive support seeking coping</strong></td>
<td>8. Sought out others for support.</td>
<td>3.11</td>
<td>1.265</td>
<td>-.198</td>
<td>-.911</td>
</tr>
<tr>
<td></td>
<td>9. Told others how I felt.</td>
<td>3.53</td>
<td>1.266</td>
<td>-.570</td>
<td>-.614</td>
</tr>
<tr>
<td></td>
<td>10. Talked to others to feel better.</td>
<td>3.25</td>
<td>1.255</td>
<td>-.318</td>
<td>-.772</td>
</tr>
<tr>
<td></td>
<td>11. Shared my feelings with others that I trust and respect.</td>
<td>3.43</td>
<td>1.198</td>
<td>-.434</td>
<td>-.548</td>
</tr>
<tr>
<td></td>
<td>12. Asked friends with similar experiences what they did.</td>
<td>3.31</td>
<td>1.314</td>
<td>-.386</td>
<td>-.893</td>
</tr>
<tr>
<td></td>
<td>13. Tried to get advice from someone about what to do.</td>
<td>3.26</td>
<td>1.311</td>
<td>-.363</td>
<td>-.916</td>
</tr>
<tr>
<td></td>
<td>14. Had a friend assist me in fixing the problem.</td>
<td>2.62</td>
<td>1.333</td>
<td>.211</td>
<td>-1.144</td>
</tr>
<tr>
<td><strong>Denial coping</strong></td>
<td>15. Denied that the event happened.</td>
<td>1.93</td>
<td>1.194</td>
<td>1.033</td>
<td>.097</td>
</tr>
<tr>
<td></td>
<td>16. Refused to believe that the problem has occurred.</td>
<td>1.92</td>
<td>1.220</td>
<td>1.109</td>
<td>.071</td>
</tr>
<tr>
<td></td>
<td>17. Pretended that this never happened.</td>
<td>1.90</td>
<td>1.186</td>
<td>1.104</td>
<td>.086</td>
</tr>
</tbody>
</table>

### 10e: Dissatisfaction

<table>
<thead>
<tr>
<th>Section E</th>
<th>Item</th>
<th>Mean</th>
<th>SD</th>
<th>Skewness</th>
<th>Kurtosis</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>1. I am dissatisfied with the level of service that I received from the mobile phone provider.</td>
<td>3.60</td>
<td>1.272</td>
<td>-.691</td>
<td>-.524</td>
</tr>
<tr>
<td></td>
<td>2. My expectations are not met.</td>
<td>3.66</td>
<td>1.267</td>
<td>-.723</td>
<td>-.493</td>
</tr>
<tr>
<td></td>
<td>3. I am dissatisfied with the quality of service that I received.</td>
<td>3.58</td>
<td>1.280</td>
<td>-.652</td>
<td>-.633</td>
</tr>
<tr>
<td></td>
<td>4. I am very dissatisfied with the mobile phone provider.</td>
<td>3.45</td>
<td>1.296</td>
<td>-.448</td>
<td>-.856</td>
</tr>
</tbody>
</table>
### 10f: Regret

<table>
<thead>
<tr>
<th>Item</th>
<th>Mean</th>
<th>SD</th>
<th>Skewness</th>
<th>Kurtosis</th>
</tr>
</thead>
<tbody>
<tr>
<td>5. I feel sorry for choosing the mobile phone provider.</td>
<td>3.04</td>
<td>1.350</td>
<td>-.043</td>
<td>-1.150</td>
</tr>
<tr>
<td>6. I regret choosing the mobile phone provider.</td>
<td>3.03</td>
<td>1.357</td>
<td>-.066</td>
<td>-1.163</td>
</tr>
<tr>
<td>7. I should have chosen another mobile phone provider.</td>
<td>3.17</td>
<td>1.373</td>
<td>-.172</td>
<td>-1.142</td>
</tr>
<tr>
<td>8. If I could do it all over, I would choose a different mobile phone provider.</td>
<td>3.24</td>
<td>1.402</td>
<td>-.264</td>
<td>-1.164</td>
</tr>
<tr>
<td>9. I made the wrong decision in my choice of mobile phone provider.</td>
<td>3.14</td>
<td>1.377</td>
<td>-.172</td>
<td>-1.160</td>
</tr>
</tbody>
</table>

### 10g: Desire for revenge

<table>
<thead>
<tr>
<th>Item</th>
<th>Mean</th>
<th>SD</th>
<th>Skewness</th>
<th>Kurtosis</th>
</tr>
</thead>
<tbody>
<tr>
<td>10. I want to take action to get the mobile phone provider in trouble.</td>
<td>2.10</td>
<td>1.282</td>
<td>.805</td>
<td>-.588</td>
</tr>
<tr>
<td>11. I want to make the mobile phone provider get what it deserves.</td>
<td>2.14</td>
<td>1.292</td>
<td>.783</td>
<td>-.596</td>
</tr>
<tr>
<td>12. I want to punish the mobile phone provider in some way.</td>
<td>2.05</td>
<td>1.270</td>
<td>.925</td>
<td>-.353</td>
</tr>
<tr>
<td>13. I want to cause inconvenience to the mobile phone provider.</td>
<td>2.06</td>
<td>1.262</td>
<td>.897</td>
<td>-.400</td>
</tr>
<tr>
<td>14. I want to get even with the mobile phone provider.</td>
<td>2.04</td>
<td>1.273</td>
<td>.914</td>
<td>-.403</td>
</tr>
</tbody>
</table>

### 10h: Loyalty intentions

<table>
<thead>
<tr>
<th>Item</th>
<th>Mean</th>
<th>SD</th>
<th>Skewness</th>
<th>Kurtosis</th>
</tr>
</thead>
<tbody>
<tr>
<td>15. I intend to stay with the mobile phone provider in the future.</td>
<td>3.02</td>
<td>1.296</td>
<td>-.187</td>
<td>-.999</td>
</tr>
<tr>
<td>16. I am very likely to encourage my friends to use the mobile phone provider.</td>
<td>2.47</td>
<td>1.260</td>
<td>.374</td>
<td>-.914</td>
</tr>
<tr>
<td>17. As long as the present standard of service continues, I will use the mobile phone provider again.</td>
<td>2.92</td>
<td>1.288</td>
<td>-.055</td>
<td>-.952</td>
</tr>
<tr>
<td>18. I am loyal to the mobile phone provider.</td>
<td>2.85</td>
<td>1.338</td>
<td>-.013</td>
<td>-1.132</td>
</tr>
</tbody>
</table>
6.4 Pre-analysis data screening

Pre-analysis data screening prepares data for the next two phases of analysis (measurement model evaluation and SEM), by testing the normality and outlying observations. Thus, this section will report the results for the two tests.

6.4.1 Normality

According to Tabachnick and Fidell (2001) and Hair et al. (2014, p.69), two statistical tests are implemented to describe non-normality: skewness and kurtosis. Skewness examines the extent to which a variable’s distribution is symmetrical. Conversely, kurtosis is a measure of the area of a distribution (the middle and the tail of a distribution). According to Byrne (2001) and Kline (2011) when the skewness value falls outside the range of between +1 and -1, the distribution is substantially skewed while a range of ± 2 is usually considered to be a significant departure from normality. Moreover, if the skewness value falls outside the range of ± 3, the distribution of the data is considered extremely skewed.

By inspecting skewness and kurtosis values in Table 10, it can be seen that most of the variables of skewness were outside -1 and 1, suggesting that they were negatively skewed. Furthermore, the values were all between -2 and 2, so it can be argued that these variables are moderately, not normally, distributed with a negative skew. The kurtosis values ranged from -1.164 (E8) and .655 (BI11). However, the majority of the values were in the range of -2 and 2, thus, showing that the data was moderately non-normal. Taking into account that participants were encouraged to think about the last time that their mobile phone provider failed to fulfil its obligations, this bias could have potentially caused the moderate non-normality distribution.

6.4.2 Outliers

Outliers are “observations with a unique combination of characteristics identifiable as distinctly different from other the observations” (Hair et al., 2014, p.62). An inspection of the received data revealed that there were numbers of outlying observations. It was decided to retain all the cases for the following reasons. First, these outliers were part of the population; some participants might provide different answers than those provided by the majority of the sample population, but they are still part of the target population. Furthermore, according to Kline (2011) the presence of few outliers within a big sample size is a minor issue. Hair et al. (2014, p.65) suggested that it is a researcher’s decision whether to retain or remove outliers. However, Hair et al. (2014, p.65) believed they should be retained to ensure generalisability
unless there was a technical problem. They stated that by deleting outliers, a researcher runs the “risk of improving the multivariate analysis but limiting its generalisability” (Hair *et al.*, 2014, p.65). In respect to this, it was decided to retain the outlying observation.

6.5 Reflective and formative measures

In SEM, it is important to first define constructs and measures prior to proceeding with an examination of the relationships between them. Measurement theory specifies how to measure latent variables. There are two approaches to measure constructs: reflective or formative. Reflective constructs represent the manifest effects of an underlying construct, whereas formative constructs assume that the indicators cause the construct (Edwards and Bagozzi, 2000; Hair *et al.*, 2014). Another characteristic of a reflective construct is that the indicators (items) of it are interchangeable (Bollen and Lennox, 1991; Edwards and Bagozzi, 2000; Diamantopoulos and Siguaw, 2006; Hair *et al.*, 2014). This is because each of the items reflects the same conceptual domain, which implies that removing one of two equally reliable indicators from the measurement model should not cause a change in the meaning of the construct.

All constructs in this study were reflective constructs as they were formed of conceptually similar items that reflected the overall construct. Thus, the direction of causality was from the construct to the constituent items. Moreover, dropping or adding an indicator would not alter the meaning of the construct, as the indicators were interchangeable. To clarify, the four items in the feelings of violation scale measured whether the consumer had experienced a violation. Sample items were “I felt betrayed by my mobile phone provider” and “I felt extremely frustrated by how I was treated by my mobile phone provider”. These items reflected the content of the overall construct: feelings of violation. Additionally, removing any of these items would not have changed the original meaning of the construct. This orientation was also in keeping with how the measures have previously been used in the literature.

6.6 Measurement model

This section will explain the analysis phase needed to assess the unidimensionality, reliability and validity of the measurement scales employed prior to performing SEM. This section consists of four subsections. First, it will discuss the modelling procedure adopted from Bentler and Chou (1987). Second, it will discuss the checks used to assess unidimensionality, which were undertaken by examining the scale purification using item-total correlations and EFA. Third, it will present the results of the measurement model and evaluate the internal
consistency of each scale. Finally, it will describe techniques employed to test the discriminant validity of each construct.

6.6.1 Measurement modelling procedure

Multivariate analysis “refers to all statistical methods that simultaneously analyse multiple measurements on each individual or object under investigation” (Hair et al., 2014, p.4). In other words, multivariate analysis is used to explore whether each of the used construct measures are valid on the basis of CFA procedures. Hence, any simultaneous analysis of more than two variables is known as multivariate analysis. Conversely, univariate analysis refers to the analysis of one variable only. Several multivariate statistical techniques were applied to the data to answer the research questions. Factor analysis was the first method used to examine the unidimensionality of the scales (the idea that several items were strongly associated and presented a single concept). Factor analysis is a generic name given to a class of multivariate techniques, which address the problem of analysing the structure of the correlations among a large number of variables (Hair et al., 2014, p.92).

Therefore, data reduction can be achieved by substituting each underlying dimension for their original variable. One further important but generic issue needs to be addressed in this initial explanation of factor analysis. There are two approaches that one can take to conduct factor analysis: one is exploratory and the other confirmatory (Hair et al., 2014; Pallant, 2010). EFA is often used to explore the possible interrelationships between the variables without imposing a structure to the outcome based on theoretical support or prior research (Hair et al., 2014). CFA is a more complex technique, which requires a preconceived structure for the data based on a previous theory and a model (understanding) developed by the researcher (Hair et al., 2014). In this study, both were employed to examine the dimensionality of used measures.

6.6.2 Goodness-of-fit (GOF)

Goodness-of-fit (GOF) is defined as a measure that indicates “how well a specified model reproduces the covariance matrix among the indicator variables” (Hair et al., 2014, p.544). According to Hair et al. (2014, p.576), the basics of GOF are, firstly, the chi-square (\( \chi^2 \)), which is “the fundamental measure of differences between the observed and estimated covariance matrices” (Hair et al., 2014, p.577); and secondly the degree of freedom (DF), which represents “the amount of mathematical information available to estimate model parameters” (Hair et al., 2014, p.577). However, according to Hair et al. (2014, p.587), the more indicators that are added to a model the more difficult it becomes to use the chi-square
to assess the model fit. Therefore, researchers have not generally relied on the chi-square
GOF test alone to assess the GOF measure, rather they have developed and utilised other
alternative measures of fit to fix the bias that may arise due to large samples and increased
model complexity (Hair et al., 2014, p.587).

There are many examples of GOF measures. First, the GOF index was an early
attempt to assess a fit statistic. However, due to the effect of $N$ on sampling distributions, the
GFI test was sensitive to sample size. GFI greater values of (.90) are considered acceptable.
However, Hair et al. (2014) argued for using (.95) as the cut-off value. Second, the Root Mean
Square Error of Approximation (RMSEA) is one of the most widely-used measures due to its
ability to show not just the sample used, but also how well a model fits a population. It is worth
noting that it is debatable what a good value of RMSEA is. However, Hair et al. (2014, p.579)
reported that it should be between (.03) and (.08). The third measure is the normed chi-square
measure, which reflects a simple ratio of ($\chi^2$) to the degree of freedom. Generally, $\chi^2/df$
ratios of 3:1 or less are considered better-fitting models; however, larger samples of more than 750
and complex models are excluded from this ratio (Hair et al., 2014, p.579). Another measure
is the Normed Fit Index (NFI), which considers the original incremental fit indices. NFI is “a
ration of the difference in the chi-square value for the fitted model and a null model divided by
the chi-square value for the null model” (Hair et al., 2014, p.580). However, the disadvantage
of this measure is that it is a complex model with high index values that artificially inflate the
estimate of the model; thus, it is not used a lot (Hair et al., 2014, p.580). On the other hand,
an improved version of the NFI is the Comparative Fit Index (CFI), which is one of the most
widely used indices. CFI values above (.90) are usually associated with a model that fits well
(Hair et al., 2014, p.580).

This study will report three levels of alpha $\alpha$ (i.e. 0.10, 0.05 and 0.001) to present the
statistical power. It is worth noting that there might be a larger change of being wrong when
using a high value of significance level (alpha) (e.g. 0.10). Nevertheless, this level could make
it easier to indicate that the coefficient is different from zero (Hair et al., 2014, p.189). However,
the significance level of 0.05 (p-value < 0.05), a value typically used, will be utilised to say an
effect is significant or not since the researcher should desire a smaller change of being wrong
alpha levels of .05 or .01”.
6.6.3 Unidimensionality

First, to determine the number of dimensions underlying a set of items, EFA procedures were conducted. The main reason for using factor analysis was to describe “the covariance relationships among many variables” (Najjar and Bishu, 2006, p.39). In this study, a principle component method with a varimax rotation and only eigenvalues of greater than one was utilised. In general, the goal of performing the principle component analysis is to “generate a sequence of weighted linear composites of the observed variables such that for each linear composite” (Sharma and Kumar, 2006, p.391).

Hair et al. (2014, p.107) added that only eigenvalues greater than 1 were considered significant. There were three main methods of rotations: QUARTIMAX, VARIMAX and EQUIMAX. However, no specific rules exist to help researchers select a certain technique (Hair et al., 2014, p.114). Varimax rotation is the most popular rotation method focusing on simplifying the columns in a factor matrix. It is recommended that researchers use the varimax rotation as this method works to ensure that only one, or a few, observed constructs have high loadings on any provided factors (Sharma and Kumar, 2006, p.387).

No problems were detected from the EFA results for all variables in terms of number of components, cross loading items and factor loading scores. All factor loading scores were greater than (.60) except item (D14), which was (.60). According to Hair et al. (2014, p.116) values greater than ±.50 are generally acceptable for practical significance. Table 11 shows the EFA for the final items selected for individual construct.

Table 11: EFA results for the final items selected for individual construct (n=779)

<table>
<thead>
<tr>
<th>Dimension</th>
<th>Item</th>
<th>EFA factor loading</th>
</tr>
</thead>
<tbody>
<tr>
<td>1.</td>
<td>Almost all the promises made by my mobile phone provider have not</td>
<td>.768</td>
</tr>
<tr>
<td></td>
<td>been kept so far.</td>
<td></td>
</tr>
<tr>
<td>2.</td>
<td>I feel that my mobile phone provider has not come through in</td>
<td>.849</td>
</tr>
<tr>
<td></td>
<td>fulfilling the promises made to me.</td>
<td></td>
</tr>
<tr>
<td>3.</td>
<td>So far my mobile phone provider has not done an excellent job of</td>
<td>.833</td>
</tr>
<tr>
<td></td>
<td>fulfilling its promises to me.</td>
<td></td>
</tr>
<tr>
<td>4.</td>
<td>I have not received everything promised to me in exchange for my</td>
<td>.824</td>
</tr>
<tr>
<td></td>
<td>contributions.</td>
<td></td>
</tr>
<tr>
<td>5.</td>
<td>My mobile phone provider has broken many of its promises to me even</td>
<td>.855</td>
</tr>
<tr>
<td></td>
<td>though I have upheld my side of the deal.</td>
<td></td>
</tr>
</tbody>
</table>
### 11b: Attribution of blame

<table>
<thead>
<tr>
<th>Section BII</th>
<th>Item</th>
<th>EFA factor loading</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>1. Overall, my mobile phone provider was responsible for the problem.</td>
<td>.800</td>
</tr>
<tr>
<td></td>
<td>2. The service failure episode was my mobile phone provider’s fault.</td>
<td>.860</td>
</tr>
<tr>
<td></td>
<td>3. I completely blame my mobile phone provider for what happened.</td>
<td>.890</td>
</tr>
<tr>
<td></td>
<td>4. My mobile phone provider was at fault.</td>
<td>.906</td>
</tr>
</tbody>
</table>

### 11c: Feelings of violation

<table>
<thead>
<tr>
<th>Section C</th>
<th>Item</th>
<th>EFA factor loading</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>1. I felt a great deal of anger towards my mobile phone provider.</td>
<td>.863</td>
</tr>
<tr>
<td></td>
<td>2. I felt betrayed by my mobile phone provider.</td>
<td>.918</td>
</tr>
<tr>
<td></td>
<td>3. I felt that my mobile phone provider had broken the relationship between us.</td>
<td>.906</td>
</tr>
<tr>
<td></td>
<td>4. I felt extremely frustrated by how I was treated by my mobile phone provider.</td>
<td>.882</td>
</tr>
</tbody>
</table>

### 11d: Coping behaviour

<table>
<thead>
<tr>
<th>Dimension</th>
<th>Item</th>
<th>EFA factor loading</th>
</tr>
</thead>
<tbody>
<tr>
<td>Active coping</td>
<td>1. Concentrated on ways the problem could be solved.</td>
<td>.829</td>
</tr>
<tr>
<td></td>
<td>2. Tried to make a plan of action.</td>
<td>.856</td>
</tr>
<tr>
<td></td>
<td>3. Generated potential solutions.</td>
<td>.831</td>
</tr>
<tr>
<td></td>
<td>4. Thought about the best way to handle things.</td>
<td>.845</td>
</tr>
<tr>
<td></td>
<td>5. Concentrated my efforts on doing something about it.</td>
<td>.796</td>
</tr>
<tr>
<td></td>
<td>6. Did what had to be done.</td>
<td>.761</td>
</tr>
<tr>
<td></td>
<td>7. Followed a plan to make things better and more satisfying.</td>
<td>.823</td>
</tr>
<tr>
<td>Expressive support seeking coping</td>
<td>8. Sought out others for support.</td>
<td>.650</td>
</tr>
<tr>
<td></td>
<td>9. Told others how I felt.</td>
<td>.746</td>
</tr>
<tr>
<td></td>
<td>10. Talked to others to feel better.</td>
<td>.861</td>
</tr>
<tr>
<td></td>
<td>11. Shared my feelings with others that I trust and respect.</td>
<td>.836</td>
</tr>
<tr>
<td></td>
<td>12. Asked friends with similar experiences what they did.</td>
<td>.779</td>
</tr>
<tr>
<td></td>
<td>13. Tried to get advice from someone about what to do.</td>
<td>.781</td>
</tr>
<tr>
<td></td>
<td>14. Had a friend assist me in fixing the problem.</td>
<td>.600</td>
</tr>
<tr>
<td>Denial coping</td>
<td>15. Denied that the event happened.</td>
<td>.873</td>
</tr>
<tr>
<td></td>
<td>16. Refused to believe that the problem has occurred.</td>
<td>.911</td>
</tr>
<tr>
<td></td>
<td>17. Pretended that this never happened.</td>
<td>.911</td>
</tr>
</tbody>
</table>
### 11e: Dissatisfaction

<table>
<thead>
<tr>
<th>Item</th>
<th>EFA factor loading</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. I am dissatisfied with the level of service that I received from the mobile phone provider.</td>
<td>.928</td>
</tr>
<tr>
<td>2. My expectations were not met.</td>
<td>.904</td>
</tr>
<tr>
<td>3. I am dissatisfied with the quality of service that I received.</td>
<td>.924</td>
</tr>
<tr>
<td>4. I am very dissatisfied with the mobile phone provider.</td>
<td>.913</td>
</tr>
</tbody>
</table>

### 11f: Regret

<table>
<thead>
<tr>
<th>Item</th>
<th>EFA factor loading</th>
</tr>
</thead>
<tbody>
<tr>
<td>5. I feel sorry for choosing the mobile phone provider.</td>
<td>.917</td>
</tr>
<tr>
<td>6. I regret choosing the mobile phone provider.</td>
<td>.943</td>
</tr>
<tr>
<td>7. I should have chosen another mobile phone provider.</td>
<td>.950</td>
</tr>
<tr>
<td>8. If I could do it all over, I would choose a different mobile phone provider.</td>
<td>.940</td>
</tr>
<tr>
<td>9. I made the wrong decision in my choice of mobile phone provider.</td>
<td>.955</td>
</tr>
</tbody>
</table>

### 11g: Desire for revenge

<table>
<thead>
<tr>
<th>Item</th>
<th>EFA factor loading</th>
</tr>
</thead>
<tbody>
<tr>
<td>10. I want to take action to get the mobile phone provider in trouble.</td>
<td>.911</td>
</tr>
<tr>
<td>11. I want to make the mobile phone provider get what it deserves.</td>
<td>.940</td>
</tr>
<tr>
<td>12. I want to punish the mobile phone provider in some way.</td>
<td>.942</td>
</tr>
<tr>
<td>13. I want to cause inconvenience to the mobile phone provider.</td>
<td>.919</td>
</tr>
<tr>
<td>14. I want to get even with the mobile phone provider.</td>
<td>.940</td>
</tr>
</tbody>
</table>

### 11h: Loyalty intentions

<table>
<thead>
<tr>
<th>Item</th>
<th>EFA Factor Loading</th>
</tr>
</thead>
<tbody>
<tr>
<td>15. I intend to stay with the mobile phone provider in the future.</td>
<td>.880</td>
</tr>
<tr>
<td>16. I am very likely to encourage my friends to use the mobile phone provider.</td>
<td>.830</td>
</tr>
<tr>
<td>17. As long as the present standard of service continues, I will use the mobile phone provider again.</td>
<td>.900</td>
</tr>
<tr>
<td>18. I am loyal to the mobile phone provider.</td>
<td>.840</td>
</tr>
</tbody>
</table>
The results for perceived contract breach (global measure) suggest that all items loaded on a single factor accounted for 68.28% of the total variance. Similarly, the results demonstrate evidence of a single factor of attribution of blame accounting for 74.69% of the total variance. Feelings of violation also loaded on a single factor accounting for 79.61% of total variance. With regards to the three coping strategies, the results show that each coping strategy was loaded on three separate components. The seven items of active coping were loaded on the first component. The seven items of expressive support-seeking coping were loaded on the second component and the three items of denial coping were loaded on the third component accounting for 12.73% of total variance for the three components. The four service outcomes also passed the EFA test. The four items of dissatisfaction were loaded on a single factor accounting for 84.13% of total variance. The five items of regret were also loaded on a single factor accounting for 88.45%. In addition, the five items of desire for revenge were loaded on a single factor symbolising 86.46% of the total variance. Finally, the four items of loyalty intentions were loaded on a single factor representing 73.67% of total variance. Hence, these reflective constructs appeared to be unidimensional and to exhibit good internal consistency (Hair et al., 2014).

According to Hair et al. (2014, p.120), a researcher should validate their EFA results in order to move to a confirmatory perspective and assess the replicability of the results. One option is to run CFA through structural equation modelling (Hair et al., 2014, p.120). Hence, a measurement model was created and examined to validate the EFA results.

### 6.6.4 CFA results for the measurement model

The measurement model included ten constructs. As displayed in Table 12, all standardised factor loadings at both were greater than (.60) except item D14, which was (.56); and the t-values were significant at the 1% level, thus demonstrating convergent validity. The GOF indices showed that the measurement model represented a good fit to the data: $^2 = 2874.28$ based on 1035 degrees of freedom ($^2/df = 2.77$; $p < 0.05$); Bentler's CFI = .94; TLI = .93; RMSEA = .04.

Since the CFA model satisfied the criteria for unidimensionality and convergent validity, the next test assessed the construct reliability of individual variables. Using the Cronbach coefficient alpha, values for all of the constructs exceeded (.70). However, Fornell and Larcker (1981), Gerbing and Anderson (1988) have urged researchers to calculate the composite reliability and AVEs for each measure to assess reliability. In particular, Fornell and Larcker (1981) and Gerbing and Anderson (1988) suggested the use of composite reliabilities and AVEs using both the standardised loadings and measurement errors for each item, resulting
in superior analysis accuracy. All composite reliabilitys for constructs in the measurement model exceeded Bagozzi and Yi's (1988) recommended value of .60. Furthermore, all construct AVEs above (.50) were cut-off as suggested by Fornell and Larcker (1981), indicating that the variance accounted for by measurement error was less than the variance captured by the construct.

Table 12: CFA results for the measurement model (n=779)

<table>
<thead>
<tr>
<th>Dimension</th>
<th>Item</th>
<th>Standardized estimate</th>
<th>t-value</th>
<th>Cronbach alpha α</th>
<th>Average variance extracted</th>
<th>Composite reliability</th>
</tr>
</thead>
<tbody>
<tr>
<td>Perceived contract breach (Section BII)</td>
<td>GM1</td>
<td>.692</td>
<td>21.200</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>GM2</td>
<td>.813</td>
<td>26.629</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>GM3</td>
<td>.779</td>
<td>24.982</td>
<td>.883</td>
<td>.60</td>
<td>.830</td>
</tr>
<tr>
<td></td>
<td>GM4</td>
<td>.775</td>
<td>24.813</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>GM5</td>
<td>.823</td>
<td>27.122</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>12b: Attribution of blame</td>
<td>BII1</td>
<td>.688</td>
<td>21.234</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>BII2</td>
<td>.769</td>
<td>24.733</td>
<td>.887</td>
<td>.67</td>
<td>.876</td>
</tr>
<tr>
<td></td>
<td>BII3</td>
<td>.879</td>
<td>30.246</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>BII4</td>
<td>.909</td>
<td>31.919</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>12c: Feelings of violation</td>
<td>C1</td>
<td>.794</td>
<td>26.110</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>C2</td>
<td>.897</td>
<td>31.671</td>
<td>.915</td>
<td>.72</td>
<td>.868</td>
</tr>
<tr>
<td></td>
<td>C3</td>
<td>.889</td>
<td>31.213</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>C4</td>
<td>.833</td>
<td>28.088</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
### 12d: Coping behaviour

<table>
<thead>
<tr>
<th>Dimension</th>
<th>Item</th>
<th>Standardized estimate</th>
<th>t-value</th>
<th>Cronbach alpha α</th>
<th>Average variance extracted</th>
<th>Composite reliability</th>
</tr>
</thead>
<tbody>
<tr>
<td>Active coping (Section D)</td>
<td>D1</td>
<td>.804</td>
<td>26.581</td>
<td>.925</td>
<td>.64</td>
<td>.902</td>
</tr>
<tr>
<td></td>
<td>D2</td>
<td>.851</td>
<td>29.030</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>D3</td>
<td>.826</td>
<td>27.690</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>D4</td>
<td>.822</td>
<td>27.505</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>D5</td>
<td>.780</td>
<td>25.415</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>D6</td>
<td>.722</td>
<td>22.772</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>D7</td>
<td>.794</td>
<td>26.094</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Expressive support seeking coping (Section D)</td>
<td>D8</td>
<td>.634</td>
<td>19.020</td>
<td>.885</td>
<td>.53</td>
<td>.824</td>
</tr>
<tr>
<td></td>
<td>D9</td>
<td>.695</td>
<td>21.423</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>D10</td>
<td>.857</td>
<td>29.000</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>D11</td>
<td>.839</td>
<td>28.081</td>
<td>.901</td>
<td>.76</td>
<td>.866</td>
</tr>
<tr>
<td></td>
<td>D12</td>
<td>.735</td>
<td>23.132</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>D13</td>
<td>.745</td>
<td>23.573</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>D14</td>
<td>.557</td>
<td>16.211</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Denial coping (Section D)</td>
<td>D15</td>
<td>.801</td>
<td>26.277</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>D16</td>
<td>.901</td>
<td>31.388</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>D17</td>
<td>.902</td>
<td>31.421</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

### 12e: Dissatisfaction

<table>
<thead>
<tr>
<th>Section E</th>
<th>Item</th>
<th>Standardized estimate</th>
<th>t-value</th>
<th>Cronbach alpha α</th>
<th>Average variance extracted</th>
<th>Composite reliability</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>E1</td>
<td>.900</td>
<td>32.099</td>
<td>.937</td>
<td>.88</td>
<td>.906</td>
</tr>
<tr>
<td></td>
<td>E2</td>
<td>.862</td>
<td>29.846</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>E3</td>
<td>.894</td>
<td>31.738</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>E4</td>
<td>.895</td>
<td>31.779</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

### 12f: Regret

<table>
<thead>
<tr>
<th>Section E</th>
<th>Item</th>
<th>Standardized estimate</th>
<th>t-value</th>
<th>Cronbach alpha α</th>
<th>Average variance extracted</th>
<th>Composite reliability</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>E5</td>
<td>.888</td>
<td>31.632</td>
<td>.967</td>
<td>.87</td>
<td>.941</td>
</tr>
<tr>
<td></td>
<td>E6</td>
<td>.921</td>
<td>33.671</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>E7</td>
<td>.940</td>
<td>34.951</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>E8</td>
<td>.931</td>
<td>34.323</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>E9</td>
<td>.946</td>
<td>35.305</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
### 12g: Desire for revenge

<table>
<thead>
<tr>
<th>Section E</th>
<th>Item</th>
<th>Standardized estimate</th>
<th>t-value</th>
<th>Cronbach alpha α</th>
<th>Average variance extracted</th>
<th>Composite reliability</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>F10</td>
<td>.885</td>
<td>31.373</td>
<td></td>
<td>.961</td>
<td>.938</td>
</tr>
<tr>
<td></td>
<td>F11</td>
<td>.927</td>
<td>33.991</td>
<td></td>
<td>.83</td>
<td>.938</td>
</tr>
<tr>
<td></td>
<td>F12</td>
<td>.929</td>
<td>34.139</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>F13</td>
<td>.895</td>
<td>31.955</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>F14</td>
<td>.923</td>
<td>33.701</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

### 12h: Loyalty intentions

<table>
<thead>
<tr>
<th>Section E</th>
<th>Item</th>
<th>Standardized estimate</th>
<th>t-value</th>
<th>Cronbach alpha α</th>
<th>Average variance extracted</th>
<th>Composite reliability</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>F15</td>
<td>.836</td>
<td>27.622</td>
<td></td>
<td>.880</td>
<td>.816</td>
</tr>
<tr>
<td></td>
<td>F16</td>
<td>.756</td>
<td>23.847</td>
<td></td>
<td>.65</td>
<td>.816</td>
</tr>
<tr>
<td></td>
<td>F17</td>
<td>.864</td>
<td>29.035</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>F18</td>
<td>.771</td>
<td>24.537</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

**Overall GOF indices**

Chi-square= 2874.28; Degrees of freedom = 1035; \( \chi^2/df = 2.77 \); CFI = 0.94; NFI = 0.91; CFI = 0.94; RMSEA = 0.04

Another part of the alpha value is the corrected item-total-correlations, which is used to evaluate and establish reliability of measures. According to Hair et al. (2014, p.123), a scale for any construct should not include any item with a score lower than (.50). The higher the item-total-correlation score for an item reflects whether the item is a good component. There were no issues in this study; all values were higher than (.50). The corrected item-total-correlations in this study are presented in Table 13.
### Table 13: Corrected-item-total-correlation for individual variables (n=779)

#### 13a: Perceived psychological contract breach

<table>
<thead>
<tr>
<th>Dimension</th>
<th>Item</th>
<th>Corrected-item-total-correlation</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>1. Almost all the promises made by my mobile phone provider have not been kept so far.</td>
<td>.646</td>
</tr>
<tr>
<td></td>
<td>2. I feel that my mobile phone provider has not come through in fulfilling the promises made to me.</td>
<td>.750</td>
</tr>
<tr>
<td></td>
<td>3. So far my mobile phone provider has not done an excellent job of fulfilling its promises to me.</td>
<td>.727</td>
</tr>
<tr>
<td></td>
<td>4. I have not received everything promised to me in exchange for my contributions.</td>
<td>.715</td>
</tr>
<tr>
<td></td>
<td>5. My mobile phone provider has broken many of its promises to me even though I have upheld my side of the deal.</td>
<td>.760</td>
</tr>
</tbody>
</table>

#### 13b: Attribution of blame

<table>
<thead>
<tr>
<th>Section BII</th>
<th>Item</th>
<th>Corrected-item-total-correlation</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>1. Overall, my mobile phone provider was responsible for the problem.</td>
<td>.664</td>
</tr>
<tr>
<td></td>
<td>2. The service failure episode was my mobile phone provider's fault.</td>
<td>.743</td>
</tr>
<tr>
<td></td>
<td>3. I completely blame my mobile phone provider for what happened.</td>
<td>.790</td>
</tr>
<tr>
<td></td>
<td>4. My mobile phone provider was at fault.</td>
<td>.819</td>
</tr>
</tbody>
</table>

#### 13c: Feelings of violation

<table>
<thead>
<tr>
<th>Section C</th>
<th>Item</th>
<th>Corrected-item-total-correlation</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>1. I felt a great deal of anger toward my mobile phone provider.</td>
<td>.760</td>
</tr>
<tr>
<td></td>
<td>2. I felt betrayed by my mobile phone provider.</td>
<td>.845</td>
</tr>
<tr>
<td></td>
<td>3. I felt that my mobile phone provider had broken the relationship between us.</td>
<td>.825</td>
</tr>
<tr>
<td></td>
<td>4. I felt extremely frustrated by how I was treated by my mobile phone provider.</td>
<td>.790</td>
</tr>
</tbody>
</table>
### 13d: Coping behaviour

<table>
<thead>
<tr>
<th>Dimension</th>
<th>Item</th>
<th>Corrected-item-total-correlation</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Active coping (Section D)</strong></td>
<td>1. Concentrated on ways the problem could be solved.</td>
<td>.760</td>
</tr>
<tr>
<td></td>
<td>2. Tried to make a plan of action.</td>
<td>.803</td>
</tr>
<tr>
<td></td>
<td>3. Generated potential solutions.</td>
<td>.780</td>
</tr>
<tr>
<td></td>
<td>4. Thought about the best way to handle things.</td>
<td>.784</td>
</tr>
<tr>
<td></td>
<td>5. Concentrated my efforts on doing something about it.</td>
<td>.755</td>
</tr>
<tr>
<td></td>
<td>6. Did what had to be done.</td>
<td>.701</td>
</tr>
<tr>
<td></td>
<td>7. Followed a plan to make things better and more satisfying.</td>
<td>.773</td>
</tr>
<tr>
<td><strong>Expressive support seeking coping (Section D)</strong></td>
<td>8. Sought out others for support.</td>
<td>.605</td>
</tr>
<tr>
<td></td>
<td>9. Told others how I felt.</td>
<td>.625</td>
</tr>
<tr>
<td></td>
<td>10. Talked to others to feel better.</td>
<td>.774</td>
</tr>
<tr>
<td></td>
<td>11. Shared my feelings with others that I trust and respect.</td>
<td>.741</td>
</tr>
<tr>
<td></td>
<td>12. Asked friends with similar experiences what they did.</td>
<td>.709</td>
</tr>
<tr>
<td></td>
<td>13. Tried to get advice from someone about what to do.</td>
<td>.728</td>
</tr>
<tr>
<td></td>
<td>14. Had a friend assist me in fixing the problem.</td>
<td>.550</td>
</tr>
<tr>
<td><strong>Denial coping (Section D)</strong></td>
<td>15. Denied that the event happened.</td>
<td>.755</td>
</tr>
<tr>
<td></td>
<td>16. Refused to believe that the problem has occurred.</td>
<td>.827</td>
</tr>
<tr>
<td></td>
<td>17. Pretended that this never happened.</td>
<td>.830</td>
</tr>
</tbody>
</table>

### 13e: Dissatisfaction

<table>
<thead>
<tr>
<th>Section E</th>
<th>Item</th>
<th>Corrected-item-total-correlation</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>1. I am dissatisfied with the level of service that I received from the mobile phone provider.</td>
<td>.870</td>
</tr>
<tr>
<td></td>
<td>2. My expectations are not met.</td>
<td>.830</td>
</tr>
<tr>
<td></td>
<td>3. I am dissatisfied with the quality of service that I received.</td>
<td>.861</td>
</tr>
<tr>
<td></td>
<td>4. I am very dissatisfied with the mobile phone provider.</td>
<td>.845</td>
</tr>
</tbody>
</table>

### 13f: Regret

<table>
<thead>
<tr>
<th>Section E</th>
<th>Item</th>
<th>Corrected-item-total-correlation</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>5. I feel sorry for choosing the mobile phone provider.</td>
<td>.871</td>
</tr>
<tr>
<td></td>
<td>6. I regret choosing the mobile phone provider.</td>
<td>.910</td>
</tr>
<tr>
<td></td>
<td>7. I should have chosen another mobile phone provider.</td>
<td>.920</td>
</tr>
<tr>
<td></td>
<td>8. If I could do it all over, I would choose a different mobile phone provider.</td>
<td>.904</td>
</tr>
<tr>
<td></td>
<td>9. I made the wrong decision in my choice of mobile phone provider.</td>
<td>.930</td>
</tr>
</tbody>
</table>
13g: Desire for revenge

<table>
<thead>
<tr>
<th>Item</th>
<th>Corrected-item-total-correlation</th>
</tr>
</thead>
<tbody>
<tr>
<td>10. I want to take action to get the mobile phone provider in trouble.</td>
<td>.862</td>
</tr>
<tr>
<td>11. I want to make the mobile phone provider get what it deserves.</td>
<td>.905</td>
</tr>
<tr>
<td>12. I want to punish the mobile phone provider in some way.</td>
<td>.907</td>
</tr>
<tr>
<td>13. I want to cause inconvenience to the mobile phone provider.</td>
<td>.873</td>
</tr>
<tr>
<td>14. I want to get even with the mobile phone provider.</td>
<td>.900</td>
</tr>
</tbody>
</table>

13h: Loyalty intentions

<table>
<thead>
<tr>
<th>Item</th>
<th>Corrected-item-total-correlation</th>
</tr>
</thead>
<tbody>
<tr>
<td>15. I intend to stay with the mobile phone provider in the future.</td>
<td>.765</td>
</tr>
<tr>
<td>16. I am very likely to encourage my friends to use the mobile phone provider.</td>
<td>.700</td>
</tr>
<tr>
<td>17. As long as the present standard of service continues, I will use the mobile phone provider again.</td>
<td>.792</td>
</tr>
<tr>
<td>18. I am loyal to the mobile phone provider.</td>
<td>.714</td>
</tr>
</tbody>
</table>

6.6.5 Discriminant validity

Voorhees et al. (2016) analysed the results section of 621 survey-based marketing articles published between 1996 and 2012 and found that marketing literature tended to favour three discriminant validity tests above all others: the constrained phi approach (Joreskog, 1971), comparison of average variance extracted to shared variance (i.e. the AVE-SV test; Fornell and Larcker 1981), and overlapping confidence intervals (Anderson and Gerbing 1988).

Among the three methods, Voorhees et al. (2016) found the AVE-SV method to be substantially more effective (hit rate = 71.35%) than the constrained phi and overlapping confidence intervals techniques. The AVE-SV method also performed equally well with large and small sample sizes (Voorhees et al., 2016). In the cells that operationalised construct-level discriminant validity violations (i.e. focal correlation = 0.90), the AVE-SV successfully identified 99.79% of the violations, suggesting that the technique was nearly perfectly suited to identify discriminant validity violations caused by excessive correlations (see Voorhees et al., 2016). Therefore, overall the AVE-SV technique has been considered strong, however, it was found to have some limitations, such as being far less effective in detecting item-level
violations (Voorhees et al., 2016). A second limitation of the AVE-SV technique had to do with arbitrary violations when lambda values are moderate. In other words, Voorhees et al. (2016) results confirmed that the arbitrary violations issue was connected to conditions where focal correlations and average lambda values were comparable.

Voorhees et al. (2016) suggested that researchers should report correlations (or a correlation matrix) so that readers can draw their own conclusions about discriminant validity. However, when researchers have used multi-item measures and have had an adequate sample size to conduct measurement model testing, the results have suggested that the heterotrait-monotrait (HTMT) method with a cut-off of (0.85) and the AVE-SV method should be the standard methods for discriminant validity testing in marketing (Voorhees et al., 2016). The HTMT ratio (Henseler et al., 2015) is the most recent addition to discriminant validity tests advocated in marketing literature. The HTMT test requires the calculation of a ratio of the average correlations between constructs to the geometric mean of the average correlations within items of the same constructs (Henseler et al., 2015). However, the two discriminant validity testing methods that emerged as clear favourites by Henseler et al. (2015) were limited in so far as they were only intended for use with multiple item scales.

In order to assess the discriminant validity, this study followed the procedure recommended by Fornell and Larcker (1981), that also supported by Voorhees et al. (2016), where the AVE (and the square root of AVE) of each measure was calculated and compared to the correlation coefficient of all other variables in the model. To clarify, in order to obtain discriminant validity, the square roots of the AVE of each individual construct must be higher than the correlations shared between the construct and the other constructs in the model. The correlation matrix in Table 14, confirms discriminant validity between all of the constructs employed.
Table 14: Correlation at the Dimensional Level and Average Vairance Extracted (AVE)

<table>
<thead>
<tr>
<th>Construct</th>
<th>Psychological Contract Breach</th>
<th>Blame</th>
<th>Violation</th>
<th>Active</th>
<th>Expressive</th>
<th>Denial</th>
<th>Regret</th>
<th>Dissatisfaction</th>
<th>Revenge</th>
<th>Loyalty</th>
</tr>
</thead>
<tbody>
<tr>
<td>Psychological Contract Breach</td>
<td>0.77</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Attribution of Blame</td>
<td>.387**</td>
<td>.81</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Feelings of Violation</td>
<td>.548**</td>
<td>.564**</td>
<td>.85</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Active Coping</td>
<td>.020</td>
<td>.127**</td>
<td>.085*</td>
<td>.8</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Expressive Coping</td>
<td>.245**</td>
<td>.188**</td>
<td>.307**</td>
<td>.327**</td>
<td>0.73</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Denial Coping</td>
<td>.133**</td>
<td>-.110**</td>
<td>.062</td>
<td>-.020</td>
<td>.234**</td>
<td>0.86</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Regret</td>
<td>.599**</td>
<td>.354**</td>
<td>.595**</td>
<td>.014</td>
<td>.319**</td>
<td>.158**</td>
<td>0.93</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Dissatisfaction</td>
<td>.585**</td>
<td>.440**</td>
<td>.649**</td>
<td>.033</td>
<td>.297**</td>
<td>-.024</td>
<td>.743**</td>
<td>0.88</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Revenge</td>
<td>.339**</td>
<td>.104**</td>
<td>.342**</td>
<td>.030</td>
<td>.257**</td>
<td>.523**</td>
<td>.416**</td>
<td>.292**</td>
<td>0.91</td>
<td></td>
</tr>
<tr>
<td>Loyalty</td>
<td>-.292**</td>
<td>-.146**</td>
<td>-.252**</td>
<td>.063</td>
<td>-.065</td>
<td>.249**</td>
<td>-.420**</td>
<td>-.371**</td>
<td>.125**</td>
<td>0.8</td>
</tr>
</tbody>
</table>

Note: Diagonal elements are the square root of AVE; off-diagonal elements are the correlations between constructs

**. Correlation is significant at the 0.01 level (2-tailed).

*. Correlation is significant at the 0.05 level (2-tailed).
6.7 Common method bias

Additional analysis was conducted to assess the robustness of the estimation results. The effects of common method bias needed to be examined as all the study variables were measured using the same source (Podsakoff et al., 2003; Chang and Eden, 2010). Common method bias refers to the statistical variance that can be attributed to the method of measurement rather than the constructs the measures represent (Podsakoff et al., 2003; Chang et al., 2010; Podsakoff, MacKenzie and Podsokoff, 2012). Podsakoff et al. (2012) argued that common method bias was one of the major sources of measurement error that hurt the validity of results related to the relationships between variables. In respect to this, some strategies were used through the study design and statistical tests to initially address the minimisation of common method variance.

Regarding study design, the first strategy was that the leading questions aimed to encourage a psychological separation between prediction and criterion variables to prevent participants from establishing a causal relationship between these variables. Second, the participants were promised confidentiality and anonymity when participating in the study. Third, item wording was refined and improved after the pre-test and before the main data collection phase.

With reference to the statistical remedies employed (Hansen et al., 2013; Pavlou et al., 2007; Podsakoff et al., 2003; 2012), Harman’s single-factor test was applied. According to Favero and Bullock (2014), researchers have largely used Harman’s single-factor test to assess the issue of common method bias. It involves running an EFA on the variables included in the study and examining the no rotation option to determine the number of factors that account for any variance in the constructs. The main assumption of this test is that if common method bias exists, either one factor will emerge from the analysis or one factor will account for most of the covariance among variables. The test was conducted and no single factor accounted for more than 30% of the variance, which was below the 50% threshold set by Podsakoff and Organ (1986). Table 15 shows the results of Harman’s test using EFA.
Table 15: Harman's test for common method bias - (EFA)

<table>
<thead>
<tr>
<th>Component</th>
<th>Initial eigenvalues</th>
<th>Extraction sums of squared loadings</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Total variance</td>
<td>Cumulative %</td>
</tr>
<tr>
<td>2</td>
<td>5.914</td>
<td>12.321</td>
</tr>
<tr>
<td>3</td>
<td>5.395</td>
<td>11.240</td>
</tr>
<tr>
<td>4</td>
<td>2.924</td>
<td>6.092</td>
</tr>
<tr>
<td>5</td>
<td>2.491</td>
<td>5.189</td>
</tr>
<tr>
<td>6</td>
<td>1.683</td>
<td>3.505</td>
</tr>
<tr>
<td>7</td>
<td>1.437</td>
<td>2.994</td>
</tr>
<tr>
<td>8</td>
<td>1.309</td>
<td>2.726</td>
</tr>
<tr>
<td>9</td>
<td>1.144</td>
<td>2.383</td>
</tr>
<tr>
<td>10</td>
<td>.852</td>
<td>1.775</td>
</tr>
<tr>
<td>11</td>
<td>.732</td>
<td>1.526</td>
</tr>
<tr>
<td>12</td>
<td>.645</td>
<td>1.345</td>
</tr>
<tr>
<td>13</td>
<td>.609</td>
<td>1.268</td>
</tr>
<tr>
<td>14</td>
<td>.513</td>
<td>1.068</td>
</tr>
<tr>
<td>15</td>
<td>.468</td>
<td>.975</td>
</tr>
<tr>
<td>16</td>
<td>.461</td>
<td>.961</td>
</tr>
<tr>
<td>17</td>
<td>.422</td>
<td>.878</td>
</tr>
<tr>
<td>18</td>
<td>.409</td>
<td>.852</td>
</tr>
<tr>
<td>19</td>
<td>.396</td>
<td>.826</td>
</tr>
<tr>
<td>20</td>
<td>.374</td>
<td>.780</td>
</tr>
<tr>
<td>21</td>
<td>.364</td>
<td>.759</td>
</tr>
<tr>
<td>22</td>
<td>.353</td>
<td>.735</td>
</tr>
<tr>
<td>23</td>
<td>.351</td>
<td>.731</td>
</tr>
<tr>
<td>24</td>
<td>.348</td>
<td>.724</td>
</tr>
<tr>
<td>25</td>
<td>.328</td>
<td>.683</td>
</tr>
<tr>
<td>26</td>
<td>.303</td>
<td>.632</td>
</tr>
<tr>
<td>27</td>
<td>.297</td>
<td>.618</td>
</tr>
<tr>
<td>28</td>
<td>.292</td>
<td>.609</td>
</tr>
<tr>
<td>29</td>
<td>.274</td>
<td>.571</td>
</tr>
<tr>
<td>30</td>
<td>.271</td>
<td>.564</td>
</tr>
<tr>
<td>31</td>
<td>.249</td>
<td>.519</td>
</tr>
</tbody>
</table>
Studies have also begun to apply Harman’s test using CFA, which is believed to be a more stringent test for examining whether one factor can account for most of the variance in the data (Malhotra et al., 2017; Podsakoff et al., 2003; 2012). Accordingly, the CFA robust maximum likelihood procedure was used in this study to perform Harman’s single-factor test. The measurement model using all reflective indicators had a very good fit ($\chi^2$/df = 2.77, CFI = 0.94, TLI = 0.93, RMSEA = 0.04). Next, a measurement model was examined where all the reflective indicators were loaded onto a single factor representing a common influence. Compared to the initial model, this model had an extremely weak fit ($\chi^2$/df = 19.67, CFI = .37, TLI = 0.34, RMSEA = 0.155). Second, common latent factor analysis (Podsakoff et al. 2003) was conducted. All latent variables in the measurement model were loaded on a common method construct in addition to loading onto their respective latent constructs. The model showed that the variance attributed to the common method factor was <10.89%. The use of procedural remedies along with the statistical tests implemented, led to the conclusion that common method bias was not a problem in this study.
6.8 Summary

This chapter provided an explanation of the measurement model stage of data analysis. In particular, the unidimensionality, reliability, convergent and discriminant validity of each of the measurement scales adopted and used was evidenced. The last section of this chapter presents the results of the Harman single-factor tests, which were used to check if common method bias existed in this study. Consequently, the measurement model procedures were acceptable allowing progression to the SEM stage, which will be detailed in chapter 7. Following this, chapter 8 will conclude the thesis with a discussion of the findings, in which the implications and limitations of this study will also be presented.
Chapter Seven

Structural Model and Study Findings
7.1 Introduction

This chapter will discuss the inferential analyses of the data collected in this study. It was decided that SEM will assess the presented hypotheses by examining the direct relationships between perceived psychological contract breach, attribution of blame and feelings of violation. Additionally, in order to provide a more informative view of the theoretical and practical applications in service failure encounters, the mediating mechanism of coping strategies will be also tested (i.e. direct and indirect effects of consumer feelings of violation on the four service outcomes resulting from a perceived psychological contract breach). Accordingly, the analyses presented below were organised in a manner that examined the direct and positive associations between perceived breach and attribution of blame. In addition, the direct relationship between attribution of blame and feelings of violation was assessed. The direct and indirect effects of feelings of violation on the four service outcomes (i.e. regret, dissatisfaction, desire for revenge and loyalty intentions) via coping strategies were also tested. All hypothesised relationships were tested using SEM and all analyses in this chapter were performed using AMOS 23. The results of the structural model will indicate whether the proposed relationships were empirically confirmed or not. Additionally, this chapter will present the results of the common method bias test carried out in this study.

7.2 Structural modelling procedure

Hair et al. (2014, p. 566) defined a six-stage SEM process. The first stage was to define the individual constructs in terms of items to be used as measured variables (Hair et al., 2014). The second stage was to use a path diagram to develop and design the measurement model (Hair et al., 2014). The third stage was to complete the study design and measurement model specification in terms of the research method elements, such as sample size and missing data (Hair et al., 2014). Stage four was to assess the validity of the designed measurement model, particularly, the GOF indices (Hair et al., 2014). If validity was achieved, the next two stages involved further structural model testing. The fit statistics and validity tests presented in table 12 (see chapter 6, section 6.6.4) indicated that the measurement model was a good fit with the data ($\chi^2$/df = 2.77; CFI = .94; TLI = .90; RMSEA = .04) and that the validity requirements were met. As a result, testing could now progress to stage five, which was the evaluation of the structural model (i.e. converting the measurement model to the structural model) (Hair et al., 2014). The final stage was to assess the validity of the structural model by evaluating the GOF indices and the significance, direction and size of the structural parameter estimates (Hair et al., 2014). Once a researcher has completed a validity assessment of their structural
model, they can compose their research conclusions and recommendations using the findings of their study.

7.3 The research model

Having successfully tested the measurement models, the structural model was evaluated (Chin, 1998). According to Hair et al. (2014, p.584), small, simple structural models should have more strict evaluation requirements than more complex and larger sample models. They added that it is extremely unacceptable and unrealistic to apply the same high evaluation criteria (e.g. a value of .97 CFI and RMSEA value is .08) to a four-construct model with only two total indicators and a sample size of 100 and an eight-construct model with 50 indicators and 2000 respondents. According to Hair et al. (2014, p.579), large sample can be considered as consisting of more than 500 respondents. The research model in this study had ten constructs, 48 indicator variables and a sample size of 779. Hence, the fit statistics presented in Table 16 indicate that the research model met the criteria and provided an acceptable and a good fit with the data (χ²/df = 3.57; CFI = .91; TLI = .90; RMSEA = .05).

Table 16: Structural model fit summary (GOF Indices)

<table>
<thead>
<tr>
<th>Model</th>
<th>CMIN</th>
<th>DF</th>
<th>p-value</th>
<th>CMIN/DF</th>
<th>CFI</th>
<th>TLI</th>
<th>RMSEA</th>
</tr>
</thead>
<tbody>
<tr>
<td>Default model</td>
<td>3785.5</td>
<td>1059</td>
<td>.000</td>
<td>3.57</td>
<td>.91</td>
<td>.90</td>
<td>.05</td>
</tr>
</tbody>
</table>

7.3.1 Coefficient of determination (R²)

The coefficient of determination (R²) provides the percentage of variation in dependent variable(s) explained by the independent variable(s) (Hair et al., 2014). According to Hair et al. (2014, p.152), the coefficient of determination is the “measure of the proportion of the variance of the dependant variable about its mean that is explained by the independent, or predictor, variables”. The coefficient can range between 0 and 1. If a model is correctly tested and estimated, it can be assumed that the greater the value of R², the greater the explanatory power of the regression equation, which implies the better the predictions of the dependant variable(s) (Hair et al., 2014, p.152). The R² value was used to measure the percentage of the variance explained by the constructs in the structural model, namely attribution of blame, feelings of violation, regret, dissatisfaction, desire for revenge and loyalty intentions. Table 17 presents the R² values for the research model.

The R² value for attribution of blame was (R² = 0.231). This shows that the independent variable (attribution of blame) accounted for 23.1% of the variance in the blame scores. The
attrition of blame measure accounted for 42.3% of the variance in the feelings of violation scores ($R^2 = 0.423$). The feelings of violation measure accounted for 49.2% of the variance in the regret scores ($R^2 = 0.492$), 57.8% of the variance in the dissatisfaction scores ($R^2 = 0.578$), 42.3% of the variance in the desire for revenge scores ($R^2 = 0.423$) and 22.6% of the variance in the loyalty intentions scores ($R^2 = 0.226$). This suggests that feelings of violation had a greater influence over affective states (regret, dissatisfaction and desire for revenge) compared with behavioural intentions (loyalty intentions). According to Falk and Miller (1992), $R^2$ values above 0.10 were substantial. Table 14 shows that the $R^2$ values for the latent variables exceeded the critical level stated above. Similar $R^2$ values were found in Carbonell et al. (2009) study. The SEM test yielded significant results for all, except three, proposed hypotheses. The next section will report the results for each hypothesis tested in this investigation.

Table 17: $R^2$ values for the structural model

<table>
<thead>
<tr>
<th>Antecedent</th>
<th>$R^2$</th>
</tr>
</thead>
<tbody>
<tr>
<td>Attribution of blame</td>
<td>.231</td>
</tr>
<tr>
<td>Feelings of violation</td>
<td>.423</td>
</tr>
<tr>
<td>Outcomes</td>
<td></td>
</tr>
<tr>
<td>Regret</td>
<td>.492</td>
</tr>
<tr>
<td>Dissatisfaction</td>
<td>.578</td>
</tr>
<tr>
<td>Desire for revenge</td>
<td>.423</td>
</tr>
<tr>
<td>Loyalty intentions</td>
<td>.226</td>
</tr>
</tbody>
</table>

7.4 The relationship between psychological contract breach and attribution of blame

Hypothesis 1 predicted that perceived contract breach would have a positive association with attribution of blame to the service firm. Table 18 shows that psychological contract breach significantly influenced attribution of blame ($\beta = 0.481$; $t$-value = 11.5; $p < 0.001$), which suggests that consumers strongly blamed the service providers for the contract breach incidents. Therefore, H1 was supported. This result confirmed that consumers experienced psychological contract violation when the responsibility for the service failure was directly attributed to the firm. The second association tested was the link between attribution of blame to the service provider and consumer feelings of violation.
Table 18: The effect of perceived psychological contract breach on attribution of blame

<table>
<thead>
<tr>
<th>Hypothesis</th>
<th>β</th>
<th>t-value</th>
<th>p-value</th>
<th>Result</th>
</tr>
</thead>
<tbody>
<tr>
<td>H1: Perceived breach on attribution of blame</td>
<td>.481</td>
<td>11.5</td>
<td>***</td>
<td>Supported</td>
</tr>
</tbody>
</table>

**p<0.001

7.5 The relationship between attribution of blame and feelings of violation

In analysing the effect of attribution of blame on feelings of violation, the results in Table 19 show that external attribution of blame had a strong positive influence on consumer feelings of violation (β = 0.651; t-value = 14.8; p < 0.001). These results show that attribution of blame appeared to be an important primary cognition. It was confirmed to directly influence consumer feelings of violation in perceived psychological contract breach events. The more consumers blamed the firm for the contract violation, the more violation they experienced. This was consistent with the prediction of hypothesis 2, which predicted that attribution of blame would have a positive association with feelings of violation. Therefore, H2 was supported.

Table 19: The effect of attribution of blame on feelings of violation

<table>
<thead>
<tr>
<th>Hypothesis path</th>
<th>β</th>
<th>t-value</th>
<th>p-value</th>
<th>Result</th>
</tr>
</thead>
<tbody>
<tr>
<td>H2: Attribution of blame on feelings of violation</td>
<td>.651</td>
<td>14.8</td>
<td>***</td>
<td>Supported</td>
</tr>
</tbody>
</table>

**p<0.001

7.6 Direct and mediating effects of feelings of violation on the four service outcomes: regret, dissatisfaction, desire for revenge and loyalty intentions

This study analysed the indirect effects of coping strategies on the relationship between violation and service outcomes. Figure 3 illustrates the indirect effects within a standard mediation model where path (a) corresponds to the direct effect of the independent variable (IV) on a mediator. Path (b) corresponds to the direct effect of a mediator on the dependent variable (DV) with the presence of an independent variable in the model and path (c') corresponds to the effect of the independent variable (IV) on the dependent variable (DV) after the mediator is introduced.

According to Preacher and Hayes (2004), two conditions needed to be met in order to proceed with the mediation test. First, there should be an effect to be mediated. Second, the predicted direction should be statistically significant for the indirect effect. If the independent variable had no significant effect on the dependent variable when the mediator was controlled, full mediation occurred. Conversely, partial mediation occurred when the value of the effect of
the independent variable was smaller but remained significant when the mediator was controlled (Preacher and Hayes, 2004). This was consistent with Hair et al. (2009, p.753). They contended that mediation involved the comparison of a direct effect between two variables whilst also including an indirect effect through the introduction of a third variable. They also added that full mediation occurred when the direct effect became non-significant in the presence of the indirect effect. Conversely, partial mediation occurred when the direct effect was reduced, but still significant (Hair et al., 2009). Figure 3 shows a simple mediation model.

![Simple mediation model](image)

Figure 3: A simple mediation model

Hypotheses 7, 8 and 9 predicted that the three-dimensional coping measures (i.e. active coping, expressive support-seeking coping and denial coping) would mediate the relationship between feelings of violation and regret, dissatisfaction, desire for revenge and loyalty intentions. To analyse the hypothesized mediated sequences, the bootstrapping bias-corrected confidence interval procedure was applied to the mediation model in SEM (Cheung and Lau, 2008; Zhao et al., 2010; Iacobucci, 2008). The bootstrap procedure works by resampling the data many times to reach an estimate of the entire sampling distribution of the indirect effect. The bootstrap method has some advantages, for example, it assesses lack of normality assumptions and provides more accurate confidence intervals (Cheung and Lau 2008; Preacher and Hayes 2008; Zhao et al., 2010). According to Zhao et al. (2010), the bootstrap test of the indirect effect is more powerful than Sobel’s test. To obtain confidence intervals, this study used 5000 samples. To test the hypotheses concerning mediation effects, the bias-corrected percentile method generated 95% confidence intervals (see also section 7.6.2). If zero was not included in the 95% confidence interval, the indirect effect was considered significant (see Cheung and Lau, 2008; Preacher and Hayes, 2008). The bootstrapping bias-corrected confidence interval procedure has been widely used in recent marketing studies (see Joireman et al., 2013; Malhotra et al., 2017; Obeidat et al., 2017; Santos-Vijande et al., 2016).
7.6.1 Direct effects of feelings of violation on service outcomes

The direct effects of feelings of violation on the four service outcomes (i.e. regret, dissatisfaction, desire for revenge and loyalty intentions) were first tested and then the mediating effects of the three coping strategies (i.e. active coping, expressive-support-seeking coping and denial coping) were examined. Table 20 shows that when consumers perceived a contract breach and attributed blame to the service provider feelings of violation were found to have a significant direct and positive effect on consumers regret (β = 0.63; t-value = 16.95; p < 0.001) (H3). Also, the effect of violation on dissatisfaction was significant (β = 0.70; t-value = 19.00; p < 0.001) (H4). Furthermore, violation positively impacted consumers desire for revenge (β = 0.33; t-value = 9.55; p < 0.001) (H5). As predicted, feelings of violation had a significant negative effect on loyalty intentions (β = -0.311; t-value = -7.69; p < 0.001) (H6). Overall, it was found that feelings of violation led to unfavourable outcomes. As a result, H3, H4, H5 and H6 were confirmed. The results confirmed that feelings of violation had a positive association with regret, dissatisfaction and desire for revenge. The more consumers felt violated because of a perceived psychological contract breach, the more they felt regret, dissatisfaction and a desire for revenge. Conversely, feelings of violation directly and negatively affected their loyalty intentions. Consumers showed less loyalty intentions toward a service firm after a perceived psychological contract breach. It is worth noting that the direct path between feelings of violation and active coping (β = 0.113; t-value = 2.91; p < 0.05), and feelings of violation and expressive support-seeking coping (β = 0.355; t-value = 8.52; p < 0.001) were also statically significant. Figure 4 shows the research model estimates.

The significant effects of feelings of violation on service outcomes suggested the presence of the mediation effects of coping behaviour on the relationship between feelings of violation and service outcomes (regret, dissatisfaction, desire for revenge and loyalty intentions). As mentioned previously in section 7.6, the general rule was that full mediation was present if the direct relationship between the independent variable and dependent variable was significant, but then became insignificant after introducing the mediator (Hair et al., 2009; Preacher and Hayes, 2004). However, if the relationship between IV and DV remained significant after introducing the mediator, then partial mediation existed (Preacher and Kelley, 2011). As feelings of violation remained a significant predictor of the four service outcomes, the mediating effect of any of coping strategies, if present, is partial.
Figure 4: Research model estimates

Perceived Psychological Contract Breach → Attribution of Blame → Feelings of Violation → Active Coping

Feelings of Violation → Expressive Coping

Active Coping → Regret

Dissatisfaction

Revenge

Loyalty

Denial Coping

** p < 0.05

*** p < 0.001

n.s. non-significant
7.6.2 The mediating role of coping strategies

The presence of mediation was assessed using the bootstrapping procedures suggested by Preacher and Hayes (2008), which analysed the sampling distribution of the indirect effect (Cheung and Lau, 2008; Hair et al., 2014, p.644; Preacher and Hayes, 2008; Zhao et al., 2010). In addition, when all mediation criteria were present, following Baron and Kenny (1986) (see Joireman et al., 2013) the determination of full, partial, or no mediation was identified and reported (see Table 20). The advantage of using the bootstrapping approach was that it made no assumption about standard error distribution associated with the indirect effect and provided confidence intervals for the estimate (Cheung and Lau 2008; Iacobucci, 2008; Preacher and Hayes, 2008; Zhao et al., 2010). This method is deemed better than the Sobel test; setting Bootstrap in AMOS allows assessing significance and comparing different mediators in a model (Strizhakova et al., 2012; Tsarenko and Strizhakova, 2013). The significance of the indirect effect using bootstrapping was established by determining whether zero was contained within the 95% confidence interval (thus indicating the lack of significance). The results presented in the last three columns of Table 20 were based on 5000 bootstrapped samples using bias-corrected and accelerated 95% confidence intervals (Cheung and Lau, 2008; Preacher and Hayes, 2004; 2008; Joireman et al., 2013). They show that the indirect effects were indeed significantly different from zero at (p < .05), except for seven paths.

Hypotheses 7, 8 and 9 suggested that coping behaviour (i.e. active coping, expressive-support seeking coping and denial coping) had a mediating effect on the relationship between feelings of violation and each of four service outcomes. The results confirmed that the first simple mediating effect referred to the indirect effect on the relationship between feelings of violation → active coping → regret, which was (0.113 × -0.105) and the associated test statistic (i.e. bootstrap bias-corrected method result) was statistically significant (β = -0.011; p < 0.05) (H7a). The direct effect of the relationship between active coping → regret (β = -.105; t-value = -3.66; p < 0.001) was also significant. The second simple mediating effect referred to the indirect effect on the relationship between feelings of violation → active coping → dissatisfaction, which was (0.113 × -0.094) and the test statistic was statistically significant (β = -0.016; p < 0.05) (H7b). The direct effect of active coping → dissatisfaction (β = -.094; t-value = -3.41; p < 0.05) was also significant. The third simple mediating effect referred to the indirect effect on the relationship between feelings of violation → active coping → desire for revenge, which was (0.113 × -0.005) and the test statistic was statistically non-significant (β = -0.000, p > 0.05) (H7c). The direct effect of active coping → desire for revenge (β = -.005; t-value = -0.16; p > 0.05) was also not significant. The fourth simple mediating effect referred to
the indirect effect on the relationship between feelings of violation → active coping → loyalty intentions, which was \((0.113 \times 0.156)\) and the test statistic was statistically significant \((\beta = 0.017; p < 0.05)\) (H7d). The direct effect of active coping → loyalty intentions \((\beta = .156; t\text{-value} = 4.29; p < 0.001)\) was also significant. Hence, active coping acted as partial mediator in three out of the four simple mediating relationships mentioned above (H7a, H7b and H7d). Hence, H7 was partially supported.

The second effect hypothesised within the mediation route, the indirect effect of feelings of violation via expressive support-seeking coping on service outcomes, was also partially supported (H8). The indirect impact on the relationship between feelings of violation → expressive support-seeking coping → regret was \((0.355 \times 0.141)\) and the associated test statistic was statistically significant \((\beta = 0.050; p < 0.05)\) (H8a). The direct effect of expressive support-seeking coping → regret \((\beta = 0.141; t\text{-value} = 4.43; p < 0.001)\) was significant. Furthermore, the results indicated that the indirect effect on the relationship between feelings of violation → expressive support-seeking coping → dissatisfaction was \((0.355 \times 0.147)\) and the associated test statistic was also statistically significant \((\beta = 0.052; p < 0.001)\) (H8b). The results also showed that the direct effect of expressive support-seeking coping → dissatisfaction \((\beta = 0.147; t\text{-value} = 4.81; p < 0.001)\) was significant. Conversely, the results indicated that the indirect effect on the relationship between feelings of violation → expressive support-seeking coping → desire for revenge was \((0.355 \times 0.035)\) and the associated test statistic was not statistically significant \((\beta = 0.012; p > 0.05)\) (H8c). In addition, the direct effect of expressive support-seeking coping → desire for revenge was non-significant \((\beta = 0.035; t\text{-value} = 1.05; p > 0.05)\). Therefore, the hypothesis was not supported. However, the indirect effect on the relationship between feelings of violation → expressive support-seeking coping → loyalty intentions was \((0.355 \times -0.112)\) and the associated test statistic was statistically significant \((\beta = -0.039; p < 0.05)\) (H8d). Furthermore, the direct effect of expressive support-seeking coping → loyalty intentions was significant \((\beta = -0.112; t\text{-value} = -2.84; p < 0.05)\). As a result, this study confirmed that expressive support-seeking coping acted as partial mediator in the relationship between violation and regret, violation and dissatisfaction and violation and loyalty intentions (H8a, H8b and H8d). However, the results did not confirm H8c, which stated that expressive support-seeking coping partially mediates the relationship between feelings of violation and desire for revenge. As a result, H8 was partially supported.

The last mediation effect under investigation in this study was the mediating role of denial coping. The influence of feelings of violation on the four service outcomes was not mediated by denial coping behaviour (H9), as the indirect effect on the relationship between feelings of violation → denial coping → regret mediation route was \((0.063 \times 0.088)\) and the
associated test statistic was not statistically significant (β = 0.005; p > 0.05) (H9a). Also, the indirect influence on the relationship between feelings of violation → denial coping → dissatisfaction was (0.063 × -0.096) and the associated test statistic was statistically non-significant (β = -0.006; p > 0.05) (H9b). Furthermore, the results showed that the indirect effect on the relationship between feelings of violation → denial coping → desire for revenge was (0.063 × 0.532) and the associated test statistic was also not statistically significant (β = 0.033; p > 0.05) (H9c). The final results reported that the indirect effect on the relationship between feelings of violation → denial coping → loyalty intentions was (0.063 × 0.305) and the associated test statistic was also not statistically significant (β = 0.019; p > 0.05) (H9d). There was no mediation and the hypotheses H9a, H9b, H9c and H9d were not supported. Therefore, the study confirmed that denial coping did not mediate the relationship between feelings of violation and the four service outcomes (H9). However, the results revealed that the paths: denial coping → regret (β = 0.088; t-value = 3.05; p < 0.05), denial → dissatisfaction (β = -0.096; t-value = -3.49; p < 0.001), denial coping → desire for revenge (β = 0.532; t-value = 15.28; p < 0.001) and denial coping → loyalty intentions (β = 0.305; t-value = 8.15; p < 0.001) were all statically significant.

Based on the analysis of the data, it can be concluded that active coping and expressive-support seeking coping partially mediated the relationship between feelings of violation and regret, dissatisfaction and loyalty intentions but not desire for revenge. In addition, denial coping had no mediating effect on the relationship between feelings of violation and the service outcomes although the results showed that the direct effects of denial coping on the four service outcomes were significant. Thus, it could be inferred that feelings of violation had both direct and indirect effects on service outcomes. Therefore, H7 and H8 were partially confirmed and H9 was not confirmed. The mediating effects of coping on the violation-service outcome relationships are presented in Table 20.
Table 20: Bootstrapping assessment of direct and mediation testing

The direct and indirect effects of feelings of violation on the service outcomes: regret, dissatisfaction, desire for revenge and loyalty intention.

### 20a: Direct effects

<table>
<thead>
<tr>
<th>Relationship</th>
<th>$\beta$</th>
<th>p-value</th>
<th>lower^b</th>
<th>upper^c</th>
<th>p-value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Feelings of violation $\rightarrow$ regret</td>
<td>.632</td>
<td>***</td>
<td>.558</td>
<td>.698</td>
<td>.001***</td>
</tr>
<tr>
<td>Feelings of violation $\rightarrow$ dissatisfaction</td>
<td>.700</td>
<td>***</td>
<td>.624</td>
<td>.764</td>
<td>.001***</td>
</tr>
<tr>
<td>Feelings of violation $\rightarrow$ desire for revenge</td>
<td>.330</td>
<td>***</td>
<td>.255</td>
<td>.396</td>
<td>.001***</td>
</tr>
<tr>
<td>Feelings of violation $\rightarrow$ loyalty intentions</td>
<td>-.311</td>
<td>***</td>
<td>-.408</td>
<td>-.208</td>
<td>.000***</td>
</tr>
<tr>
<td>Feelings of violation $\rightarrow$ active coping</td>
<td>.113</td>
<td>.004**</td>
<td>.024</td>
<td>.203</td>
<td>.013**</td>
</tr>
<tr>
<td>Feelings of violation $\rightarrow$ expressive support-seeking coping</td>
<td>.355</td>
<td>***</td>
<td>.272</td>
<td>.439</td>
<td>.000***</td>
</tr>
<tr>
<td>Feelings of violation $\rightarrow$ denial coping</td>
<td>.063</td>
<td>.109n.s.</td>
<td>-.019</td>
<td>.138</td>
<td>.130n.s.</td>
</tr>
</tbody>
</table>

### 20b: Indirect effects

<table>
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<tr>
<th>Relationship</th>
<th>$\beta$</th>
<th>p-value</th>
<th>lower^b</th>
<th>upper^c</th>
<th>p-value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Active coping $\rightarrow$ regret</td>
<td>-.105</td>
<td>***</td>
<td>-.177</td>
<td>-.031</td>
<td>.004**</td>
</tr>
<tr>
<td>Active coping $\rightarrow$ dissatisfaction</td>
<td>-.094</td>
<td>***</td>
<td>-.162</td>
<td>-.025</td>
<td>.009**</td>
</tr>
<tr>
<td>Active coping $\rightarrow$ desire for revenge</td>
<td>-.005</td>
<td>.866n.s.</td>
<td>-.077</td>
<td>.064</td>
<td>.879n.s.</td>
</tr>
<tr>
<td>Active coping $\rightarrow$ loyalty intentions</td>
<td>.156</td>
<td>***</td>
<td>.074</td>
<td>.240</td>
<td>.001***</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Relationship</th>
<th>$\beta$</th>
<th>p-value</th>
<th>lower^b</th>
<th>upper^c</th>
<th>p-value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Expressive support-seeking coping $\rightarrow$ regret</td>
<td>.141</td>
<td>***</td>
<td>.053</td>
<td>.223</td>
<td>.002**</td>
</tr>
<tr>
<td>Expressive support-seeking coping $\rightarrow$ dissatisfaction</td>
<td>.147</td>
<td>***</td>
<td>.069</td>
<td>.226</td>
<td>.001***</td>
</tr>
<tr>
<td>Expressive support-seeking coping $\rightarrow$ desire for revenge</td>
<td>.035</td>
<td>.291n.s.</td>
<td>-.044</td>
<td>.112</td>
<td>.365n.s.</td>
</tr>
<tr>
<td>Expressive support-seeking coping $\rightarrow$ loyalty intentions</td>
<td>-.112</td>
<td>.004**</td>
<td>-.210</td>
<td>-.017</td>
<td>.021**</td>
</tr>
<tr>
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<td>p-value</td>
<td>lower</td>
<td>upper</td>
<td>p-value</td>
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<tr>
<td>--------------</td>
<td>--------</td>
<td>---------</td>
<td>-------</td>
<td>-------</td>
<td>---------</td>
</tr>
<tr>
<td>Denial coping $\rightarrow$ regret</td>
<td>.088</td>
<td>.002**</td>
<td>.021</td>
<td>.150</td>
<td>.007**</td>
</tr>
<tr>
<td>Denial coping $\rightarrow$ dissatisfaction</td>
<td>-.096</td>
<td>***</td>
<td>-.157</td>
<td>-.035</td>
<td>.001***</td>
</tr>
<tr>
<td>Denial coping $\rightarrow$ desire for revenge</td>
<td>.532</td>
<td>***</td>
<td>.465</td>
<td>.594</td>
<td>.000***</td>
</tr>
<tr>
<td>Denial coping $\rightarrow$ loyalty intentions</td>
<td>.305</td>
<td>***</td>
<td>.221</td>
<td>.386</td>
<td>.000***</td>
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</table>

### Indirect effects

**20b: The effects of feelings of violation on service outcomes via active coping behaviour**

<table>
<thead>
<tr>
<th>Hypothesis</th>
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<th>p-value</th>
<th>lower</th>
<th>upper</th>
<th>p-value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Feelings of violation $\rightarrow$ regret</td>
<td>-.011</td>
<td>-</td>
<td>-.037</td>
<td>-.002</td>
<td>.009**</td>
</tr>
<tr>
<td>Feelings of violation $\rightarrow$ dissatisfaction</td>
<td>-.016</td>
<td>-</td>
<td>-.033</td>
<td>-.002</td>
<td>.012**</td>
</tr>
<tr>
<td>Feelings of violation $\rightarrow$ desire for revenge</td>
<td>-.000</td>
<td>-</td>
<td>-.013</td>
<td>.008</td>
<td>.820 n.s.</td>
</tr>
<tr>
<td>Feelings of violation $\rightarrow$ loyalty intentions</td>
<td>.017</td>
<td>-</td>
<td>.004</td>
<td>.045</td>
<td>.009**</td>
</tr>
</tbody>
</table>

**20c: The effects of feelings of violation on service outcomes via expressive support-seeking coping behaviour**

<table>
<thead>
<tr>
<th>Hypothesis</th>
<th>$\beta$</th>
<th>p-value</th>
<th>lower</th>
<th>upper</th>
<th>p-value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Feelings of violation $\rightarrow$ regret</td>
<td>.050</td>
<td>-</td>
<td>.024</td>
<td>.102</td>
<td>.002**</td>
</tr>
<tr>
<td>Feelings of violation $\rightarrow$ dissatisfaction</td>
<td>.052</td>
<td>-</td>
<td>.170</td>
<td>.315</td>
<td>.000***</td>
</tr>
<tr>
<td>Feelings of violation $\rightarrow$ desire for revenge</td>
<td>.012</td>
<td>-</td>
<td>-.018</td>
<td>.045</td>
<td>.355 n.s.</td>
</tr>
<tr>
<td>Feelings of violation $\rightarrow$ loyalty intentions</td>
<td>-.039</td>
<td>-</td>
<td>-.088</td>
<td>-.007</td>
<td>.019**</td>
</tr>
</tbody>
</table>
20d: The effects of feelings of violation on service outcomes via denial coping behaviour

<table>
<thead>
<tr>
<th>Hypothesis</th>
<th>$\beta$</th>
<th>p-value</th>
<th>lower</th>
<th>upper</th>
<th>p-value</th>
<th>Type of effect / mediation</th>
</tr>
</thead>
<tbody>
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<td>Feelings of violation $\rightarrow$ regret</td>
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<td>-</td>
<td>.000</td>
<td>.020</td>
<td>.067*</td>
<td>No mediation effect</td>
</tr>
<tr>
<td>Feelings of violation $\rightarrow$ dissatisfaction</td>
<td>-.006</td>
<td>-</td>
<td>-.021</td>
<td>.001</td>
<td>.094*</td>
<td>No mediation effect</td>
</tr>
<tr>
<td>Feelings of violation $\rightarrow$ desire for revenge</td>
<td>.033</td>
<td>-</td>
<td>-.010</td>
<td>.087</td>
<td>.123n.s.</td>
<td>No mediation effect</td>
</tr>
<tr>
<td>Feelings of violation $\rightarrow$ loyalty intentions</td>
<td>.019</td>
<td>-</td>
<td>-.005</td>
<td>.053</td>
<td>.115n.s.</td>
<td>No mediation effect</td>
</tr>
</tbody>
</table>

* Direct and indirect effects estimated using Preacher and Hayes (2008) bootstrapping procedure (Zhao et al., 2010).

b Lower confidence interval (at 95%)

^c Upper confidence interval (at 95%)

d Indicates whether the indirect effect was significant using Baron and Kenny (1986) and whether there is full or partial mediation.

* p < 0.10 ; ** p < 0.05 ; *** p < 0.001

n.s. non-significant.
7.7 Summary

This chapter examined, in detail, the structural model developed in this study. The results indicated that perceived contract breach had a significant positive relationship with attribution of blame, which subsequently was positively associated with feelings of violation. Regarding the direct effects of feelings of violation on consumer regret, dissatisfaction, desire for revenge and loyalty intentions, the results revealed that feelings of violation directly and positively affected consumer regret, dissatisfaction and desire for revenge and negatively affected consumer loyalty intentions.

Regarding the mediating effects of the three coping strategies on the relationships between feelings of violation and the four outcomes, the results suggested that both active coping and expressive support-seeking coping partially mediated the relationship between feelings of violation and regret, dissatisfaction and loyalty intentions, but that there was no mediation between feelings of violation and desire for revenge. There was no significant indirect effect on the relationship between feelings of violation and any of the four service outcomes via denial coping behaviour. Denial coping had no mediating effect.

Table 21 summarises the results of the hypotheses tested in this thesis. Drawing on the empirical evidence reported in this chapter, the final chapter will present a discussion of the research questions in relation to the findings of this study. It will also present the contributions, managerial implications, research limitations of this thesis and suggest directions for future research.
### Table 21: Summary of results: hypothesised relationships

<table>
<thead>
<tr>
<th>Hypothesis</th>
<th>Hypothesised relationships</th>
<th>Result</th>
</tr>
</thead>
<tbody>
<tr>
<td>Hypothesis 1</td>
<td>Psychological contract breach has a positive association with external attribution of blame.</td>
<td>Supported</td>
</tr>
<tr>
<td>Hypothesis 2</td>
<td>Attribution of blame to an external party (i.e. a service provider) has a positive association with feelings of violation.</td>
<td>Supported</td>
</tr>
<tr>
<td>Hypothesis 3</td>
<td>Feelings of violation have a positive association with regret.</td>
<td>Supported</td>
</tr>
<tr>
<td>Hypothesis 4</td>
<td>Feelings of violation have a positive association with dissatisfaction.</td>
<td>Supported</td>
</tr>
<tr>
<td>Hypothesis 5</td>
<td>Feelings of violation have a positive association with desire for revenge.</td>
<td>Supported</td>
</tr>
<tr>
<td>Hypothesis 6</td>
<td>Feelings of violation have a negative association with loyalty intentions.</td>
<td>Supported</td>
</tr>
<tr>
<td>Hypothesis 7</td>
<td>Active coping partially mediates the relationship between feelings of violation and (a) regret, (b) dissatisfaction, (c) desire for revenge and (d) loyalty intentions.</td>
<td>Partially supported</td>
</tr>
<tr>
<td>Hypothesis 7a</td>
<td>Active coping partially mediates the relationship between feelings of violation and regret.</td>
<td>Supported</td>
</tr>
<tr>
<td>Hypothesis 7b</td>
<td>Active coping partially mediates the relationship between feelings of violation and dissatisfaction</td>
<td>Supported</td>
</tr>
<tr>
<td>Hypothesis 7c</td>
<td>Active coping partially mediates the relationship between feelings of violation and desire for revenge.</td>
<td>Not supported</td>
</tr>
<tr>
<td>Hypothesis 7d</td>
<td>Active coping partially mediates the relationship between feelings of violation and loyalty intentions.</td>
<td>Supported</td>
</tr>
<tr>
<td>Hypothesis 8</td>
<td>Expressive support-seeking coping partially mediates the relationship between feelings of violation and (a) regret, (b) dissatisfaction, (c) desire for revenge and (d) loyalty intentions.</td>
<td>Partially supported</td>
</tr>
<tr>
<td>Hypothesis 8a</td>
<td>Expressive support-seeking coping partially mediates the relationship between feelings of violation and regret.</td>
<td>Supported</td>
</tr>
<tr>
<td>Hypothesis 8b</td>
<td>Expressive support-seeking coping partially mediates the relationship between feelings of violation and dissatisfaction.</td>
<td>Supported</td>
</tr>
<tr>
<td>Hypothesis 8c</td>
<td>Expressive support-seeking coping partially mediates the relationship between feelings of violation and desire for revenge.</td>
<td>Not supported</td>
</tr>
<tr>
<td>Hypothesis 8d</td>
<td>Expressive support-seeking coping partially mediates the relationship between feelings of violation and loyalty intentions.</td>
<td>Supported</td>
</tr>
<tr>
<td>Hypothesis</td>
<td>Hypothesised relationships</td>
<td>Result</td>
</tr>
<tr>
<td>------------</td>
<td>--------------------------------------------------------------------------------------------</td>
<td>-----------</td>
</tr>
<tr>
<td>Hypothesis 9</td>
<td>Denial coping partially mediates the relationship between feelings of violation and (a) regret, (b) dissatisfaction, (c) desire for revenge and (d) loyalty intentions.</td>
<td>Not supported</td>
</tr>
<tr>
<td>Hypothesis 9a</td>
<td>Denial coping partially mediates the relationship between feelings of violation and regret.</td>
<td>Not supported</td>
</tr>
<tr>
<td>Hypothesis 9b</td>
<td>Denial coping partially mediates the relationship between feelings of violation and dissatisfaction.</td>
<td>Not supported</td>
</tr>
<tr>
<td>Hypothesis 9c</td>
<td>Denial coping partially mediates the relationship between feelings of violation and desire for revenge.</td>
<td>Not supported</td>
</tr>
<tr>
<td>Hypothesis 9d</td>
<td>Denial coping partially mediates the relationship between feelings of violation and loyalty intentions.</td>
<td>Not supported</td>
</tr>
</tbody>
</table>
Chapter Eight

Discussion and Conclusion
8.1 Introduction

The primary objective of this thesis was to develop and test a comprehensive model to examine possible antecedents and outcomes of perceived psychological contract breach and violation. In doing so, the study empirically examined the antecedents of perceived psychological contract breach in a structural fashion. Additionally, it empirically tested the mediating role of the three coping strategies on the relationship between feelings of violation and the four service outcomes. Generally, the SEM results supported most of the study hypotheses.

This chapter is divided into four sections. First, the study findings will be discussed, leading to a comprehensive discussion of the study in terms of the research questions and study objectives, measurement model and structural model results and findings, theoretical and managerial implications and policies for service providers. Next, the limitations of the study will be detailed. Finally, directions for future research will be suggested.

8.2 Discussion of the findings

The main aim of this study was to examine the relationship between psychological contract breach and its antecedents and outcomes. This study evaluated two antecedents of psychological contract breach: attribution of blame and feelings of violation. Furthermore, it considered four service outcomes associated with feelings of violation resulting from the perception of psychological contract breach: regret, dissatisfaction, desire for revenge and loyalty intentions. Furthermore, the study examined the indirect effects of feelings of violation on the four service outcomes via three coping strategies: active coping, expressive support-seeking coping and denial coping. The study then tested a comprehensive model developed using the cognitive appraisal theory.

The SEM testing procedures revealed very interesting findings. Twelve out of total eighteen hypotheses tested elicited statistically significant results \( (p < 0.05) \) (see Table 21) and were empirically confirmed. Indeed, in examining the research model it was evident that, based on the GOF indices, the research model represented a good fit with the data. The study found that when psychological contract breach occurred in a service setting (i.e. mobile phone providers), users directly attributed blame to the service provider. The research model showed that perceived psychological contract breach had a direct relationship with attribution of blame (H1), thus supporting the findings of Goles et al. (2009), Malhotra et al. (2017) and Peng et al. (2016). In addition, the research model supported (H2) by demonstrating a direct relationship
between attribution of blame and feelings of violation. In the vein of Morrison and Robinson (1997), Gelbrich (2010) and Robinson and Morrison (2000), the cognitive process influenced the relationship between perceived breach and feelings of violation.

In regards to the direct outcomes of feelings of violation resulting from a perceived psychological contract breach in the context of service encounter, the structural model provided empirical evidence of direct relationships between feelings of violation and regret (H3), dissatisfaction (H4), desire for revenge (H5) and loyalty intentions (H6). Feelings of violation were found to have a positive and direct association with consumer regret. Consumers felt sorry and regretted choosing their mobile phone provider, as they believed that they had made the wrong decision in their choice of mobile phone provider. In addition, violation had a direct and positive relationship with dissatisfaction. Consumers were highly dissatisfied with their mobile phone provider. The results indicated that consumers also had a positive desire for revenge against their mobile phone provider due to their feelings of violation. The results confirmed a direct and negative relationship between violation and loyalty intentions. When consumers felt that they had been badly violated they were less likely to be loyal to their mobile phone provider. These findings confirmed the findings of prior marketing studies completed by Bitner et al. (1990), Bougie et al. (2003), Daunt and Greer (2015), Davvetas et al. (2017), Gelbrich (2010), Grégoire and Fisher (2008), Grégoire et al. (2010), Obeidat et al. (2017), Theotokis et al. (2012), Wan et al. (2011), Wang et al. (2007) and Zeelenberg and Pieters (2007), along with management studies completed by Robinson and Morrison, (1995), Rousseau (1989), Sels et al. (2004) and Zhao et al. (2007).

In addition to the hypothesised direct relationships, the research model empirically examined the extent of mediation coping strategies had on the indirect relationship between feelings of violation and service outcomes. First, the structural model verified that the relationship between feelings of violation and regret (H7a), dissatisfaction (H7b) and loyalty intentions (H7d) were indirect, partially mediated by active coping behaviour. In addition, the research model supported the direct effect of active coping on these three outcomes. Active coping led to favourable outcomes. Hence, the findings of Tsarenko and Strizhakova (2013) were supported, and, as a result, (H7) was partially supported.

Second, the study found that feelings of violation had an indirect relationship with regret (H8a), dissatisfaction (H8b) and loyalty intentions (H8d) mediated via an expressive support-seeking coping strategy. In contrast, the data rejected the proposed indirect relationship between
feelings of violation and desire for revenge via expressive support-seeking coping (H8c), which did not exhibit statistical significance (p > 0.05). Furthermore, the direct effect of expressive support-seeking coping on regret, dissatisfaction and loyalty intentions was statically significant. As a result, expressive support-seeking coping mediated the relationship between feelings of violation and regret, dissatisfaction and loyalty intentions, but led to negative affective states and behavioural outcomes, confirming the findings of Strizhakova et al. (2012) and partially supporting (H7) and (H8) (see also section 8.3.3). However, contrary to expectations, the indirect effects of feelings of violation on the four service outcomes via denial coping were not supported. Denial coping did not mediate the relationships between feelings of violation and regret, dissatisfaction, desire for revenge and loyalty intentions. As result, hypotheses (H9a), (H9b), (H9c) and (H9d) were rejected and hence (H9) was not accepted. However, interestingly, the results showed that the indirect effects of feelings of violation → denial coping → regret (β = 0.005; p < 0.10) and feelings of violation → denial coping → dissatisfaction (β = -0.006; p < 0.10) were statically significant at 10%. Additionally, the direct paths of denial coping → regret (β = 0.088; p < 0.05), denial coping → dissatisfaction (β = -0.096; p < 0.001), denial coping → desire for revenge (β = 0.532; p < 0.001) and denial coping → loyalty intentions (β = 0.305; p < 0.001) were all statically significant. So, as expected, when consumers used denial as a coping strategy, they felt less dissatisfied and maintained positive loyalty intentions. Yet, due to unreleased feelings of violation, they felt regret and showed a strong desire for revenge confirming the findings of Strizhakova et al. (2012), Zeelenberg and Pieters, (2004) and Zourrig et al. (2014). Also, this was consistent with behavioural research, which suggested that suppressing feelings led to depression and anxiety, which eventually led to unpleasant behaviour (Amstadter, 2008). Therefore, the overall GOF indices, together with the path estimations, showed that in addition to a direct relationship between feelings of violation and the four service outcomes, feelings of violation were found to have an indirect relationship with regret, dissatisfaction and loyalty intentions mediated by active and expressive support-seeking coping strategies.

In summary, the results supported the proposed model and most of the hypotheses. A perception of psychological contract breach was found to contribute to consumer cognitive appraisalal processes and affect service outcomes during service encounters. When the consumer perceived a psychological contract breach, the degree of external attribution of blame to the service provider was high and confirmed. In line with Robinson and Morrison (2000) and Theotokis et al. (2012), attribution of blame, in terms of psychological contract breach, determined
the intensity of feelings of violation that consumers experienced. This experience, as a result, led to direct negative service outcomes. Consumers who highly felt violation, also felt extreme regret about their choice of mobile phone provider and highly dissatisfied with the service. They also desired revenge against their mobile phone provider and did not intend to be loyal to them. According to Gilmore and McMullan (2002), a long-term success in a market is determined by an organisation’s ability to improve and sustain a high level of customers’ loyalty.

When perceived contract breach and consumers felt violated, both active coping and expressive support-seeking coping mediated the relationship between feelings of violation and regret, dissatisfaction and loyalty intentions. However, neither constructs mediated the relationship between feelings of violation and desire for revenge. Interestingly, denial did not mediate the relationship between feelings of violation and the four service outcomes when consumers perceived a contract breach, but it did have a direct effect on the service outcomes. The results of this study found the following to be true. First, perceived contract breach was a key antecedent that evoked consumer cognitive processes, which led to different service outcomes. Second, attribution of blame was a key primary cognition in perceived contract breach failures, which subsequently led to consumers feeling violated and adopting various coping methods (Bougie et al., 2003; Kalamas et al., 2008; Pavlou and Gefen, 2005; Watson and Spence, 2007). Finally, active coping and expressive support-seeking coping partially mediated the relationship between feelings of violation and regret, dissatisfaction and loyalty intentions (Malhotra et al., 2017; Sengupta et al., 2015).

The findings of this study indicate that different coping mechanisms have different outcomes. Consumers should be encouraged to use active coping strategies to resolve problems; otherwise, they may cope by expressing their negative emotions to others or deny the episode, both of which lead to detrimental outcomes for the firm and the consumer. Particularly, when consumers deny the problem, they become less dissatisfied and report positive loyalty intentions. However, due to the lingering emotional distress of violation, they feel regret and may try to get revenge on the firm. Failure denial does not guarantee negative emotion dismissal and inadequately addresses negative feelings and prolongs the lingering of failure in consumers’ minds (Thomsen, 2006). When consumers deny problems, it can lead to negative outcomes.
8.3 Study conclusions

The conclusions of this study are divided into three separate sections. Each will be discussed as follows. First, the chapter will present the study objective and conceptualisation conclusions followed by the measurement model empirical investigation conclusions. Finally, the structural model empirical analysis conclusions will be presented.

8.3.1 Study objectives and conceptualisation

Chapter 1 presented the theoretical and practical context of this study and briefly covered the importance of this study in terms of the theoretical and managerial needs. Moreover, chapter 1, section 1.5 stated that the objectives of this study were to assess the relationship between perceived contract breach, attribution of blame and feelings of violation, alongside an investigation of the direct association between feelings of violation and the four contract breach outcomes (i.e. regret, dissatisfaction, desire for revenge and loyalty intentions). Another study objective was to explore the mediating effects of coping strategies on the relationship between contract breach, violation and service outcomes. The final objective of this study was to give service marketing theorists and practitioners an insight into the impact of coping on service outcomes after incidents of contract breach and consumer feelings of violation. In respect to this outcome, an extensive review of existing literature was conducted (see chapters 2 and 3). Due to a lack of research investigating the antecedents and outcomes of perceived psychological contract breach within service encounters, the aim of this study was to offer a deeper understanding of the direct and indirect effects of feelings of violation (after a perceived psychological contract breach) on four service outcomes via an investigation into consumer coping behaviour. Accordingly, literature and theory was not only drawn from a marketing perspective, but rather from organisational behaviour, management, psychology, service marketing and consumer behaviour perspectives and paradigms.

Therefore, this study attempted to expand existing research on psychological contract (e.g. Argyris, 1960; Conway and Briner, 2005; Rousseau, 1989; Morrison and Robinson, 1997) and service marketing literature (e.g. Bitner et al., 1990; Boulding et al., 1993; Zeithaml et al., 1993) using cognitive appraisal theory to examine potential antecedents and outcomes of psychological contract breach and violation. Moreover, the study aimed to offer empirical insight about the direct and indirect effects of feelings of violation on service outcomes by examining three coping strategies using the SEM bootstrapping bias-corrected confidence interval
procedure. The study also aimed to build on prior marketing literature research (e.g. Lövblad et al., 2012; Malhotra et al., 2017; Pavlou and Gefen, 2005), which has only focused narrowly on psychological contract fulfilment and violation to adopt a valid, multi-item measure of perceived psychological contract breach and feelings of violation in a more holistic view.

By using a survey-based strategy to collect data, this study also aimed to give theorists and practitioners new insight into the antecedents and outcomes of actual experiences of perceived contract breach and violation, as opposed to experimental, staged and scenario based-findings (cf. Lövblad et al., 2012; Malhotra et al., 2017; Pavlou and Gefen, 2005; Theotokis et al., 2012; Wang et al., 2007). Hence, in holistically theorising psychological contract breach and gathering data about real-life experiences, new insights have been obtained which will help academics and practitioners understand consumer responses to perceived contract breach and feelings of violation.

As shown in the literature review and conceptualisation chapters (see chapter 2, 3 and 4), this study used the cognitive appraisal theory to develop a model to test multiple relationships. The conceptual model reflected literature from several research fields including organisational behaviour, management, emotions, psychology, service marketing, medical and firm-consumer relationships, all of which noted a direct association between perceived psychological contract breach, attribution of blame and feelings of violation. The conceptual model in this study differed from previous disconfirmation models in that it took into account that consumers’ overall service failure evaluation and consequently their cognitive, emotional and behavioural outcomes were influenced by their current perception of a service failure incident (i.e. perceived psychological contract breach) and not their current expectations. This perception is the result of prior expectations regarding obligations that derived from different sources such as, promises and the contract terms and conditions. This study applied the theoretical basis of the cognitive appraisal theory and measurement approaches from previous research investigations (e.g. Duhachek, 2005; Robinson and Morrison, 2000; Stephens and Gwinner, 1998) of perceived psychological contract and feelings of violation to offer a comprehensive model that analysed cognitive appraisal and emotional elicitation to further contribute to service marketing literature.

The study also proposed that appraisal of perceived contract breach triggered several coping strategies that influenced the evaluation of the service encounter. Thus, the conceptual model also examined the direct and indirect effects of feelings of violation on the four service outcomes (mediated by active coping, expressive support-seeking coping and denial coping
strategies). Hence, the conceptual model supported several marketing studies which have stated that service encounter failure affects consumer emotions, coping behaviour and service outcomes (see Balaji et al., 2017; Duhachek, 2005; Fang and Chiu, 2014; Gelbrich, 2010; Grégoire and Fisher, 2008; Malhotra et al., 2017; Obeidat et al., 2017; Robinson and Morrison, 2000; Theotokis et al., 2012; Tsarenko and Strizhakova, 2013; Zourrig et al., 2014). Thus, the structural model theorised and empirically examined multiple antecedents to perceived psychological contract breach encounters and their negative consequences (see also section 8.2).

8.3.2 Measurement model conclusions

Chapter 6 reported the results of the descriptive analysis stage of this investigation and examined whether the constructs of interest were efficiently measured using multiple-item scales. The chapter began by profiling the sample’s demographics, analysing the data using fundamental statistical tests (i.e. mean, standard deviation, skewness and kurtosis). Next, normality and outlying observation issues were discussed prior to assessing the measurement model.

Having completed the descriptive analysis phase, the chapter analysed the unidimensionality, reliability and convergent and discriminant validity of the data. Following EFA procedures, CFA was employed and the results revealed evidence for each construct in terms of the conditions of unidimensionality and convergent validity. In addition, the Cronbach alpha, composite reliability and AVE tests were used to assess the reliability of each construct. All measures exceeded the cut-off score for each criterion.

An assessment of discriminant validity was also reported at the measurement model stage of analysis. As recommended by Voorhees et al. (2016), the AVE-SV test (Fornell and Larcker, 1981) for discriminant validity was performed. As Table 14 demonstrated, Fornell and Larcker's (1981) criteria was achieved as the square roots of the AVE of individual construct were greater than the correlations shared between the construct and other constructs in the model. These procedures led to the conclusion that the discriminant validity criteria were met for all of the constructs used.

Finally, prior to proceeding to the structural stage of the investigation, a common method bias test was employed. In respect to this, Harman’s single-factor test was applied using EFA and CFA. The test was conducted and no single factor accounted for more than 30% of the variance, which was below the 50% threshold set by Podsakoff and Organ (1986).
Accordingly, having completed EFA and CFA procedures, it can be concluded that at the end of the measurement model stage of analysis each construct passed the required tests and the study could now enter the structural model testing phase.

### 8.3.3 Structural model conclusions

The structural model results showed that the model fitted well with the data and provided empirical support for most of the tested hypotheses. Specifically, the conceptual model first confirmed the research of Goles et al. (2009), Malhotra et al. (2017), Morrison and Robinson (1997), Peng et al. (2016), Forrester and Maute (2001) and Watson and Spence (2007) in revealing a statistically significant link between perceived contract breach and attribution of blame. Second, the relationship between attribution of blame and negative emotions (i.e. feelings of violation) was verified, thus, the findings of Obeidat et al. (2017) and Robinson and Morrison (2000) were supported. Third, the model provided statistically significant evidence of a direct relationship between feelings of violation and regret, thus, the proposals of Zeelenberg and Pieters (2004), Davvetas et al. (2017) and Zourrig et al. (2014) were upheld.

Also, a direct relationship between feelings of violation and dissatisfaction, as expected by Kickul and Lester (2001), Lövblad et al. (2012), Turnley and Feldman (2000) and Zhao et al. (2007) was confirmed by the empirical results. In addition, the direct relationship between feelings of violation and desire for revenge was found to be statically significant. This was consistent with the findings and proposals of Finkel et al. (2002), Grégoire and Fisher (2008), Grégoire et al. (2010) and Koehler and Gershoff (2003). Finally, the association between feelings of violation, as powerful negative emotions and loyalty intentions was supported, which was suggested by the research studies conducted by Funches, (2011) and Strizhakov et al. (2012).

Furthermore, an examination of the indirect effects of violation on the service outcomes of the three coping strategies showed that active coping and expressive support-seeking coping mediated the effects of feelings of violation on regret, dissatisfaction and loyalty intentions. However, the study did not find support for the indirect effects of violation on desire for revenge via both active coping and expressive support-seeking coping. Additionally, owing to a lack of statistical significance, hypotheses (H9) and, thus, (H9a), (H9b), (H9c) and (H9d) were rejected. While the model provided some support as it demonstrated the mediating role of active coping and expressive support-seeking coping, (H9) failed to uphold the findings of Strizhakova et al. (2012), in exhibiting a non-significant relationship between feelings of violation and denial coping.
behaviour. Hence, denial coping did not mediate the relationship between feelings of violation and the four service outcomes.

One reason may be that denial appeared to be the least adaptive strategy for consumers (Tsarenko and Strizhakova, 2013). Another reason may be due to the type of resource exchanged and the context of study (i.e. tangibility versus intangibility – controllable versus uncontrollable resources exchanged due to the nature of psychological contracts). Yi and Baumgartner (2004) stated that when expectations are not met due to impersonal circumstances, mental and behavioural disengagement are the most common coping strategies. They also stated that “the most general conclusion that can be derived from our data seems to be that perceptions of the degree to which the situation can be changed or not determine whether the consumer will try to manage the problem or adapt to the situation” (Yi and Baumgartner, 2004, p.315). As psychological contracts emerge from contractual agreements and perceived failures that have occurred due to perceptions of reneging not due to consumer fault, the relationship between violation and denial appears to be non-applicable within this context. Furthermore, Yi and Baumgartner (2004) studied how negative emotions led to different coping behaviours. They found that anger led to confrontive coping and that frustration led to disengagement. As feelings of violation reflect a combination of first-order feelings (i.e. betrayal, frustration and anger emotions), this may be another reason for the non-significant relationship between violation and denial coping behaviour.

The statistical acceptance of the conceptual model generated a number of interesting conclusions. First, the cognitive appraisal process showed that specific appraisal of situations led to specific emotions which then resulted in specific consequences. Hence, consumer feelings of violation stemmed from perceived psychological contract breach and resulted in very specific affective states and behavioural intentions, such as regret, dissatisfaction, desire for revenge and reduced loyalty intentions. The results illustrated that there were strong and direct relationships between perceived psychological contract breach, attribution of blame, feelings of violation and the four service outcomes. Second, feelings of violation appeared to drive negative service outcomes both directly and indirectly. Thus, in addition to direct effects, indirect effects were also evident in feeling relation to the relationship between feelings of violation and regret, dissatisfaction and loyalty intentions via active coping and expressive-support seeking coping, in which active coping led to favourable outcomes whereas expressive support-seeking coping led to unfavourable outcomes, providing support for Sengupta et al. (2015), Strizhakova et al. (2012) and Tsarenko and Strizhakova (2013). Feelings of violation had an indirect effect with three
service outcomes, mediated by active coping and expressive support-seeking coping behaviour. Interestingly, although denial seems to be a protective and healthy strategy to deal with some problems, the study findings revealed that denying feelings of violation resulted in negative states and destructive behaviour. The results confirmed that denial coping had a direct relationship with the four service outcomes. This was also consistent with prior clinical research (see Brewer and Hewstone, 2004; Wenzlaff and Rude, 2002).

In summary, of the eighteen hypothesised relationships within the conceptual model, twelve were statistically upheld. The further six hypothesised relationships, which described the indirect effects of feelings of violation on desire for revenge via active coping and expressive-support seeking coping and secondly, the indirect effects of feelings of violation on the four service outcomes via denial coping were not statistically supported and were consequently rejected. These findings are original as prior research has only offered a brief overview, rather than a holistic insight, into the antecedents and outcomes of psychological contract breach within service failure literature (see Goles et al., 2009; Malhotra et al., 2017). Furthermore, despite past conceptual and empirical contributions to study of antecedents and outcomes of contract breach, to the best of the author’s knowledge, to date, no study has attempted to use SEM to empirically investigate coping behaviour as a mediator of the effects of feelings of violation on service outcomes. Thus, the structural findings of this study are unique in that they offer a clear insight into antecedents of psychological contract breach and violation.

8.4 Theoretical implications

This study makes five key contributions. The first contribution, to the best of the author’s knowledge, this is the first empirical investigation to test a developed comprehensive model that explores the mediating mechanism underpinning the antecedents and outcomes of contract breach and feelings of violation in a service setting. Service encounters are a unique and useful context used to evaluate consumer feelings of violation. In a typical service exchange, a service provider offers an intangible service that can be delivered to many consumers (Bitner, 1992). However, during this exchange there could be many sources of failures since these services fall into the sphere of psychological contracts and are usually delivered based on contractual agreements.

An examination of psychological contracts in relation to service encounters has several advantages over studying purely legal contracts. First, consumers are rarely aware of all of the
explicit rules written in legal contracts but they do have an implicit understanding of the firm’s obligations (Guo et al., 2015; Hannah et al., 2016). As a result, even if the explicit contract terms or conditions have not been violated, consumers may still perceive that their expectations have not been fulfilled and, thus, perceive a contract breach (Pavlou and Gefen, 2005). While psychological contract fulfilment and breach has primarily been examined within the context of organisational relationships, this study proposed an extension of psychological contract breach research to examine the field of service marketing, specifically service failure encounters. The logic behind the proposed extension was that service encounters are generally governed by psychological contracts. This is in line with recent buyer-seller research and e-retailing context where psychological contract violation has been applied to firm-consumer relationships (see section 2.8), also extending the original context of previous psychological contract research.

The second contribution of this study relates to the enhancement of academic understanding with regards to the antecedents and outcomes of psychological contract breach. That is, by synthesising literature from different fields and paradigms, this study contributes to existing knowledge on psychological contracts by expanding and broadening the conception of the drivers and outcomes of contract breach and violation (Malhotra et al., 2017). Indeed, to the best of the author’s knowledge, the literature review in this study is broader in scope than any previous review of the antecedents of psychological contract breach within service marketing literature and draws on an unprecedented breadth of research streams (see chapters 2 and 3). Hence, this study provided new insight into the subject by investigating the pivotal role of four major constructs – perception of psychological contract breach, attribution of blame, feelings of violation and coping behaviour - as drivers of several service outcomes. Indeed, support for the merit of studying each of these constructs was derived from various schools of thought including, organisational relationships, management, psychology and service marketing. Thus, to date, empirically based holistic analysis of the antecedents and outcomes of psychological contract breach has been lacking. Therefore, in conceptualising and studying consumer perception of contract breach and violation, this study contributes to the service failure encounter field of research including services marketing and consumer behaviour research.

The third contribution of the study is born from the review of extant research to model the antecedents and outcomes of psychological contract breach. The literature review uncovered several research traditions ranging from organisational behaviour to psychology and consumer behaviour to marketing-based research (see Duhachek, 2005; Folkman and Lazarus, 1984; Guo et al., 2015; Lazarus, 1991b; Malhotra et al., 2017; Morrison and Robinson, 1997; Pavlou and
leading to a conceptualisation of the mechanism between psychological contract breach, cognitive processes, negative emotions, coping behaviour and related service outcomes. The literature review led to the formation of a new model that can provide original theoretical insight into the dynamics of psychological contact breach and violation.

Additionally, this research makes an empirical contribution to the study of actual incidents of perceived contract breach resulting and provides a greater understanding of an element of service encounter research that has previously received little attention. Previous research on service failure has been weakened by the strict concentration on the evaluation of the consequences of either the type or severity of service failures on consumer attitudes and behaviour (Malhotra et al., 2017). Although the study of hypothetical situations can lead to useful insight into a topic, the author's view is that such research is complemented by focusing on real people in real situations which contribute to a better understanding of the antecedents to actual perceived psychological contract breach incidents and feelings of violation.

The study also expands service failure literature to examine the different coping strategies that consumers might use to manage perceived contract breach and feelings of violation and mediate the relationship between emotions elicited from the perception of contract breach and the service outcomes in service encounters (Obeidat et al., 2017; Stephens and Gwinner, 1998). An examination of the direct effects of consumer feelings of violation on service outcomes precludes an understanding of people's internal responses to violation-inducing service incidents (Strizhakova et al., 2012). Building upon stress-and-coping theory (Lazarus and Folkman, 1984), this study examined three consumer coping strategies; active coping, expressive support-seeking coping and denial coping (Duhachek, 2005) as mediators of feelings of violation on consumer affective states and behavioural outcomes.

Overall, services marketing is a continuously evolving and changing field (Gilmore, 1997). The results of the study provide empirical support for the cognitive appraisal framework that links psychological contract breach, blame and violation to coping and consumer outcomes. Building on stress-and-coping theory (Lazarus and Folkman, 1984), this study emphasises the importance of coping processes as a psychological response to stressful incidents and service encounter failures. Overall, this study makes a significant contribution to service marketing literature by providing the first empirical investigation of the mediating mechanisms that underpin the relationship between perceived contract breach and violation in relation to regret, dissatisfaction,
desire for revenge and loyalty intentions. Therefore, the results of this study shows that psychological contract breach can be a source of service failure during service encounters and that the perception of contract breach within service encounter failures could account for unfavourable outcomes (Bitner et al., 1990).

8.5 Managerial implications and recommendations

The results of this study provide implications for practitioners. While it is impossible to satisfy all consumers, firms must make legitimate, credible and serious attempts to enhance consumer satisfaction in terms of service design, delivery and outcome. This study provides robust, empirical evidence of the relationship between consumer perception of psychological contract breach, attribution of blame, feelings of violation, coping behaviour and negative service outcomes. The identification of a range of associated factors will be of profound interest to service managers concerned with maintaining good relationships with consumers and upholding their levels of satisfaction, along with reducing occurrences of expensive and disruptive negative consumer behaviour. Given an increased understanding of the drivers of some of potential negative affective states and behavioural intentions, senior managers should be able to proactively develop systems, set policies and design procedures to monitor, minimise and manage unpleasant outcomes resulting from psychological contract violation.

Prior studies (e.g. Gelbrich, 2010; Grégoire et al., 2010) have suggested implementing an active, quick and effective system to manage consumer complaints and it is very important to also develop proactive strategies of redress for identified failure situations. While blame attribution towards firms may sometimes be unwarranted, firms that are compassionate toward perceived psychological contract breach and that are quick to redress any issues may be able to effectively avoid situations that could escalate into instances of consumer revenge and provider switching (Surachartkumtomkunet et al., 2013). Hence, it is important to consider consumer feedback in terms of expected service obligations.

The perception of psychological contract breach is subjective. Managers should ensure that consumers are satisfied with their service with regards to its design and the service delivery programmes. The first recommendation of this study is that since psychological contract violation seems to be inevitable, all management levels of service firms - executives and front-line staff – are advised to avoid communicating with customers in a way that infers firm obligation. This can be achieved by devoting the efforts to be directed toward leading a dialogue in such a way as to
avoid making explicit promises to consumers (e.g. will try to do our best, will keep following up and see what I can do for you) and to assist consumers to cognitively restructure the problem if a problem occurred. Consumers who perceive psychological contract breach experience strong feelings of violation. A breach of explicit and implicit promises could drive consumers either to change to a new provider immediately without complaining or to complain but stay with the existing provider (Wan et al., 2011). Furthermore, practitioners can actively collect consumer feedback in terms of satisfaction and equity that, particularly, related to fulfilment of obligations, and not the transaction, during service encounters. For example, ask a customer if the provider failed to fulfil an obligation that he/she were expecting during the visit to the store, whether promises to him/her have been fulfilled during the service encounter experience. Also, services personal should be offered training in communication skills and how to diffuse customers’ negative emotions.

This study provides evidence to suggest that consumer perception of contract breach initiates severe consumer emotional reactions, which lead to feelings of regret, dissatisfaction, a desire for revenge and reduced loyalty intentions. If consumers decide not to express their emotions, there is a potential that a firm may lose them. Therefore, by providing satisfactory service delivery and in successfully recovering failed service encounters, episodes of revenge and switching to another provider may be significantly reduced. Therefore, senior managers should ensure that consumer feedback mechanisms allow managers and front-line staff to identify potential causes of perceived contract violation by designing surveys to capture customers' perception about fulfilment and breach of promises. In addition, how customers perceived the service delivery in terms of transactional, relational and reciprocity exchanges. Such strategies may provide a positive sign to consumers regarding firms’ attitudes towards their clients (for example, appreciation, recognition, cooperation and respect). This in turn may help relieve feelings of violation and as a result, reduce the likelihood of negative outcomes. In addition, the development of a database to record and track incidents of perceived contract breach would allow managers to analyse and understand whether the perceived incidents occurred due to reneging or incongruence. Such data could provide valuable insights into firm failings. The insights gained should then feed into front-line employee training and redesigned service recovery policies and procedures.

Understanding types of consumer-coping strategies used to deal with service failure incidents and, particularly, perceived contract breach episodes, can help managers to formulate recovery tactics that are outstandingly tailored to the consumer-coping experience. Specifically,
active coping appears to switch consumer attention from a negative perception of breach over the feelings of violation-induced failures to a positive perception of service interactions. As such, service providers should design engagement strategies to encourage consumers to be actively involved in problem solving and make consumers feel as if they are part of the recovery process team. Providers should welcome consumers who are active and cooperative when finding solutions to their problems with service failures. From a firm’s perspective, more consumer feelings of violation will increase the negative effect on firm priorities, mainly consumer regret, dissatisfaction, desire for revenge and loyalty intentions. Hence, service managers and front-line staff should take advantage of consumers’ active involvement in bringing the failure to the firm’s attention so that recovery can be executed quickly and the failure corrected immediately.

By contrast, expressive support-seeking coping is linked to the most damaging consequences for both the consumer (i.e. feelings of violation) and the service firms, due to the indirect effect of an increase in negative affective states and behavioural outcomes. Therefore, consumers who use expressive support-seeking coping represent a critical and important group since they share their negative emotions and experiences with others, demand attention and negatively express/vent their emotions. Thus, service managers should create private outlets for expressing negative emotions so that instead of consumers expressing their negativity to their friends, family or other consumers (e.g. using social media platforms), the firm will absorb these negative expressions. For example, when consumers vent their feelings of violation to the firm, service front-line workers/ supervisors should try not to stop the consumers from doing so and provide the empathy and support that the consumers are looking for. Through active listening, consumer service representatives can also begin to understand the problem and learn how to change consumers’ coping strategies from expressive support-seeking coping strategies to active coping strategies. Another example is when consumers use social media platforms (e.g. twitter) to complain and share their negative experience. Social media channels are fast to spread negative WOM, which will in turn affect the purchasing intentions, and customers expect quick solutions (Jamali and Khan, 2018). This could be an advantage for service practitioners to manage the crisis and urge customers to be more active and engage to solve the problem.

While some may presume that denial coping prevents negative effects, the study findings indicated that this coping strategy can have negative consequences in service interactions due to denial’s relationship with negative outcomes. Service providers should be wary about consumers who engage in expressive support-seeking coping and denial coping strategies, and be aware of
the negative consequences of these coping strategies (Strizhakova et al., 2012; Tsarenko and Strizhakova, 2013).

Overall, the results suggested that managers should encourage consumers to adopt active coping strategies. If the problem cannot be fixed immediately by the service provider, providers are strongly recommended to obtain a solution via another service provider (e.g. a competitor) to prevent consumers adopting expressive support-seeking coping or denial coping strategies (Strizhakova et al., 2012). The findings suggested that service providers should aim to prevent consumer feelings of violation. Feelings of violation ultimately have harmful effects on the restoration and maintenance of positive consumer-firm relationships (Obeidat et al., 2017). The results showed that feelings of violation stimulate both active coping and expressive support-seeking coping, and as a result, if and when consumers perceive psychological contract breach and experience feelings of violation (i.e. anger, betrayal, frustration and violation), managers should strive to encourage consumers to use active coping strategies to reduce the chances of negative outcomes.

Alternatively, managers could decide to directly interact with consumers to understand where the failure occurred, what obligations they expect to be fulfilled and to attempt to preserve their brand name and reputation by stopping incidences of consumer revenge and misbehaviour. Therefore, service providers should train consumer service representatives to recognise indicators of consumer emotions (i.e. facial expressions and other non-verbal and verbal emotional displays) and their different ways of coping. In doing so, front-line service staff and supervisors will be able to tailor and execute effective recovery strategies. Consumers who experience feelings of violation and their coping patterns are all different and, therefore, tailored solutions are crucial. In other words, service recovery should go beyond a simple process to fix a problem; consumers should play a pivotal role in this procedure. From a practical perspective, service recovery requires excellent hiring and training to incorporate consumer-provider interventions and to provide an understanding of consumer emotional and cognitive responses to failure episodes, particularly psychological contract breach incidents.

The psychological characteristics and communication skills of service personnel provide a competitive advantage for service firms. Service representatives should be skilful enough to identify consumer coping styles and employ a targeted approach to recovery strategies. Both academic and practice report have indicated that the majority of dissatisfied consumers do not complain (Chebat et al., 2005); mostly because they believe that their complaints would be
useless and unproductive. Consumers should be encouraged to disengage from disappointed and upsetting thoughts and supported to facilitate and sustain helpful and positive ones. This could be accomplished by well-designed and effective structuring of a consumer-provider service script that includes what to say and how to say it to consumers during interactions, as well as both verbal and non-verbal emotional expression training.

Hence, service firms should design strategies to improve service personnel skills to allow them to recognise when consumers perceive contract breach and to understand consumer emotions and coping strategies. They should also make and execute a plan to encourage consumers to use active coping strategies and reject expressive support-seeking coping and denial coping strategies, thereby, reducing consumer feelings of violation either directly or indirectly via consumer coping strategies. Service firms should encourage consumers to reconsider the situation so that options/solutions can be explored and delivered. For example, based on dimensions of psychological contract, service firms can offer compensation, provide a bonus, upgrade loyalty membership, value consumer contributions, reciprocate consumer effort, appreciate consumer cooperation, place consumer needs above the needs of the firm, prioritise consumer interests and care about and/or consider the consumers best interests when the provider make decisions that impact upon consumers. Furthermore, service firms should also follow-up to make sure that there are no lingering issues/emotions.

Therefore, consumer expectations of obligations should be managed effectively. Employees should be trained to understand consumer needs and goals and work with them to achieve these goals. Employees should also be empowered to deal rapidly with consumer queries and complaints. Service practitioners should design certain programs for loyal consumers. Consumers believe they deserve rewards for and appreciation and recognition of their continued loyalty (Guo et al., 2015). As most interactions between service providers and consumers within service sectors are founded on terms and conditions and are, most likely, based on explicit or implicit contractual agreements, it is possible that psychological contract violation could become a potential source of service failure during an encounter. Hence, service firms should continue to concentrate on ensuring appropriate service design, delivery and recovery taking into account consumer expectations of obligations that must be fulfilled in order to prevent consumer feelings of violation leading to unfavourable behavioural outcomes such as switching and misbehaviour. Service firms and service managers should design immediate recovery strategies to decrease negative attributions by consumers and enhance firm-consumer relationships (Dabholkar and Spaid, 2012). In respect to this, designing a service blueprint that give a clear structure for
employees about how to handle and deal with consumers’ complaint regarding perceived psychological contract breach incidents can be effective and useful tool for service providers to deliver better service quality and obtain positive outcome.

In summary, from a managerial perspective, this study indicates that perception of psychological contract breach could harm the success of service encounters as it negatively affects consumer emotions, which in turn influences affective states and behavioural intentions. Directors, managers and front-line staff need to assume both a proactive and reactive stance towards incidents of actual and/or perceived contract violation through excellent service delivery and recovery efforts equally. This can be done by a) asking for feedback tailored to capture psychological contract issues b) offering intensive training in communication skills and c) using a service blueprint and a service script that specifically designed to help and guide workers to manage customers’ complaints and recover the problem effectively (see also Sousa et al., 2016) In addition, they should encourage consumers to engage with the provider to solve the problem and use active coping rather than expressive support-seeking coping or denial coping strategies.

8.6 Study limitations

The theoretical and managerial contribution of any research study is tempered by its limitations. This study is an early effort in applying psychological contract breach to a cognitive appraisal model and performing empirical research. Despite its key contributions, this study should be interpreted in light of its limitations. Subsequently, six limitations will now be outlined and discussed. First, the study is limited by its single country application. The focus of the study centres on the antecedents and outcomes of psychological contract breach within the USA. This focus limits the geographical generalisability and external validity of the findings. Therefore, while the structural model provided an acceptable fit with the direct and indirect effects of feelings of violation resulting from contract breach within the USA, these findings may not apply to wider geographical and cultural contexts.

Second, within the context of service encounters, the research results were obtained from a single study. The study was conducted in the context of mobile phone service encounters, which require some consumer-employee interaction and a contractual agreement. As such, generalisation of this research should be handled with caution due to testing a single context only. Third, as the first study to conceptualise and empirically examine important antecedents and outcomes of psychological contract breach within service marketing, the focus of this study
centres on introducing and examining the extent, to which, the principal antecedents are linked to the perception of contract breach. However, it would be naïve to claim that attribution of blame, feelings of violation and coping responses constitute the only relevant antecedents of real or perceived psychological contract breach. Indeed, within a single study, it is arguable whether it is practical to test every potential driver and outcome. However, excluding other antecedents represents a limitation and to some extent, limits the depth of the obtained results.

Fourth, another limitation could be related to constructs of interest. This study examined only agency (i.e. attribution of blame) as a key antecedent of the appraisal process, which might limit the understanding of the cognitive appraisal process and the reasons behind the non-significant relationship between feelings of violation and denial coping. Also, while this study focussed on three coping strategies, service failures and contract breach incidents may trigger other three-dimensional coping strategies primary control, secondary control and relinquishment of control defined by Heckhausen and Schulz (1995) and autonomy, competence, and others coping introduced by Skinner et al. (2003) (Duhachek, 2005; Sengupta et al., 2015; Yi and Baumgartner, 2004). Furthermore, the fact that this study only focussed on four service outcomes could be a limitation. While these four affective states and behavioural intentions outcomes are the most pertinent and common in the service marketing literature, the list did not include behavioural outcomes, such as switch or consumer misbehaviour. Behavioural outcomes are interesting and useful for service practitioners as they help them to understand how consumers might behave after experiencing an incident of psychological contract breach and violation.

The fifth limitation of this study refers to the adaptation of the cross-sectional research design. One of the key limitations of cross-sectional research is its inability to test causal relationships. Cross-sectional research design does not analyse dynamic parameters, but rather focuses on the analysis of static relationships, which cause limitations in terms of interpreting the association of relationships beyond examined constructs. Yet, while the issue of causality is beyond the scope of this study, the restrictions of cross-sectional data analysis limit the findings of this study and the conclusions which can reasonably be justified.

Finally, the methodological approach adopted within this study relied on the retrospective analysis of consumer interpretations of real contract breach incidents, as opposed to hypothetical or experimental situations. As such, similar to most survey strategies, the findings and contributions of this study are based on the assumption that respondents actually and accurately recall the last time that their mobile phone provider failed to fulfil an obligation. Indeed, while
following a closer approach to the critical incident technique, prompting many questions to promote accurate and truthful respondent recall (see Appendix B, Section A) cannot be totally guaranteed, owing to the past nature of the event. In respect to this, recall bias is acknowledged as a limitation of this study.

Despite these limitations, this study makes important contributions to the applicability of psychological contract breach and consumers feelings of violation and of the specific use of coping behaviour, particularly in the case of negative service outcomes. This study extends existing models (e.g. Obeidat et al., 2017; Theotokis et al., 2012) by investigating the impact of specific service failure incidents. The results revealed that perception of psychological contract breach is more likely to contribute to consumer cognitive appraisal processes and negative service outcomes once consumers have felt violated. The study has revealed that service firms can affected by consumer active coping and expressive support-seeking coping strategies. As most interactions within the service industry between consumers and service providers are based upon terms and conditions and contractual agreements, it is possible that psychological contract violation could become a potential source of service failure during service encounters. Hence, firms should strive to focus on appropriate service design, delivery and recovery, along with well-designed loyalty programs so that consumer feelings of violation do not lead to revenge or switch.

### 8.7 Directions for future research

The findings and limitations of the current study highlight several valuable opportunities and directions for future research. First, future research should broaden the understanding of psychological contract breach, real or perceived and service outcomes in different and contrasting contexts. Alternative and similar services and retail settings would be also be advisable. Studies of psychological contract violation in the context of the service sector could be illuminating. In this regard, this study is likely to stimulate future research on the nature and influence of psychological contract breach, actual or perceived, in the context of service marketing and, more importantly, how its adverse effects can be mitigated. For instance, how positive perception of employee services and/or service recovery procedure contribute to handle and manage the negative effects of violation on service outcomes. Furthermore, this study might be conducted in different geographical and cultural contexts. Such research could build on the conceptions and measures used in this study.
Additionally, future research could examine more antecedent appraisals effecting emotions such as the locus of control and self-esteem suggested by Watson and Spence (2007) and coping behaviour. Moreover, future research could identify more direct variations of service outcomes, particularly behavioural outcomes such as forms of retaliation, complaining to a third party and switch to another provider. Furthermore, the author only investigated the mediating role of three coping strategies, that facilitated or hindered consumer negative service outcome. The results of direct paths from each coping strategy and the four related service outcomes revealed interesting findings. Therefore, future research could consider further coping strategies in the framework to examine the direct effects of coping on service outcomes or the mediating role of the new coping strategies on the effects of feelings of violation related to service outcomes. In addition, future research should extend the model to incorporate service provider responses to reach a better understanding of the consumer coping process in perceived contract breach incidents. The findings also revealed that there is a need to better understand the relationship between feelings of violation and denial coping behaviour. An in-depth interview approach may be best suited in revealing any underlying factors that play a critical role in affecting the relationship between emotion and denial coping behaviour and more importantly, to better understand the nature, motives and consequence of the denial coping strategy.

Future research might also examine the role of personality, such as the Big-Five conceptualisation of personality and how this affects feelings of violation, coping and service outcomes. Although this study focused on highlighting the applicability of psychological contract breach and feelings of violation, taking into account the cognitive appraisal process, personality traits appear worthy of potential further investigation, based on the review of coping literature (see Duhachek and Iacobucci, 2005).

Above all, this study examined the role of perceived contract breach and violation in relation to service failure outcomes. However, the theory of perceived psychological contracts considers only one party in the exchange relationship (Robinson, 1996). The breach is subjective and defined by only one of party in a two-way exchange. In the area of marketing, that one party would be the consumer. This study followed the precedent by adopting the global measure of Robinson and Morrison (2000) to measure perceived contract breach and violation and did not consider the defined breach by other party (service provider) as it was beyond the scope of the study. However, as psychological contracts are reciprocal, psychological contract breach and related issues could also be studied from the firm’s perspective. Hence, building on Guo et al.’s (2015) conceptualisation of psychological contract in marketing, it may be valuable for future
studies to capture and examine real breach elements by investigating the violation of the four defined dimensions of psychological contract (i.e. economic exchange, relational exchange, mutual/other interest and self-interest).

Owing to the above mentioned limitations derived from the cross-sectional and retrospective research design of the current study, future research using experimental designs, longitudinal surveys and qualitative approaches would be useful to establish the robustness of this study’s findings (Malhotra et al., 2017). In addition, expanding the model to include possible moderators in the research model and control variables, such as length of relationship, recovery, etc., can also be added and examined as another route for future studies. Finally, this study concentrated on testing a comprehensive model using the cognitive appraisal theory to investigate the antecedents and outcomes of psychological contract breach within service encounter, future studies can use alternative model(s) by applying other theories to provide further understanding about the antecedents and outcomes of perceived psychological contract breach and feelings of violation with different directions of causation.

8.8 Summary

To conclude, the current chapter presented the conclusions and implications of this study. First, a discussion of the findings was provided. Second, the conclusions of the study divided into three sub-sections - the study objectives and conceptualisation, measurement model conclusions and structural model conclusions – and explained. Third, findings of the study forward five key theoretical contributions of this study. In addition, the managerial implications of the study findings were highlighted, followed by the study’s limitations. Finally, the chapter offered suggestions for different opportunities and directions for future research.
Bibliography


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Appendices
Appendix A: Ethics approval letter

Baeshen, Mashour  
Cardiff University Business School  
28 October 2016  

Dear Mashour:  

Ethics Approval Reference: 1617011  
Project Title: Understanding Consumers’ Coping Behaviour in Response to Psychological Contract Breach and Violation.  

I would like to confirm that your project has been granted ethics approval as it has met the review conditions.  

Should there be a material change in the methods or circumstances of your project, you would in the first instance need to get in touch with us for re-consideration and further advice on the validity of the approval.  

I wish you both the best of luck on the completion of your research project.  

Yours sincerely,  

Electronic signature via email  

Debbie Foster  
Chair of the ethics sub-committee  
Email: CARBSResearchOffice@cardiff.ac.uk
Dear Participant,

Thank you for participating, your cooperation in completing this questionnaire is pivotal to the success of the study. This research project is conducted in fulfilment of the requirements for the degree of Doctor of Philosophy of Cardiff University. We are happy to inform you why the research is being conducted, what it involves, and what is required from you. Please take a moment to read the following information:

1. What is the purpose of this study?
The aim of this study is to evaluate your last negative experience when your cell phone provider failed to fulfil their obligations to you.

2. Do I have to participate?
It is your decision to take part or not. However, if you do, you will be asked to answer a series of questions in approximately 20 minutes. Also, you are required to give consent by selecting YES below.

3. Will my answers be kept anonymous and confidential?
Yes, your data will be securely stored, storage of data is password protected and data is stored in accordance with the Data Protection Act. Anonymity and confidentiality of survey participants will be preserved at all times. You will not be required to provide your name or contact details. Data will be analysed using statistical software packages and analysed findings maybe published. Only the researcher and supervisors will have access.

If you have any questions about the survey or the research study, please contact the researcher Mashhour Baeshen at: BaeshenM@cardiff.ac.uk or supervisors, Dr. Kate Daunt at: DauntK@cardiff.ac.uk or Professor Malcolm Beynon at: BeynonMJ@cardiff.ac.uk

Yes, I consent to take part in this study.
No, I do not consent taking part in this study.
Section A

Please respond to this section by ticking the appropriate circle.

A1) Do you live in the USA?
   (1) Yes (Continue with question A2) (2) No (Terminate)

A2) Service providers make promises to customers, which obligate them to give certain things in exchange for their customers' contributions. Service providers vary in the degree to which they fulfil those obligations to their customers. Has your cell phone provider failed to fulfil an obligation that you were expecting?
   (1) Yes (Continue with question A3) (2) No (Terminate)

A3) Thinking about your last negative experience (problem) when your cell phone provider failed to fulfil an obligation, what went wrong?
   (Please tick all that apply)
   Customer service
   Signal quality
   Device fault
   Treatment from staff
   Value for money
   Rewarding my loyalty
   Other, please specify ……………………

A4) Please tell us about this experience.

A5) When did this negative experience occur? (Screen out if more than 12 months)
   (1) Less than 3 months (2) 3 to 6 months
   (3) 7 to 9 months (4) 10 to 12 months
   (5) More than 12 months, please specify….

A6) How long did it take to solve the problem?
   (1) One day (2) Within 2 weeks
   (3) Within 3 to 4 weeks (4) Within one month to 3 months
   (5) Within 4 to 6 months (6) More than 6 months
   (7) Problem is not yet resolved

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A7) How did you interact with your cell phone provider to solve the problem? (Please tick all that apply)
   (1) Visit a store (2) Over the phone
   (3) Online chat (4) Email
   (5) Social media channels (6) Other, please specify…..

A8) Who was your cell phone provider at the time of the problem?
   (1) T-Mobile (2) Verizon (3) AT&T
   (4) Sprint (5) MetroPCS (6) Boost Mobile
   (7) Virgin Mobile (8) U.S. Cellular (9) Cricket
   (10) Next-Tech (11) Straight Talk Wireless (12) Ting
   (13) Tracfone (14) Net10 Wireless (15) QLink Wireless
   (16) FreedomPop (17) Other, please specify …………………

A9) How long have you been/were you with this provider?
   (1) Less than one month (2) 1 to 6 months
   (3) 7 to 12 months (4) 13 to 18 months
   (5) 19 to 24 months (6) More than 24 months

A10) At the time of the problem, were you using a:
   (1) Prepaid plan (2) Contract plan
   (3) Monthly bill (4) Family plan
   (5) Other, please specify…. 

A11) Approximately how much money do you spend on your cell phone bill per month?
   (1) Less than $20 (2) $20 to $59
   (3) $60 to $99 (4) $100 to $149
   (5) $150 to $200 (6) more than $200

A12) The primary use of this cell phone(s) with your service provider is for:
   (1) Business (2) Personal
   (3) Both
Section B

I) Thinking about your cell phone provider who failed to fulfil an obligation, please indicate your level of agreement with the following statements

<table>
<thead>
<tr>
<th>Statement</th>
<th>Strongly disagree</th>
<th>Strongly agree</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Almost all the promises made by my cell phone provider have not been kept so far.</td>
<td>1</td>
<td>5</td>
</tr>
<tr>
<td>2. I feel that my cell phone provider has not come through in fulfilling the promises made to me.</td>
<td>1</td>
<td>5</td>
</tr>
<tr>
<td>3. So far my cell phone provider has not done an excellent job of fulfilling its promises to me.</td>
<td>1</td>
<td>5</td>
</tr>
<tr>
<td>4. I have not received everything promised to me in exchange for my contributions.</td>
<td>1</td>
<td>5</td>
</tr>
<tr>
<td>5. My cell phone provider has broken many of its promises to me even though I've upheld my side of the deal.***</td>
<td>1</td>
<td>5</td>
</tr>
</tbody>
</table>

II) Thinking about your last negative experience when your cell phone provider failed to fulfil an obligation that you were expecting, please indicate your level of agreement with the following statements.

<table>
<thead>
<tr>
<th>Statement</th>
<th>Strongly disagree</th>
<th>Strongly agree</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Overall, my cell phone provider was responsible for the problem.</td>
<td>1</td>
<td>5</td>
</tr>
<tr>
<td>2. The service failure episode was my cell phone provider’s fault.</td>
<td>1</td>
<td>5</td>
</tr>
<tr>
<td>3. I completely blame my cell phone provider for what happened.</td>
<td>1</td>
<td>5</td>
</tr>
<tr>
<td>4. My cell phone provider was at fault.</td>
<td>1</td>
<td>5</td>
</tr>
</tbody>
</table>
### Section C

Continue thinking about your last negative experience when your cell phone provider failed to fulfil an obligation that you were expecting, please indicate your level of agreement with the following statements.

<table>
<thead>
<tr>
<th>Statement</th>
<th>Strongly disagree</th>
<th>Strongly agree</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. I felt a great deal of anger toward my cell phone provider.</td>
<td>1</td>
<td>5</td>
</tr>
<tr>
<td>2. I felt betrayed by my cell phone provider.</td>
<td>1</td>
<td>5</td>
</tr>
<tr>
<td>3. I felt that my cell phone provider had broken the relationship between us.</td>
<td>1</td>
<td>5</td>
</tr>
<tr>
<td>4. I felt extremely frustrated by how I was treated by my cell phone provider.</td>
<td>1</td>
<td>5</td>
</tr>
</tbody>
</table>

### Section D

Continue thinking about your last negative experience when your cell phone provider failed to fulfil an obligation that you were expecting, how did you respond?

<table>
<thead>
<tr>
<th>Statement</th>
<th>Didn’t do this at all</th>
<th>Did this a lot</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Concentrated on ways the problem could be solved.</td>
<td>1</td>
<td>5</td>
</tr>
<tr>
<td>2. Tried to make a plan of action.</td>
<td>1</td>
<td>5</td>
</tr>
<tr>
<td>3. Generated potential solutions.</td>
<td>1</td>
<td>5</td>
</tr>
<tr>
<td>4. Thought about the best way to handle things.</td>
<td>1</td>
<td>5</td>
</tr>
<tr>
<td>5. Concentrated my efforts on doing something about it.</td>
<td>1</td>
<td>5</td>
</tr>
<tr>
<td>6. Did what had to be done.</td>
<td>1</td>
<td>5</td>
</tr>
<tr>
<td>7. Followed a plan to make things better and more satisfying.</td>
<td>1</td>
<td>5</td>
</tr>
<tr>
<td>8. Sought out others for support.</td>
<td>1</td>
<td>5</td>
</tr>
<tr>
<td>9. Told others how I felt.</td>
<td>1</td>
<td>5</td>
</tr>
<tr>
<td>10. Talked to others to feel better.</td>
<td>1</td>
<td>5</td>
</tr>
<tr>
<td>11. Shared my feelings with others that I trust and respect.</td>
<td>1</td>
<td>5</td>
</tr>
<tr>
<td>12. Asked friends with similar experiences what they did.</td>
<td>1</td>
<td>5</td>
</tr>
<tr>
<td>13. Tried to get advice from someone about what to do.</td>
<td>1</td>
<td>5</td>
</tr>
<tr>
<td>14. Had a friend assist me in fixing the problem.</td>
<td>1</td>
<td>5</td>
</tr>
<tr>
<td>15. Denied that the event happened.</td>
<td>1</td>
<td>5</td>
</tr>
<tr>
<td>16. Refused to believe that the problem has occurred.</td>
<td>1</td>
<td>5</td>
</tr>
<tr>
<td>17. Pretended that this never happened.</td>
<td>1</td>
<td>5</td>
</tr>
</tbody>
</table>
## Section E

Thinking about your cell phone provider who failed to fulfill an obligation, how do you now feel?

<table>
<thead>
<tr>
<th>Statement</th>
<th>Strongly disagree</th>
<th>Strongly agree</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. I am dissatisfied with the level of service that I received from the cell phone provider.</td>
<td>1</td>
<td>5</td>
</tr>
<tr>
<td>2. My expectations are not met.</td>
<td>1</td>
<td>5</td>
</tr>
<tr>
<td>3. I am dissatisfied with the quality of service that I received.</td>
<td>1</td>
<td>5</td>
</tr>
<tr>
<td>4. I am very dissatisfied with the cell phone provider.</td>
<td>1</td>
<td>5</td>
</tr>
<tr>
<td>5. I feel sorry for choosing the cell phone provider.</td>
<td>1</td>
<td>5</td>
</tr>
<tr>
<td>6. I regret choosing the cell phone provider.</td>
<td>1</td>
<td>5</td>
</tr>
<tr>
<td>7. I should have chosen another cell phone provider.</td>
<td>1</td>
<td>5</td>
</tr>
<tr>
<td>8. If I could do it all over, I would choose a different cell phone provider.</td>
<td>1</td>
<td>5</td>
</tr>
<tr>
<td>9. I made a wrong decision in my choice of the cell phone provider.</td>
<td>1</td>
<td>5</td>
</tr>
<tr>
<td>10. I want to take actions to get the cell phone provider in trouble.</td>
<td>1</td>
<td>5</td>
</tr>
<tr>
<td>11. I want to make the cell phone provider get what it deserves.</td>
<td>1</td>
<td>5</td>
</tr>
<tr>
<td>12. I want to punish the cell phone provider in some way.</td>
<td>1</td>
<td>5</td>
</tr>
<tr>
<td>13. I want to cause inconvenience to the cell phone provider.</td>
<td>1</td>
<td>5</td>
</tr>
<tr>
<td>14. I want to get even with the cell phone provider.</td>
<td>1</td>
<td>5</td>
</tr>
<tr>
<td>15. I intend to stay with the cell phone provider in the future.</td>
<td>1</td>
<td>5</td>
</tr>
<tr>
<td>16. I am very likely to encourage my friends to use the cell phone provider.</td>
<td>1</td>
<td>5</td>
</tr>
<tr>
<td>17. As long as the present standard of service continues, I will use the cell phone provider again.</td>
<td>1</td>
<td>5</td>
</tr>
<tr>
<td>18. I am loyal to the cell phone provider.</td>
<td>1</td>
<td>5</td>
</tr>
</tbody>
</table>
Section F

Please respond to this section by ticking the appropriate circle.

H1) Age:
(1) 18-24.  (2) 25-34.
(3) 35-44.  (4) 45-54.
(5) 55-64.  (6) 65 or older.
(7) Prefer not to say.

H2) Gender:
(1) Female.  (2) Male.
(3) Prefer not to say.

H3) Level of education:
(1) No schooling completed.  (2) Some high school, no diploma, or equivalent.
(3) Bachelor’s degree or equivalent.  (4) Postgraduate-studies, or equivalent.
(5) Prefer not to say.

H4) What is your total household income?
(1) $24,999 or less  (2) $25,000 to $34,999.
(3) $35,000 to $49,999.  (4) $50,000 to $74,999.
(5) $75,000 to $99,999  (6) $100,000 to $149,999.
(7) $150,000 or more.  (8) Prefer not to say.

H5) How would you identify yourself?
(1) American Indian / Native American.
(2) Arab.
(3) Asian.
(4) Black / African American.
(5) Hispanic / Latino.
(6) Native Hawaiian or Other Pacific Islander.
(7) White / Caucasian.
(8) Multiracial.
(9) Other, please specify …………. 
(10) Prefer not to say.
**H6) In which state do you live?**

<table>
<thead>
<tr>
<th>State</th>
<th>State</th>
</tr>
</thead>
<tbody>
<tr>
<td>Alabama</td>
<td>New Hampshire</td>
</tr>
<tr>
<td>Alaska</td>
<td>New Jersey</td>
</tr>
<tr>
<td>American Samoa</td>
<td>New Mexico</td>
</tr>
<tr>
<td>Arkansas</td>
<td>New York</td>
</tr>
<tr>
<td>California</td>
<td>North Carolina</td>
</tr>
<tr>
<td>Colorado</td>
<td>North Dakota</td>
</tr>
<tr>
<td>Connecticut</td>
<td>Northern Marianas Islands</td>
</tr>
<tr>
<td>Delaware</td>
<td>Ohio</td>
</tr>
<tr>
<td>District of Columbia (DC)</td>
<td>Oklahoma</td>
</tr>
<tr>
<td>Florida</td>
<td>Oregon</td>
</tr>
<tr>
<td>Georgia</td>
<td>Pennsylvania</td>
</tr>
<tr>
<td>Guam</td>
<td>Puerto Rico</td>
</tr>
<tr>
<td>Hawaii</td>
<td>Rhode Island</td>
</tr>
<tr>
<td>Idaho</td>
<td>South Carolina</td>
</tr>
<tr>
<td>Illinois</td>
<td>South Dakota</td>
</tr>
<tr>
<td>Indiana</td>
<td>Tennessee</td>
</tr>
<tr>
<td>Iowa</td>
<td>Texas</td>
</tr>
<tr>
<td>Kansas</td>
<td>Utah</td>
</tr>
<tr>
<td>Kentucky</td>
<td>Vermont</td>
</tr>
<tr>
<td>Louisiana</td>
<td>Virginia</td>
</tr>
<tr>
<td>Maine</td>
<td>Virgin Islands</td>
</tr>
<tr>
<td>Maryland</td>
<td>Washington</td>
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<td>Massachusetts</td>
<td>West Virginia</td>
</tr>
<tr>
<td>Michigan</td>
<td>Wisconsin</td>
</tr>
<tr>
<td>Minnesota</td>
<td>Wyoming</td>
</tr>
<tr>
<td>Mississippi</td>
<td>Prefer not to say</td>
</tr>
<tr>
<td>Missouri</td>
<td></td>
</tr>
<tr>
<td>Montana</td>
<td></td>
</tr>
<tr>
<td>Nebraska</td>
<td></td>
</tr>
<tr>
<td>Nevada</td>
<td></td>
</tr>
</tbody>
</table>

**Thank you for your Time!**
Appendix C: Descriptive results for relevant questions from Section A

Q3. Thinking about your last negative experience when your cell phone provider failed to fulfil an obligation, what went wrong?

Selected Choice: **Customer service**

<table>
<thead>
<tr>
<th></th>
<th>Frequency</th>
<th>Percent</th>
<th>Valid Percent</th>
<th>Cumulative Percent</th>
</tr>
</thead>
<tbody>
<tr>
<td>Valid 0</td>
<td>462</td>
<td>59.3</td>
<td>59.3</td>
<td>59.3</td>
</tr>
<tr>
<td></td>
<td>317</td>
<td>40.7</td>
<td>40.7</td>
<td>100.0</td>
</tr>
<tr>
<td>Total</td>
<td>779</td>
<td>100.0</td>
<td>100.0</td>
<td></td>
</tr>
</tbody>
</table>

Q3. Thinking about your last negative experience when your cell phone provider failed to fulfil an obligation, what went wrong?

Selected Choice: **Signal quality**

<table>
<thead>
<tr>
<th></th>
<th>Frequency</th>
<th>Percent</th>
<th>Valid Percent</th>
<th>Cumulative Percent</th>
</tr>
</thead>
<tbody>
<tr>
<td>Valid 0</td>
<td>451</td>
<td>57.9</td>
<td>57.9</td>
<td>57.9</td>
</tr>
<tr>
<td></td>
<td>328</td>
<td>42.1</td>
<td>42.1</td>
<td>100.0</td>
</tr>
<tr>
<td>Total</td>
<td>779</td>
<td>100.0</td>
<td>100.0</td>
<td></td>
</tr>
</tbody>
</table>

Q3. Thinking about your last negative experience when your cell phone provider failed to fulfil an obligation, what went wrong?

Selected Choice: **Device fault**

<table>
<thead>
<tr>
<th></th>
<th>Frequency</th>
<th>Percent</th>
<th>Valid Percent</th>
<th>Cumulative Percent</th>
</tr>
</thead>
<tbody>
<tr>
<td>Valid 0</td>
<td>655</td>
<td>84.1</td>
<td>84.1</td>
<td>84.1</td>
</tr>
<tr>
<td></td>
<td>124</td>
<td>15.9</td>
<td>15.9</td>
<td>100.0</td>
</tr>
<tr>
<td>Total</td>
<td>779</td>
<td>100.0</td>
<td>100.0</td>
<td></td>
</tr>
</tbody>
</table>

277
Q3. Thinking about your last negative experience when your cell phone provider failed to fulfil an obligation, what went wrong?

**Selected Choice: Treatment from staff**

<table>
<thead>
<tr>
<th></th>
<th>Frequency</th>
<th>Percent</th>
<th>Valid Percent</th>
<th>Cumulative Percent</th>
</tr>
</thead>
<tbody>
<tr>
<td>Valid</td>
<td>0</td>
<td>677</td>
<td>86.9</td>
<td>86.9</td>
</tr>
<tr>
<td></td>
<td>1</td>
<td>102</td>
<td>13.1</td>
<td>100.0</td>
</tr>
<tr>
<td>Total</td>
<td>779</td>
<td>100.0</td>
<td>100.0</td>
<td></td>
</tr>
</tbody>
</table>

Q3. Thinking about your last negative experience when your cell phone provider failed to fulfil an obligation, what went wrong?

**Selected Choice: Value for money**

<table>
<thead>
<tr>
<th></th>
<th>Frequency</th>
<th>Percent</th>
<th>Valid Percent</th>
<th>Cumulative Percent</th>
</tr>
</thead>
<tbody>
<tr>
<td>Valid</td>
<td>0</td>
<td>580</td>
<td>74.5</td>
<td>74.5</td>
</tr>
<tr>
<td></td>
<td>1</td>
<td>199</td>
<td>25.5</td>
<td>100.0</td>
</tr>
<tr>
<td>Total</td>
<td>779</td>
<td>100.0</td>
<td>100.0</td>
<td></td>
</tr>
</tbody>
</table>

Q3. Thinking about your last negative experience when your cell phone provider failed to fulfil an obligation, what went wrong?

**Selected Choice: Rewarding my loyalty**

<table>
<thead>
<tr>
<th></th>
<th>Frequency</th>
<th>Percent</th>
<th>Valid Percent</th>
<th>Cumulative Percent</th>
</tr>
</thead>
<tbody>
<tr>
<td>Valid</td>
<td>0</td>
<td>653</td>
<td>83.8</td>
<td>83.8</td>
</tr>
<tr>
<td></td>
<td>1</td>
<td>126</td>
<td>16.2</td>
<td>100.0</td>
</tr>
<tr>
<td>Total</td>
<td>779</td>
<td>100.0</td>
<td>100.0</td>
<td></td>
</tr>
</tbody>
</table>
Q5. When did this negative experience occur?

<table>
<thead>
<tr>
<th>Valid</th>
<th>Frequency</th>
<th>Percent</th>
<th>Valid Percent</th>
<th>Cumulative Percent</th>
</tr>
</thead>
<tbody>
<tr>
<td>Less than 3 months</td>
<td>356</td>
<td>45.7</td>
<td>45.7</td>
<td>45.7</td>
</tr>
<tr>
<td>3 to 6 months</td>
<td>238</td>
<td>30.6</td>
<td>30.6</td>
<td>76.3</td>
</tr>
<tr>
<td>7 to 9 months</td>
<td>94</td>
<td>12.1</td>
<td>12.1</td>
<td>88.3</td>
</tr>
<tr>
<td>10 to 12 months</td>
<td>91</td>
<td>11.7</td>
<td>11.7</td>
<td>100.0</td>
</tr>
<tr>
<td>Total</td>
<td>779</td>
<td>100.0</td>
<td>100.0</td>
<td></td>
</tr>
</tbody>
</table>

5. When did this negative experience occur? - Selected Choice

![Bar chart showing the distribution of the negative experiences by duration]

5. When did this negative experience occur? - Selected Choice
Q6. How long did it take to solve the problem?

<table>
<thead>
<tr>
<th></th>
<th>Frequency</th>
<th>Percent</th>
<th>Valid Percent</th>
<th>Cumulative Percent</th>
</tr>
</thead>
<tbody>
<tr>
<td>Valid</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>One day</td>
<td>181</td>
<td>23.2</td>
<td>23.2</td>
<td>23.2</td>
</tr>
<tr>
<td>Within one week</td>
<td>176</td>
<td>22.6</td>
<td>22.6</td>
<td>45.8</td>
</tr>
<tr>
<td>Within two weeks</td>
<td>63</td>
<td>8.1</td>
<td>8.1</td>
<td>53.9</td>
</tr>
<tr>
<td>Within one month</td>
<td>54</td>
<td>6.9</td>
<td>6.9</td>
<td>60.8</td>
</tr>
<tr>
<td>More than one month, please specify</td>
<td>31</td>
<td>4.0</td>
<td>4.0</td>
<td>64.8</td>
</tr>
<tr>
<td>Problem is not yet resolved</td>
<td>274</td>
<td>35.2</td>
<td>35.2</td>
<td>100.0</td>
</tr>
<tr>
<td>Total</td>
<td>779</td>
<td>100.0</td>
<td>100.0</td>
<td></td>
</tr>
</tbody>
</table>

6. How long did it take to solve the problem? - Selected Choice

- One day: 23.2%
- Within one week: 22.6%
- Within two weeks: 8.1%
- Within one month: 6.9%
- More than one month, please specify: 4.0%
- Problem is not yet resolved: 35.2%
Q7. How did you interact with your cell phone provider to solve the problem?

**Selected Choice: Visit a store**

<table>
<thead>
<tr>
<th></th>
<th>Frequency</th>
<th>Percent</th>
<th>Valid Percent</th>
<th>Cumulative Percent</th>
</tr>
</thead>
<tbody>
<tr>
<td>Valid</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>0</td>
<td>500</td>
<td>64.2</td>
<td>64.2</td>
<td>64.2</td>
</tr>
<tr>
<td>1</td>
<td>279</td>
<td>35.8</td>
<td>35.8</td>
<td>100.0</td>
</tr>
<tr>
<td>Total</td>
<td>779</td>
<td>100.0</td>
<td>100.0</td>
<td></td>
</tr>
</tbody>
</table>

Q7. How did you interact with your cell phone provider to solve the problem?

**Selected Choice: Over the phone**

<table>
<thead>
<tr>
<th></th>
<th>Frequency</th>
<th>Percent</th>
<th>Valid Percent</th>
<th>Cumulative Percent</th>
</tr>
</thead>
<tbody>
<tr>
<td>Valid</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>0</td>
<td>242</td>
<td>31.1</td>
<td>31.1</td>
<td>31.1</td>
</tr>
<tr>
<td>1</td>
<td>537</td>
<td>68.9</td>
<td>68.9</td>
<td>100.0</td>
</tr>
<tr>
<td>Total</td>
<td>779</td>
<td>100.0</td>
<td>100.0</td>
<td></td>
</tr>
</tbody>
</table>

Q7. How did you interact with your cell phone provider to solve the problem?

**Selected Choice: Online chat**

<table>
<thead>
<tr>
<th></th>
<th>Frequency</th>
<th>Percent</th>
<th>Valid Percent</th>
<th>Cumulative Percent</th>
</tr>
</thead>
<tbody>
<tr>
<td>Valid</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>0</td>
<td>676</td>
<td>86.8</td>
<td>86.8</td>
<td>86.8</td>
</tr>
<tr>
<td>1</td>
<td>103</td>
<td>13.2</td>
<td>13.2</td>
<td>100.0</td>
</tr>
<tr>
<td>Total</td>
<td>779</td>
<td>100.0</td>
<td>100.0</td>
<td></td>
</tr>
</tbody>
</table>
Q7. How did you interact with your cell phone provider to solve the problem?

Selected Choice: Email

<table>
<thead>
<tr>
<th></th>
<th>Frequency</th>
<th>Percent</th>
<th>Valid Percent</th>
<th>Cumulative Percent</th>
</tr>
</thead>
<tbody>
<tr>
<td>Valid</td>
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<td>88.1</td>
<td>88.1</td>
<td>88.1</td>
</tr>
<tr>
<td>1</td>
<td>93</td>
<td>11.9</td>
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<tr>
<td>Total</td>
<td>779</td>
<td>100.0</td>
<td>100.0</td>
<td></td>
</tr>
</tbody>
</table>

Q9. How long have you been/were you with this provider?

<table>
<thead>
<tr>
<th></th>
<th>Frequency</th>
<th>Percent</th>
<th>Valid Percent</th>
<th>Cumulative Percent</th>
</tr>
</thead>
<tbody>
<tr>
<td>Valid Less than one month</td>
<td>15</td>
<td>1.9</td>
<td>1.9</td>
<td>1.9</td>
</tr>
<tr>
<td>1 to 6 months</td>
<td>61</td>
<td>7.8</td>
<td>7.8</td>
<td>9.8</td>
</tr>
<tr>
<td>7 to 12 months</td>
<td>83</td>
<td>10.7</td>
<td>10.7</td>
<td>20.4</td>
</tr>
<tr>
<td>13 to 18 months</td>
<td>75</td>
<td>9.6</td>
<td>9.6</td>
<td>30.0</td>
</tr>
<tr>
<td>19 to 24 months</td>
<td>62</td>
<td>8.0</td>
<td>8.0</td>
<td>38.0</td>
</tr>
<tr>
<td>More than 24 months</td>
<td>483</td>
<td>62.0</td>
<td>62.0</td>
<td>100.0</td>
</tr>
<tr>
<td>Total</td>
<td>779</td>
<td>100.0</td>
<td>100.0</td>
<td></td>
</tr>
</tbody>
</table>
Q10. At the time of the problem, were you using a:

<table>
<thead>
<tr>
<th></th>
<th>Frequency</th>
<th>Percent</th>
<th>Valid Percent</th>
<th>Cumulative Percent</th>
</tr>
</thead>
<tbody>
<tr>
<td>Prepaid plan</td>
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<td>21.3</td>
<td>21.3</td>
</tr>
<tr>
<td>Contract plan</td>
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<td>37.0</td>
<td>37.0</td>
<td>58.3</td>
</tr>
<tr>
<td>Other, please specify</td>
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<td>1.3</td>
<td>1.3</td>
<td>59.6</td>
</tr>
<tr>
<td>Monthly plan</td>
<td>213</td>
<td>27.3</td>
<td>27.3</td>
<td>86.9</td>
</tr>
<tr>
<td>Family plan</td>
<td>102</td>
<td>13.1</td>
<td>13.1</td>
<td>100.0</td>
</tr>
<tr>
<td>Total</td>
<td>779</td>
<td>100.0</td>
<td>100.0</td>
<td></td>
</tr>
</tbody>
</table>

10. At the time of the problem, were you using a: - Selected Choice
**Q11. Approximately how much money do you spend on your cell phone bill per month?**

<table>
<thead>
<tr>
<th>Category</th>
<th>Frequency</th>
<th>Percent</th>
<th>Valid Percent</th>
<th>Cumulative Percent</th>
</tr>
</thead>
<tbody>
<tr>
<td>Valid</td>
<td>Less than $20</td>
<td>42</td>
<td>5.4</td>
<td>5.4</td>
</tr>
<tr>
<td></td>
<td>$20 to $59</td>
<td>206</td>
<td>26.4</td>
<td>31.8</td>
</tr>
<tr>
<td></td>
<td>$60 to $99</td>
<td>169</td>
<td>21.7</td>
<td>53.5</td>
</tr>
<tr>
<td></td>
<td>$100 to $149</td>
<td>178</td>
<td>22.8</td>
<td>76.4</td>
</tr>
<tr>
<td></td>
<td>$150 to $200</td>
<td>102</td>
<td>13.1</td>
<td>89.5</td>
</tr>
<tr>
<td></td>
<td>More than $200</td>
<td>82</td>
<td>10.5</td>
<td>100.0</td>
</tr>
<tr>
<td>Total</td>
<td></td>
<td>779</td>
<td>100.0</td>
<td>100.0</td>
</tr>
</tbody>
</table>

**11. Approximately how much money do you spend on your cell phone bill per month?**

![Bar chart showing the distribution of cell phone bill amounts per month.](chart.png)
Q12. The primary use of this cell phone(s) with your cell phone provider is for:

<table>
<thead>
<tr>
<th></th>
<th>Frequency</th>
<th>Percent</th>
<th>Valid Percent</th>
<th>Cumulative Percent</th>
</tr>
</thead>
<tbody>
<tr>
<td>Valid</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Business</td>
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<td>.9</td>
<td>.9</td>
<td>.9</td>
</tr>
<tr>
<td>Personal</td>
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<td>65.9</td>
<td>65.9</td>
<td>66.8</td>
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<tr>
<td>Both</td>
<td>259</td>
<td>33.2</td>
<td>33.2</td>
<td>100.0</td>
</tr>
<tr>
<td>Total</td>
<td>779</td>
<td>100.0</td>
<td>100.0</td>
<td></td>
</tr>
</tbody>
</table>

12. The primary use of this cell phone(s) with your cell phone provider is for: