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An Empirical Examination of the Moderators of the Service Recovery Paradox

Vincent P. Magnini
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**AN EMPIRICAL EXAMINATION OF THE MODERATORS
OF THE SERVICE RECOVERY PARADOX**

by

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ABSTRACT

Some researchers (Abrams and Paese, 1993; Bitner, Booms, and Tetreault, 1990; Etzel and Silverman, 1981; Feinberg et al., 1990; Folkes and Kotsos, 1986; Gilly and Gelb, 1982; Hart, Heskett, and Sasser, 1990; Hocutt, Chakraborty, and Mowen, 1997; Kelley and Davis, 1994; Kelley, Hoffman and Davis, 1993; McCollough and Bharadwaj, 1992; Michel, 2001; Chrage, 2001; Smith and Bolton, 1998; Spreng, Harrell, and Mackoy, 1995; Tax, Brown, and Chandrashekar, 1998) support the notion of a 'recovery paradox' which states that the occurrence of a failure may, if the recovery is effective, offer an opportunity to acquire higher satisfaction ratings from customers than if the failure had never happened. While a number of researchers have provided evidence in support of the recovery paradox, several recent studies (Andreassen, 2001; Maxham, 2001; Maxham and Netemeyer, 2002; McCollough et al. 2000) have failed to find such support.

This dissertation theoretically and empirically examines factors which moderate the occurrence of a 'recovery paradox' in the event of a service failure. The research findings indicate that, under appropriate conditions, a customer can experience a paradoxical satisfaction increase after a service failure. One such condition entails the severity of the failure. That is, results indicate that it is unlikely that a first-rate redress initiative can return the satisfaction of a severe failure recipient to par. The findings of this investigation also reveal that a customer who has experienced a prior failure with the firm is less likely to be impressed by a superb recovery than a customer who has never encountered a problem with the service provider. In addition, customers are more forgiving of failures that occur during a process than mistakes that occur as part of the

outcome. Furthermore, both control and stability intervene to affect the likelihood of increases in post-failure customer satisfaction. That is, people are more forgiving if they feel that the failure was not reasonably foreseeable to the service provider. Likewise, customers are more apt to exonerate the firm if they assess that the failure is unlikely to happen again. Lastly, this research found that control and relationship type interact to influence the probability of a recovery paradox. Specifically, customers in a true relationship are more likely to accept a low control explanation of the failure than customers in a pseudo-relationship with the firm.

*This dissertation is dedicated to the Memory of
Wayne F. Anderson.*

*Wayne was the Former City Manager of Alexandria, Virginia;
Was the Former Secretary of Administration and Finance for the Commonwealth of Virginia;
Was a Distinguished Professor of Public Administration at George Mason University;
Was my next-door neighbor for 14 years;
And was [will always be] a role model of mine.*

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AN EMPIRICAL EXAMINATION OF THE MODERATORS OF THE SERVICE RECOVERY PARADOX

CHAPTER I

INTRODUCTION

The global economy is increasingly becoming service-based (Fornell et al., 1996; Zeithaml and Bitner, 2003). An illustration of this point can be witnessed within the U.S. economy. In the period between 1995 and 2000 the gross domestic product growth rates in the United States for the manufacturing, agriculture, and service sectors were 21 percent, 23 percent, and 48 percent, respectively (Kubiak, 2002). Evidence of this trend in the international arena can be seen in the year 2000 when the U.S. balance of trade in goods remained in the red, but there was an \$81 billion trade surplus in services (Zeithaml and Bitner, 2003). This trade surplus was driven by numerous service companies, such as UPS, McDonalds, American Express, and Hilton, that capitalized on international expansion opportunities.

As a result of the growth of the service sector, academics are focusing increased attention on providing practitioners with both theories and normative guidelines to better understand the unique characteristics of managing and marketing service firms (Berry and Parasuraman, 1993; Brown, Fisk, and Bitner, 1994; Fisk, Brown, and Bitner, 1993). One such unique characteristic is that in services, regardless of how stringent the policies and employee training, or how advanced the technology, zero defects is an unattainable goal (Fisk, Brown, and Bitner, 1993; Hart, Heskett, and Sasser, 1990). Unlike manufacturers that can tweak the inputs and machinery until products are of uniform

quality, service firms cannot elude variations. Mistakes are inevitable in services due largely to the high human component. The service experience is dependent on both the employee and the customer. For example, in terms of the employee, no amount of training can render all bank tellers homogenous in their job performance. Also, as a human, a teller's mood is often inconsistent throughout a shift. Furthermore, failures are spawned because service customers are usually active participants in the service delivery process (Kelley, Donnelly, and Skinner, 1990; Mills, 1986). No amount of consumer education can render customers' expectations homogenous. For instance, a restaurant chef may serve the identical entree to two customers resulting in one pleased customer and one customer being dissatisfied with the flavor or consistency of the offering.

Failures are also unavoidable in the service sector due to simultaneous production and consumption (Fisk, Brown, and Bitner, 1993; Michel, 2001). This simultaneous aspect prevents *a priori* quality inspections of most services (Hess, Hart, and Sasser, 2003). That is, the 'moment of truth' can only occur when the customer interacts with the firm. This simultaneous production and consumption also renders many environmental forces unpredictable and unavoidable. For example, even the most well-trained and personable airline reservationist cannot accurately predict the occurrence of a snowstorm.

While failures are inevitable in the service sector, dissatisfied customers may not be inevitable. Some researchers (Abrams and Paese, 1993; Bitner, Booms, and Tetreault, 1990; Etzel and Silverman, 1981; Feinberg et al., 1990; Folkes and Kotsos, 1986; Gilly and Gelb, 1982; Hart, Heskett, and Sasser, 1990; Hocutt, Chakraborty, and Mowen, 1997; Kelley and Davis, 1994; Kelley, Hoffman and Davis, 1993; McCollough and

Bharadwaj, 1992; Michel, 2001; Chrage, 2001; Smith and Bolton, 1998; Spreng, Harrell, and Mackoy, 1995; Tax, Brown, and Chandrashekar, 1998) support the notion of a 'recovery paradox' which states that the occurrence of a failure may, if the recovery is effective, offer an opportunity to acquire higher satisfaction ratings from customers than if the failure had never happened. For instance, Hart, Heskett, and Sasser (1990, pp.148) state: "A good recovery can turn angry, frustrated customers into loyal ones. It can, in fact, create more goodwill than if things had gone smoothly in the first place." Berry (1995, pp.95) writes, "Satisfaction with service recovery sharply increases customers' willingness to recommend the firm and significantly improves their perception of overall satisfaction." Furthermore, this 'recovery paradox' is included in numerous marketing textbooks. Phil Kotler (1997, p.481) writes: "Customers whose complaints are satisfactorily resolved often become more company-loyal than customers who were never dissatisfied." The 'recovery paradox' is centered upon the belief that the employee's response to a service failure is often a larger determinant of the customer's perceived satisfaction or dissatisfaction, than the original service failure. The phenomenon of the recovery paradox boldly implies that: "Service recovery not only involves the costs of redressing failures but is also a powerful tool for increasing customer satisfaction (Michel, 2001, pp.26)."

STATEMENT OF THE PROBLEM

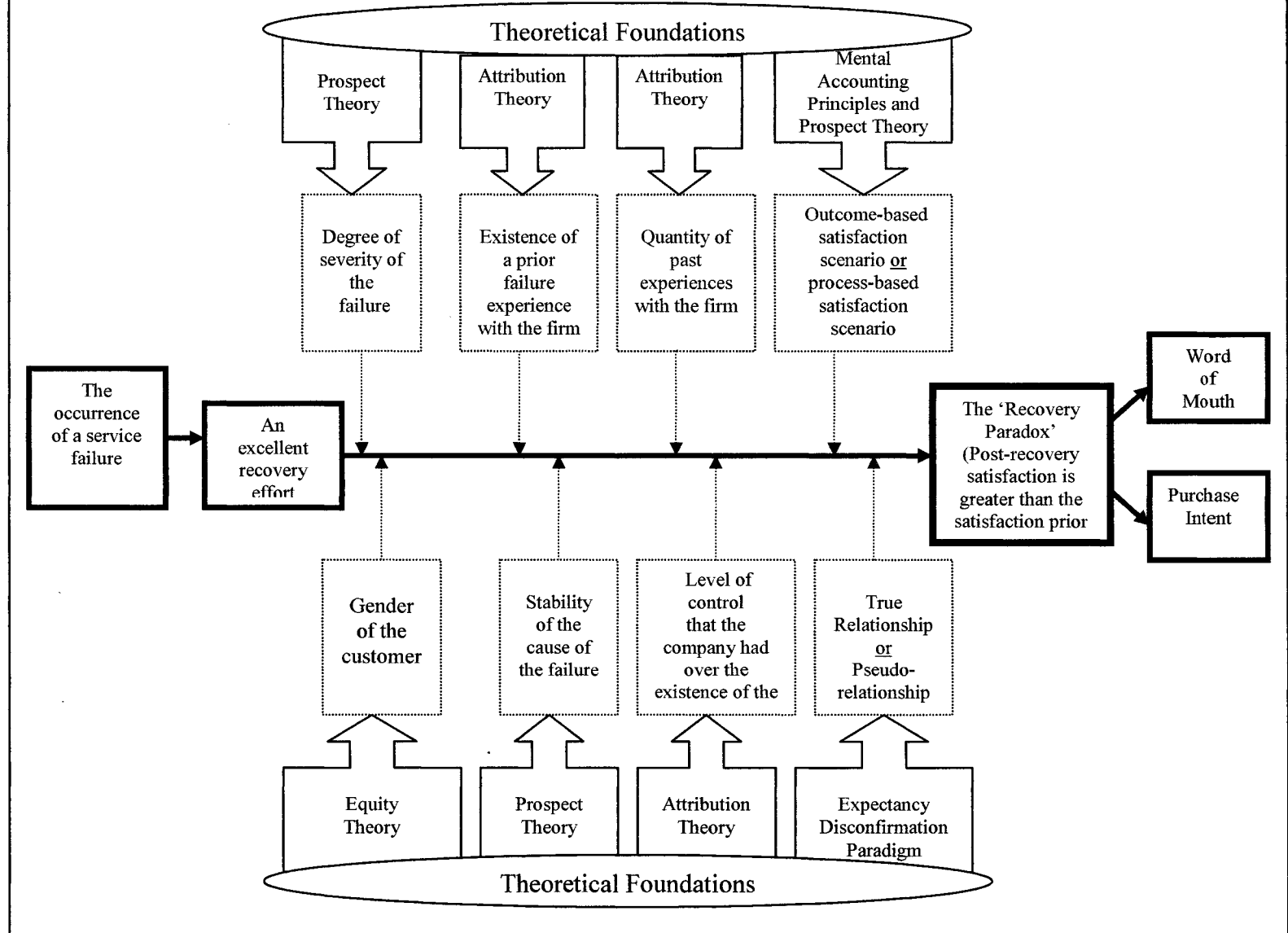
While the recovery paradox is often discussed in extant literature, evidence for the paradox is mixed (Magnini, 2003; Maxham and Netemeyer, 2002). This is where the problem, and consequently, the research opportunities lie. While a number of studies

(Bitner, Booms, and Tetreault, 1990; Etzel and Silverman, 1981; Folkes and Kotsos, 1986; Gilly and Gelb, 1982; Goodwin and Ross, 1992; Hocutt, Chakraborty, and Mowen, 1997; Kelley and Davis, 1994; Kelley, Hoffman, and Davis, 1993; McCollough and Bharadwaj, 1992; Michel, 2001; Schrage, 2001; Smith and Bolton, 1998; Tax, Brown, and Chandrashekar, 1998) have provided evidence in support of the recovery paradox, several studies have failed to find such support. For example, McCollough et al. (2000) surveyed airport patrons regarding a hypothetical scenario involving a three-hour delay and found no support for a recovery paradox despite first-rate recovery options. Next, when students were surveyed regarding their haircut experiences, Maxham (2001) found no support for a recovery paradox; furthermore, he concluded that firms do not always benefit from elaborate, often expensive, recovery efforts. Andreassen (2001) drew similar conclusions when he analyzed the responses of 822 individuals regarding a broad spectrum of service encounters. Andreassen (2001) found that excellent recovery efforts aid in restoring company intent and image, but not in raising satisfaction to levels at or above pre-failure levels. Furthermore, when Maxham and Netemeyer (2002) gauged customer sentiment after multiple service failures, no paradoxical increase in satisfaction was found. Moreover, McCollough et al. (2000) pointed out that, in general, no theoretically-based explanation as to why a recovery paradox effect is possible has ever been offered in the existing literature. Hence, in a nutshell, the problem which this dissertation addresses is the conflicting nature of the studies.

Figure 1 depicts a model of the recovery process with the potential moderators and their theoretical roots. In the figure, an excellent recovery effort is modeled as a mediator because both studies which support and do not support the paradox model a

first-rate recovery effort as axiomatic [it is understood that an excellent recovery is needed for a recovery paradox to transpire]. This dissertation differs from past empirical research in the area of service recovery with regard to its exhaustive approach to the study of recovery paradox moderators. This dissertation makes a contribution to the Marketing Discipline by examining eight moderators of the paradox. This is useful to researchers and practitioners because there is a conflict in terms of findings in the literature. This study will clear up this discrepancy by offering a better model which incorporates relevant moderators. Past studies addressing paradox moderators have focused solely on a single factor per study. For example, Maxham and Netemeyer (2002) tested the impact of multiple failures and Andreassen (2001) looked at the effects of failure severity. Conversely, this study not only incorporates these two factors, but also examines six other variables that are derived from both customer satisfaction/dissatisfaction literature and service failure literature. Some of these other six variables have been studied in the context of service failures, but none have ever before been examined as recovery paradox moderators. Further, this investigation extends the literature by empirically testing three potential interaction effects between the variables. In sum, rather than debating or speculating whether the recovery paradox is or is not a valid tool for our discipline, this study formulates and tests an exhaustive model of when and under which conditions the paradox holds.

Figure 1: Moderators of the 'Recovery Paradox' and Sources of Theoretical Support



SIGNIFICANCE OF THE PROBLEM

The problem is significant for four main reasons. First, comprehending recovery paradox moderators is inherently concerned with managing customer satisfaction in the event of a failure. This is a quintessential marketing issue because increased overall-customer satisfaction leads to customer loyalty¹ (Anderson and Sullivan, 1993; Bearden and Teel, 1983; Bolton and Drew, 1991; Boulding et al., 1993; Fornell, 1992; LaBarbera and Mazurski, 1983; Oliver, 1980; Oliver and Swan, 1989; Yi, 1990). Increased loyalty, in turn, potentially has numerous profit enhancing consequences. For example, customer loyalty secures future revenues (Bolton, 1998; Fornell, 1992; Rust, Zahorik, and Keiningham, 1994, 1995). This revenue security is due to the fact that loyal customers will probably purchase again and possibly even spend increased amounts of money for each purchase and with increased frequency. Also, loyalty reduces the cost of future transactions (Reichheld and Sasser, 1990). For instance, advertising monies have greater efficiency when targeted at loyal customers because it is already known that loyal customers have a want/need for the product or service. In addition, loyal customers decrease price elasticities. This decreased elasticity is because loyal customers are less probable to switch brands in the case of a price increase than are non-loyal customers. Furthermore, loyal customers are less likely to terminate a relationship with the firm when they experience a service failure. This is because a person's overall-satisfaction judgment is a cumulative evaluation of all experiences with the firm (Cronin and Taylor, 1994), and loyal customers most likely have a history of unflawed interactions with the

firm. Finally, positive word-of-mouth from satisfied customers reduces the cost of attracting new customers and bolsters the company's overall reputation, while that of dissatisfied customers has the reverse effect (Anderson, 1998; Fornell, 1992). A study conducted by Collier (1995) found that customers who experienced a service failure with no adequate recovery told nine or ten people about their disappointing experience; whereas, satisfied customers only told four of five people about their satisfactory experience. Further, Johnston (1998) found that customers who are "furious" spread significantly more negative word-of-mouth than customers who are only slightly dissatisfied.

Second, not only is the study of paradox moderators pertinent because the satisfaction-to-loyalty-to-profits causal chain is tenable, but more specifically, service failure is one "pushing determinant" that drives customer switching behavior (Roos, 1999). In other words, failure and recovery research addresses head-on the issues of customer defection and retention. Hence, a deepened understanding in the area of service failures can aid in retaining customers. Reichfield and Sasser (1990) state that, in particular circumstances, a service firm can boost profits almost 100 percent by increasing customer retention just 5 percent. The increased profit associated with retention is because loyal customers often increase their rate of spending with the firm. Also, customer retention circumvents acquisition costs associated with new customers such as new account setup and advertising and promotional expenses. Peters (1988) estimates that these costs can add up to five times the cost of efforts that might have enabled the company to retain a customer.

¹ As with all service failure studies, this dissertation is concerned with a customer's overall satisfaction as opposed to transaction-specific satisfaction. A customer's overall-satisfaction judgment is a cumulative

Third, examining and comprehending the effects of recovery paradox moderators is pregnant with managerial significance. Broadly speaking, if managers comprehend under which conditions the paradox will occur, then recovery resources can be allocated accordingly. That is, even in failure scenarios, firms are responsible for managing customer satisfaction with a limited amount of resources [time and money]. They must allocate these resources in a fashion that will reap the greatest investment for the firm. By understanding paradox moderators, managers can best decide when, and to whom, to offer the most generous recovery strategies. In addition, if the moderators contained in Figure 1 are shown to exist, then the following pragmatic guidelines also arise:

- If ‘perceived control’ is found to be a moderator, training programs can teach employees how to manage customer perceptions in the event of a failure; while at the same time retaining the firm’s integrity. Extant literature has found that when an employee offers an external explanation for service failure, the customer attributes less control to the firm than when an internal explanation is provided. Further, when an employee offers an external explanation for service failure, the customer attributes less control to the firm than when no explanation is given (Bitner, 1990). This is quintessential information because employees are the primary contact between customers and the firm, their efforts can either augment or weaken customer perceptions of the firm (Schneider and Bowen, 1999).
- If past problems are discovered to moderate the ‘paradox,’ a customer who has experienced a past problem could be ‘red flagged’ in the database and

evaluation of all experiences with the firm (Cronin and Taylor, 1994)

employees can be trained to take additional care to ensure that the particular customer does not encounter a second failure scenario.

- If the number of past encounters are found to moderate the existence of the recovery paradox, then employees should be trained to subtly remind the customer of the past relationship by making statements such as, “We know you have come to expect the best from our firm;” or “We are sorry we did not provide you with the high level of satisfaction that you have received in the past.”
- If the newness of a customer is evidenced to moderate the ‘paradox,’ front line employees can be trained to take extra measures to bolster the odds that new customers will not experience failures.
- If the severity of the failure is found to moderate the occurrence of a ‘paradox,’ resources should be allocated to establish and reinforce training and operational systems that limit the odds of a severe failure. This initiative would first involve the service firm collecting customer data defining which failures are viewed as severe in the eyes of the various customer segments. Upon collection of these customer-driven data, checks and balances can be put into place to reduce the likelihood of severe failures.
- If the distinction between process-based and outcome-based failures is found to moderate the ‘paradox,’ then employee training should reflect this finding. In process-based satisfaction, employees should receive extensive training in delivery processes. In outcome-based satisfaction, training should reflect the important nature of achieving the customer-desired end result.

- If the stability of cause is discovered to the ‘paradox,’ then employees should be trained to build a customer’s confidence in the redress process by exuding a feel of competence and by engaging in dialogue with that customer that instills confidence to ensure that the problem is unlikely to reoccur.

As can be seen in the above points, enhanced understanding of paradox moderators can result in refined recovery training for service personnel. Increased comprehension of recovery initiative techniques is practically significant because customers are often more emotionally involved in and observant of the recovery effort than in a routine service scenario (Berry and Parasurman, 1991; Bitner, Booms and Tetreault, 1990). In fact, poor recovery efforts can potentially have a double-deviation effect (Bitner, Booms and Tetreault, 1990; Hart, Hesk, and Sasser, 1990). Double deviation is the term used to describe a scenario in which the recovery was so poorly executed that it actually represented a separate service failure in the mind of the consumer. Double deviation, in essence, magnifies the dissatisfaction of the customer. Research conducted by Bitner, Booms and Tetreault (1990) found the double deviation effect to be quite common because many of the study’s respondents indicated that it is not the initial failure that caused dissatisfaction, but instead it was the *service employee’s response* to the failure. Hart, Heskett, and Sasser (1990) echoed this finding because according to their research more than half of all initiatives to respond to failures actually reinforce negative reactions to the service provider. Furthermore, misguided service recoveries can also spawn ‘halo’ and ‘domino’ effects. A ‘halo’ effect entails a customer having a negative impression of all interactions with the provider, and a ‘domino’ effect refers to phenomenon in which a

misguided failure spurs failures in other attributes or areas of the service process (Halstead, Drogue, and Cooper, 1993). Hence, continued understanding and refinement of recovery training procedures will reduce the odds of occurrence of these worst-case scenarios.

Fourth, the inquiry proposed here is significant from an academic perspective. Due to the perennial ramifications of understanding drivers of customer satisfaction, the perils of ignoring the discrepancy between supporting and un-supporting paradox examinations are formidable. This study will hopefully help resolve this discrepancy. In the process, this study may lead researchers to take a more fine-grained approach to the examination of service failures. This fine-grained approach to the study of service failures may then be translated into further research and extended into the classroom. That is, an inspection of services marketing textbooks reveals that the vast majority introduce the concept of the ‘recovery paradox.’ Therefore, extending conditions into the text under which the paradox is likely to hold/not hold would benefit the students as many will be future marketing managers.

PURPOSE OF THIS RESEARCH

The purpose of this dissertation is to employ attribution theory, prospect theory, equity theory, mental accounting principles, and the expectancy disconfirmation paradigm as the theoretical foundations to develop and empirically test hypotheses regarding factors which can moderate the occurrence of a ‘recovery paradox’ in the event of a service failure. A moderating effect is defined as an: “Effect in which a third independent variable (the moderator variable) causes the relationship between a

dependent / independent variable pair to change, depending on the value of the moderator variable” (Hair et al.,1998, pp.145). A moderating variable can intensify, weaken, or reverse the relationship between an independent and dependent variable (<http://psyl.clarion.edu>). An empirical examination of these moderators will hopefully aid in understanding the discrepancy between the studies which support the recovery paradox and those which do not. This study tests eight moderators individually at varying levels of strength, as well as several theoretically driven interaction effects. To date, marketing literature contains no such synthesis or empirical examination. The inclusion of these moderating variables and interactions should lead to a model of the service recovery paradox which provides improved explanatory power over current models. The model tested in this dissertation depicts a service failure as the independent variable, an excellent recovery as a mediating variable, eight intervening factors as moderating variables, and the recovery paradox as the dependent variable. The impetus of this dissertation is to translate the findings into a discussion of the managerial and academic implications inherent in an understanding of ‘recovery paradox’ moderators.

The objective of this dissertation is achieved first by searching the existing literature to find theoretical guidance for recovery paradox moderators. As stated above, theories of particular interest to the study of service failure recovery are prospect theory, equity theory, mental accounting theory, attribution theory, and the expectancy disconfirmation paradigm. Prospect theory contends that in individual decision-making, resources are weighted differentially according to their utility (Kahneman and Tversky, 1979). Also according to prospect theory, losses are typically weighted more heavily than gains (Kahneman and Tversky, 1979; Oliver, 1997). Second, equity theory contends

that a customer's assessment of equity entails two criteria: 1) distributive justice [describes the perceived fairness of the actual outcome] (Homans, 1961) and 2) procedural justice [refers to whether the procedures utilized in making the decision are perceived as fair] (Thibaut and Walker, 1975; Lind and Tyler, 1988). Next, mental accounting theory suggests that individuals utilize various implicit methods to allocate resources to different mental accounts (Benartzi and Thaler, 1995; Thaler, 1985). Furthermore, mental accounting principles posit that consumers assign economic and social resources to different mental accounts (Smith et al., 1999). Lastly, attribution theory encompasses individual attempts to comprehend the causes and implications of events (Ajzen and Fishbein, 1983; Fincham, 1983; Monson, 1983; Ross and Anderson, 1982). Finally, the expectancy disconfirmation paradigm contends that the customers' satisfaction is influenced by his/her expectations. If the firm's performance exceeds [falls below] expectations then the customer is satisfied [dissatisfied] (Bearden and Teel, 1983; Oliver, 1980, 1981, 1989, 1993; Oliver and Bearden, 1985; Oliver and Burke, 1999; Swan and Trawick, 1981a).

After the literature search, six in-depth interviews are conducted with frequent patrons of large hotels [this is the experiment's setting]. Three interviews are conducted with regular leisure travelers, and three are held with frequent business travelers. The purpose of these in-depth interviews is an attempt to solicit potential paradox moderators that cannot be derived from the existing literature. In other words, practice is often wiser than theory; therefore, perhaps paradox moderators exist in the real world that have not yet been addressed in the extant literature. The in-depth interviews will entail having unstructured conversations with the frequent travelers with an attempt to better

understand their underlying beliefs, attitudes, and feelings about the service recovery paradox and intervening influences. This exploratory process allows for a more comprehensive and exhaustive model for the study.

Upon developing and explicating theoretically driven moderators, the variables that are subjective in nature [e.g. excellent recovery, stability, control, and severity] are solidified through manipulation checks. The manipulation checks ensure that the levels are appropriate. Next, the moderators and the interaction effects are empirically tested through a number of role-playing experiments (scenarios). This approach enables costly and difficult manipulations to be more easily operationalized and avoids ethical considerations associated with observing or enacting actual service failures (Smith and Bolton, 1998). Moreover, this approach gives the researcher control over otherwise unmanageable factors, and facilitates the compression of time by summarizing happenings that might otherwise transpire over weeks (Bitner, 1990). This scenario-based method also eliminates the managerial undesirability of intentionally subjecting customers to failure situations (Smith, Bolton, and Wagner, 1999). Lastly, this approach has advantages over asking subjects to recall actual service failures and recoveries using a retrospective-type approach [such as the critical incident technique] because retrospection is often plagued with response bias due to memory lapse, re-interpretation, and rationalization (Johnston, 1995; Smith, Bolton, and Wagner, 1999). Consistent with prior service failure studies (Goodwin and Ross, 1992; Hess, Ganesan, and Klein, 2003; Matilla, 2001; Maxham, 2001; Smith, Bolton, and Wagner, 1999), undergraduate students will serve as the study's sample because undergraduates adequately possess the

ability to assess satisfaction judgments in a scenario-based experiment. Adequate internal and external validity will be achieved through this approach.

ORGANIZATION OF THE DISSERTATION

This dissertation is organized into four major sections following this chapter. First, the literature review focuses on laying the theoretical cornerstone for the empirical study. The first portion of the literature review defines key terms such as “service failure,” “service failure recovery” and “satisfaction.” After defining key terms, the chapter then outlines the emergence of the recovery paradox theory in the literature and explains the three theoretical foundations for the recovery paradox theory: 1) the expectancy disconfirmation paradigm; 2) script theory; and 3) the commitment-trust theory of relationship marketing. Based on these theoretical foundations, a hypothesis is presented which predicts the existence of the recovery paradox in the absence of moderating variables. Next, the literature review draws upon theories from various streams of research to develop and theoretically justify eight moderators of the recovery paradox. It is argued in the literature review that discrepancies between supporting and un-supporting evidence regarding the paradox can largely be explained by these eight moderators. Lastly, the literature review presents three theoretically supported interaction effects which are also posited to moderate the paradox.

Following the literature review, the methodology employed to test the hypotheses is clearly laid out in Chapter 3. In this section, specific data and sampling requirements are outlined. Also in this section, three pretests are detailed. Pretest 1 probes the suitability of using undergraduate students for the study. Pretest 2 involves a

manipulation checks on “recovery effort” to determine an excellent, but realistic, redress action for the scenarios. Further, manipulation checks are conducted on “severity”, “control”, and “stability” in order to illuminate strong, but realistic, manipulations on those variables. Pretest 3 validates that the necessary changes to experimental manipulations [resulting from the findings of pretest 2] perform as intended. In addition, this third, and final, pretest probes whether the pre-failure satisfaction in the experimental vignettes should be set at level six or seven. Also, Chapter 3 defines all of the components of the hypothesized model and explains why logistic regression (logit) will be used to test the hypotheses. Next, Chapter 4 contains a discussion and interpretation of the results of the research. Chapter 5 then includes a discussion of the conclusions, limitations, managerial implications, and research implications. The final chapter also offers an agenda for future research. Finally, a list of references and Appendices are provided.

CHAPTER II

LITERATURE REVIEW

THEORETICAL FOUNDATIONS OF THE RECOVERY PARADOX

Service failures are defined as any service related mishaps or problems [real or perceived] that transpire during a customer's experience with a firm (Maxham, 2001). Failures encompass activities that transpire as a result of customer perceptions of initial service delivery falling below the customer's expectations or 'zone of tolerance' (Zeithaml, Berry, and Parasuraman, 1993). Since it is impossible for service firms to prevent all service failures (Fisk, Brown, and Bitner, 1993; Hart, Heskett, and Sasser, 1990), they must learn to respond to failures when they occur. This response is called a service recovery and is defined as the process by which a firm attempts to rectify a service delivery failure (Gronoos, 1988; Kelley and Davis, 1994). Service recovery initiatives are performed in response to customer perceptions that the initial service encounter fell short of their expectations (Kelley and Davis, 1994; Zeithaml, Berry, and Parasuraman, 1996). Broadly speaking, a service failure/recovery encounter is an exchange in which the customer experiences a loss because of the failure and the firm tries to provide a gain, in the form of a recovery effort, to compensate for the customer's loss. Recovery strategies can range from "do nothing" to "whatever it takes to fix the problem"(McDougall and Levesque, 1999). Examples of recovery tactics include refunds, price discounts, upgraded services, apologies, and acknowledgment of the problem (Bitner, Booms, and Tetreault, 1990; Hart, Heskett, and Sasser, 1990; Hoffman,

Kelley, and Rotasky, 1995; Kelley, Hoffman, and Davis, 1993). Since failures are impossible for even the best-managed service firms to prevent, effective service recovery procedures are a critical component in a service company's customer retention strategy (Strauss and Friege, 1999). In fact, the fashion in which a company recovers from service failure should be viewed as a strategic marketing variable which could be a sustainable competitive advantage in the marketplace (Bell and Zemke, 1987; Maxham, 2001).

The 'recovery paradox' supports the notion that the occurrence of a failure may, if the recovery is effective, offer an opportunity to acquire higher satisfaction ratings from customers than if the failure had never happened (Smith and Bolton, 1998). The term "service recovery paradox" was first coined by McCollough and Bharadwaj (1992) and refers to situations in which a customer's post-failure satisfaction [also termed secondary satisfaction] exceeds pre-failure satisfaction. The recovery paradox theory contends that an effective recovery cannot only maintain customer satisfaction, but also propel it to higher levels. The service recovery paradox reiterates the old adage: "To err is human, to recover, divine" (Hart, Heskett, and Sasser's, 1990, pp.156). To illustrate the recovery paradox, Abrams and Paese (1993, pp. 73) offer the following authentic scenario:

After being convinced by a salesperson to purchase an expensive mathematical software package that turned out to be much less useful than he had hoped - resulting in a great deal of wasted time and effort setting up and learning the program – Bob got angry and conveyed that anger to the store manager. By doing so, he expected to get an apology and his money back so that he could move on – probably to another software store. What he got, however, was far more than he had expected. Along with the apology and refund came an offer that included a free one-month trial of two software packages, as

well as a 25% discount should he choose to purchase one of them. The manager also offered to spend extra time with Bob to demonstrate the difference between the two packages. Bob's reaction illustrates an interesting point: 'When someone listens to you complain for ten minutes and then makes you an offer like that, they almost give you no choice but to keep doing business with them.'

As described in this scenario, the recovery paradox is focused on the contention that a company can, in fact, convert a complaining customer into a brand-loyal company advocate. In fact, Bitner, Booms and Tetreault (1990) found that roughly one out of four memorable satisfactory encounters in the airline, hotel, and restaurant industries were directly due to incidents relating to the way service employees reacted to service failures. Although it is strictly a conceptual article, the seminal [and the most widely cited] work supporting the service recovery paradox is the Hart, Heskett, and Sasser's (1990) article in the Harvard Business Review which is titled "The Profitable Art of Service Recovery: How the Best Companies Turn Complaining Customers into Loyal Ones." The authors of this article, again, support the notion that a company's initiatives following a service failure cannot only return customer satisfaction to par, but can also thrust satisfaction above its pre-failure level. Hart, Heskett, and Sasser (1990, pp.149) state that "any problem that employees who are close to the customer can discover and resolve is a chance to go beyond the call of duty and win a customer for life." In accordance with this line of reasoning, well-orchestrated recovery initiatives can serve as powerful strategic weapons for service firms. Hart, Heskett, and Sasser (1990, pp.148-149) offer the following vignette:

The vacationers had nothing but trouble getting from New York to their Mexican destination. The flight took off 6 hours late, made 2 unexpected stops, and circled for 30 minutes before it could land. Because of all the delays and mishaps, the plane was en route for 10 hours more than planned and ran out of food and drinks. It finally arrived at 2 o'clock in the morning, with a landing so rough that oxygen masks and luggage dropped from overhead. By the time the plane pulled up to the gate, the soured passengers were faint with hunger and convinced that their vacation was ruined before it had even started. One lawyer on board was already collecting names and addresses for a class-action lawsuit. Silvio Bortoli, the general manager of the Cancun Resort and a legend throughout the organization for his ability to satisfy customers, got word of the horrendous flight and immediately created an antidote. He took half the staff to the airport, where they laid out tables of snacks and drinks and set up a stereo system to play live music. As the guests filed through the gate, they received personal greetings, help with their bags, a sympathetic ear, and a chauffeured ride to the resort. Waiting at the Club Med was a lavish banquet, complete with mariachi band and champagne. Moreover, the staff had rallied other guests to wait up and greet the newcomers, and the partying continued until sunrise. Many guests said it was the most fun they'd had since college. In the end, the vacationers had a better experience than if their flight from New York had gone like clockwork. Although the company probably couldn't measure it, Club Mediterranee won market share that night.

As described in this vignette, the failure may or may not be caused by the organization itself. Regardless of the source of the failure, the recovery paradox contends that first-rate problem resolution forges stronger bonds between customers and the company that would exist had no service problem occurred in the first place. These stronger bonds,

resulting from aggressive complaint-resolution, spell customer commitment and strong repurchase intent (Abrams and Paese, 1993). J.W. Marriott, chief executive officer of the Marriott hotel corporation, is an advocate of the recovery paradox theory; he states: “Sometimes those [disgruntled] customers whom you make the extra effort to gain back become the most loyal customers that you have” (Lovelock, 1994, pp. 214). J.W. Marriott does not stand alone on his view regarding the power of recovery initiatives, Table 1 provides a list of the articles which support the recovery paradox theory along with a brief description of the article’s primary focus. As seen in Table 1, paradox support is fueled by the confluence of both conceptual and empirical works. Further, the validity of the theory is bolstered by the fact that empirical works encompass a vast array of service settings spanning such sectors as hotels, restaurants, airlines, retailing, oil, banking, warranty repair, and moving companies.

Table 1: Literature which Supports the Recovery Paradox		
Authors	Empirical or Conceptual	Article's Contribution
Abrams and Paese, 1993	Conceptual	Discusses how complaining customers can be turned into loyal ones through first-rate failure recovery tactics
Bitner, Booms, and Tetreault, 1990	Empirical	Uses the critical incident technique to analyze 700 incidents from patrons of airlines, hotels, and restaurants
Feinberg et al., 1990	Empirical	Analyzes customer satisfaction, dissatisfaction, repurchase intent, and word-of-mouth in retail settings
Etzel and Silverman, 1981	Conceptual	Synthesizes the literature pertaining to customer satisfaction and repurchase intent in retail settings
Folkes and Kotsos, 1986	Empirical	Examines customer satisfaction and dissatisfaction and causal attributions after warranty repair service
Gilly and Gelb, 1982	Empirical	Analyzes customer satisfaction and dissatisfaction after customers experience a problem with an oil company
Goodwin and Ross, 1992	Empirical	Evaluates customer perceptions of procedural and interactional justice in service failure scenarios
Hart, Heskett, and Sasser, 1990	Conceptual	Introduces a framework for converting complaining customers into loyal ones
Hocutt, Chakraborty, and Mowen, 1997	Empirical	Finds that the recovery paradox requires high redress, responsiveness, empathy and courtesy
Kelley, Hoffman, and Davis, 1994	Empirical	Uses the critical incident technique to develop a typology of retail service failure and recovery strategies
Kelley and Davis, 1994	Empirical	Analyzes the three antecedents to customer expectations of recovery: quality, satisfaction, and commitment
Michel, 2001	Empirical	Measures customer sentiment following routine and failure situations in the banking sector
McCullough and Bharadwaj, 1992	Conceptual	Discusses the recovery paradox theory in relation to disconfirmation, service quality, and attribution theory
Schrange, 2001	Conceptual	Reports that a major hotel chain found that customer satisfaction is largely determined by recovery efforts
Smith and Bolton, 1998	Empirical	Tests the existence of the recovery paradox and finds that the magnitude of the failure must be considered
Spreng, Harrell, and MacKoy, 1995	Empirical	Measures satisfaction and repurchase intentions after customers experienced a failure with a moving company
Tax, Brown, and Chandrashekar, 1998	Empirical	Analyzes customers' perceptions of justice and resulting trust and commitment following a failure experience

Since the recovery paradox is a theory that directly addresses pre-failure and post-failure customer satisfaction levels, an understanding of the theory cannot be obtained until the customer satisfaction construct is explicated. Customer satisfaction is defined as the customer's fulfillment response. It is a judgment that a product or service feature, or the product or service itself, provided [or is providing] a pleasurable level of consumption-related fulfillment, including levels of under and over-fulfillment (Oliver, 1997 pp. 13). Broadly speaking, there are two types of customer satisfaction: transaction-based satisfaction and overall satisfaction. This study, like nearly all service failure studies, is concerned with overall satisfaction that is based upon information from all previous experiences with the service provider. Overall satisfaction is a function of all previous transaction-specific satisfactions (Parasuraman, Zeithaml, and Berry, 1994; Teas, 1993). Overall satisfaction may be formulated from many transactions or just a few, depending upon the number of times the customer has visited the firm. In sum, overall satisfaction is an aggregation of all previous transaction-specific evaluations and is updated after each service encounter (Boulding et al., 1993). Transaction-specific satisfaction may not correlate precisely with overall satisfaction because service quality can vary from encounter to encounter, spurring varying levels of transaction-specific satisfaction (Jones and Suh, 2000). Conversely, overall satisfaction can be conceptualized as a moving average (Parasuraman, Zeithaml, and Berry, 1994). The study of overall satisfaction is important because past studies utilizing panel designs have shown that individual customers' prior satisfaction directly influences their subsequent

satisfaction judgments (LaBarbera and Mazursky, 1983; Oliver, 1980; Woodruff, Cadotte, and Jenkins, 1983).

Some researchers argue that the recovery paradox has weak theoretical support (McCollough, Berry, Yadav, 2000; Zeithaml, Berry, and Parasuraman, 1996). However, a review of extant literature reveals that the following three theories provide a theoretical foundation for the recovery paradox:

1) The Expectancy Confirmation/Disconfirmation Paradigm

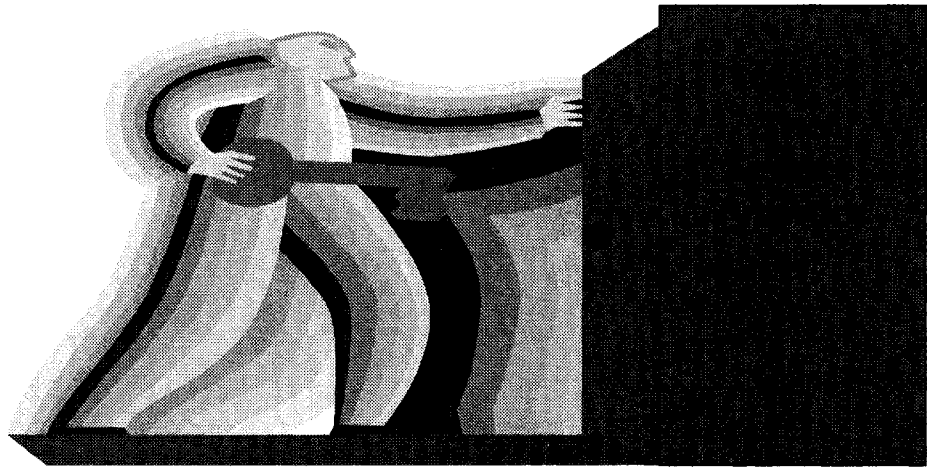
Theoretical support for the service recovery paradox is found in the expectancy disconfirmation paradigm. The disconfirmation paradigm is the most widely used model within the customer satisfaction / dissatisfaction literature (Bearden and Teel, 1983; Oliver, 1980, 1981, 1989, 1993; Oliver and Bearden, 1985; Oliver and Burke, 1999; Swan and Trawick, 1981a). According to the disconfirmation paradigm, customer satisfaction is the consequence of an evaluation process in which the customer judges his or her expectations of how the service should be performed against the actual service experience. Customer expectations are defined as internal standards or benchmarks against which customers judge or measure the quality of service they receive (McDougall and Levesque, 1998, pp.32). As summarized in Table 2, expectations are determined by factors that include advertising messages, prior experience, personal needs, word of mouth (Parasuraman, Zeithaml, and Berry, 1985), the image of the service provider (Gronroos, 1984), and promises made by the service provider (Zeithaml, Berry, and Parasuraman, 1993).

According to the paradigm, *confirmation* occurs when things go as expected (Blodgett, Granbois, and Walters, 1993). However, positive or negative differences between expectations and the actual service experience alter satisfaction judgments. That is, *negative disconfirmation* occurs when the firm does not perform up to the consumer's expectations; whereas, *positive disconfirmation* occurs when a firm performs better than expected (Oliver, 1980; Oliver and Linda, 1981; Churchill and Surprenant, 1982; LaBarbera and Mazursky, 1983). The expectancy disconfirmation paradigm was extended to include customer reactions to failure recovery by McCollough, Berry, and Yadav (2000); Oliver, (1981, 1997); Singh and Widing, (1991). This can be further extended to state that recovery disconfirmation is a function of recovery expectations and recovery performance. When a customer is the recipient of an *excellent recovery strategy*, this causes *positive disconfirmation* of expectations that results in a heightened post-satisfaction [also commonly termed secondary satisfaction] state (Oliver, 1997).

As indicated in Figure 2 (page 32) an *excellent recovery strategy* is a mediator in the recovery paradox; consequently, the paradox probably does not hold in the absence of an *excellent recovery*. To state this in terms of the expectancy disconfirmation paradigm, it is only an *excellent recovery* that can trigger a positive disconfirmation after a service failure. Positive disconfirmation is only achieved after a first-rate recovery because most customers realize that a service transaction entails some potential for dissatisfaction (Murray and Schlacter, 1990), and, therefore, they expect some form of redress as a result of a failure (Berry and Parasuraman, 1991; Blodgett, Hill, and Tax, 1997; Goodwin and Ross, 1992). Therefore, a mediocre recovery strategy only spurs *confirmation* of the customer's expectations and no paradoxical satisfaction increase is experienced.

Table 2: Determinants of Customer Expectations

- Personal Needs of the customer ^d
- Word-of-mouth heard by the customer ^b
- Past experiences of the customer with the service provider ^b
- Explicit promises made by the service provider ^c
- Implicit promises made by the service provider ^c
- Advertising messages of the service provider ^b
- Overall image of the service provider ^a
- Customer's self-perceived role in the service exchange ^d



^a Gronroos (1984);

^b Parasuraman, Zeithaml, and Berry (1985)

^c Zeithaml, Berry, and Parasuraman (1993)

^d Zeithaml and Bitner (2003)

2) Script Theory

Theoretical justification for the service recovery paradox can also be found in script theory. Script theory contends that knowledge about familiar, frequent situations is stored in one's mind as a coherent description of events expected to occur (Bateson

2002a, pp. 110). According to script theory, information about the service process is held in the memory of a consumer as a sequence of actions that transpire in a particular order, and this knowledge is called a script (Bateson, 2002b; Gan, 1991; Smith and Houston, 1983, 1985). This means that customers and employees in routine, well-understood service encounters share similar beliefs regarding their roles and the expected sequence of events and behaviors (Bitner, Booms, and Mohr, 1994). Service failures heighten the sensitivity and awareness of the customer due to deviation from an anticipated transactional script. Therefore, service recovery efforts are usually very salient in the consumer's mind because of heightened attention and evaluation as a result of the service failure (Spreng, Harrell, and Mackoy, 1995).

This heightened attention and evaluation is particularly evident in failure scenarios that make the customer vulnerable, inconvenienced, and/or uncomfortable. Due to this heightened sensitivity, satisfaction with the redress initiative is more important than initial attributes in influencing overall satisfaction (Bitner, Booms, and Tetreault, 1990; Hart, Heskett, and Sasser, 1990). Therefore, the actions of customer-contact personnel during service recovery is a key driver of a customer's overall satisfaction (Martin, 1993). That is, in the event of a failure, customer satisfaction with a service provider has a robust tie to the resolution of the problem (Spreng, Harrell, and Mackoy, 1995). The fashion in which recovery tactics are implemented can have a greater impact on overall satisfaction than does the customer's satisfaction with the original service outcomes (Parasuraman, 1991; Spreng, Harrell, and Mackoy, 1995). Often times the heavy reliance of customer satisfaction on problem resolution can have negative consequences. Andreasen and Best (1977) report that 30-35 percent of

customers who experience failures are not pleased with the resolution. Berry and Parasuraman (1991) estimate these figures to be 50-67 percent. Nevertheless, the converse can also hold true: The heightened and powerful influence of a recovery strategy can sway customer satisfaction in a positive direction – hence, creating a ‘recovery paradox.’

3) Commitment-Trust Theory

Third, theoretical foundation for the service recovery paradox is Morgan and Hunt’s (1994) commitment-trust theory for relationship marketing. A superb service recovery has a direct impact on the trust that the customer has in the firm (Kelley and Davis, 1994; Tax, Brown, and Chandrashekar, 1998). In fact, effective failure recovery and relationship marketing are linked closely in terms of their focus on customer satisfaction, trust and commitment (Archol, 1991; Morgan and Hunt, 1994). At first glance, it may appear counterintuitive to state that a failure situation can ultimately enhance trust, but it is common knowledge that service failures are inevitable; therefore, trust is built because the consumer now has confidence that the firm has enough honesty and integrity to amend errors. Trust is an integral component in the development of marketing relationships and exists “when one party has confidence in an exchange partner’s reliability and integrity” (Morgan and Hunt, 1994, pp.23). Confidence on the part of the trusting party results from the enduring belief that the trustworthy party has integrity which is associated with such attributes as honesty, fairness, responsibility, and helpfulness (Altman and Taylor, 1973; Dwyer and LaGrace, 1986; Larzelare and Houston, 1980; Rotter, 1971). Holmes and Rempel (1989, pp.199) state that “trust is

strengthened when partners are responsive in ways that acknowledge an individual's particular needs and affirm their sense of worth." Trust in a person or a company is built through observing the party or learning of previous interactions, such as conflicts, that the partner has had with others in analogous situations (Holmes, 1991). Fair conflict resolution aids in fostering this trust (Achrol, 1991). Consequently, when satisfaction exceeds expectations, the customer perceives more firm reliability (Ganesan, 1994).

MODERATORS OF THE RECOVERY PARADOX

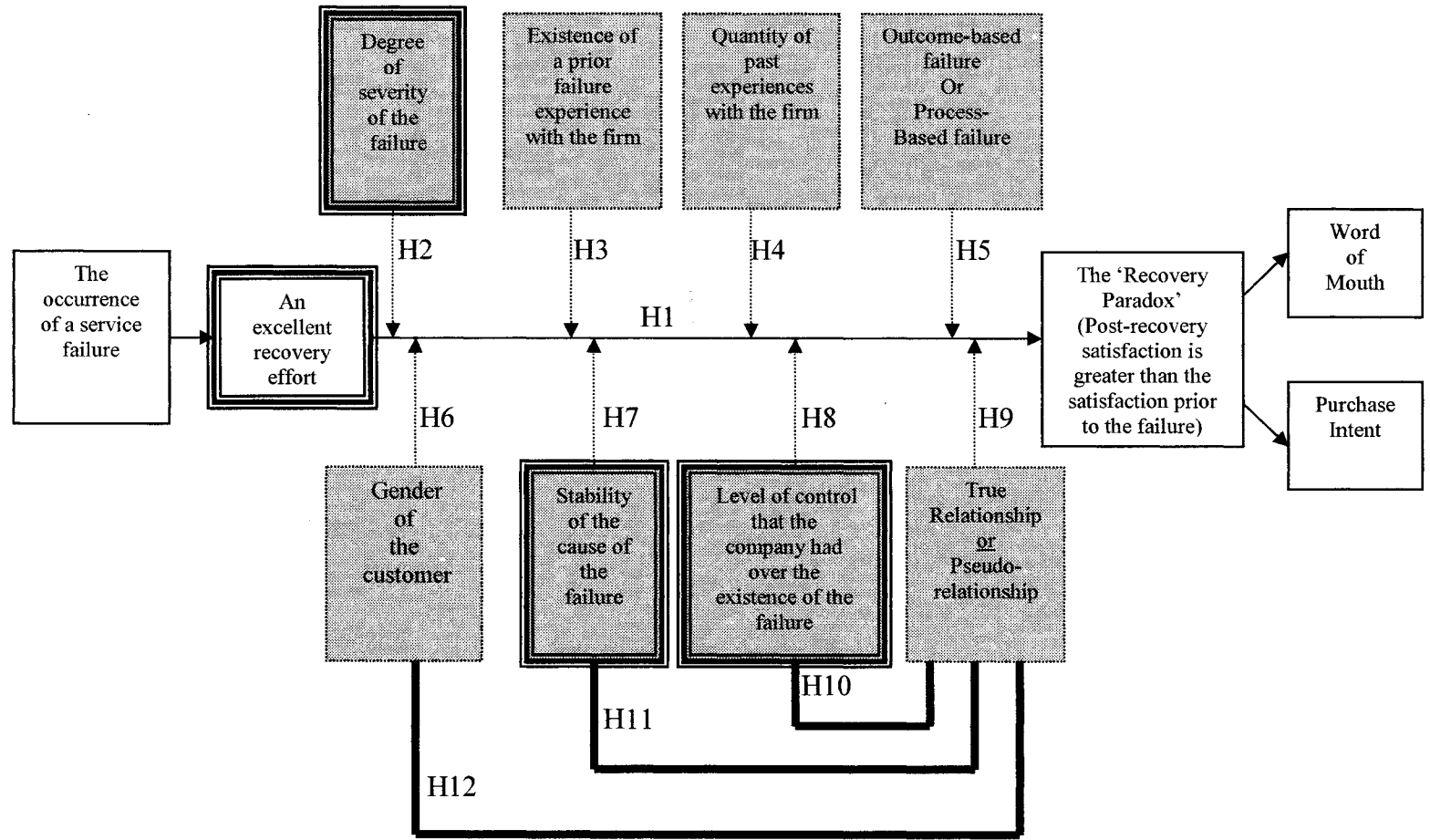
The previous discussion can be summarized by stating that the recovery paradox theory is strongly supported by expectancy disconfirmation theory, script theory, and commitment-trust theory. Due to these robust theoretical foundations, and consistent with many other studies (Bitner, Booms, and Tetreault, 1990; Etzel and Silverman, 1981; Folkes and Kotsos, 1986; Gilly and Gelb, 1982; Goodwin and Ross, 1992; Hocutt, Chakraborty, and Mowen, 1997; Kelley and Davis, 1994; Kelley, Hoffman, and Davis, 1993; McCollough and Bharadwaj, 1992; Michel, 2001; Schrage, 2001; Smith and Bolton, 1998; Tax, Brown, and Chandrashekar, 1998), the first hypothesis is:

H₁: In the event of a service failure, if the firm exercises an excellent recovery, the customer's post-failure satisfaction level will be greater than the pre-failure level.

Despite strong roots in exiting theory, evidence for the recovery paradox is mixed (Magnini, 2003; Maxham and Netemeyer, 2002). A number of studies (Andreassen 2001; Bolton and Drew, 1992; Maxham, 2001; Maxham and Netemeyer, 2002; McCollough, Berry, and Yadav, 2000; Zeithaml, Berry, and Parasuraman, 1996; Zeithaml, Parasuraman and Berry, 1990) report no paradoxical increase in secondary

customer satisfaction. Perhaps an explanation for the division between findings supporting, and not supporting, the paradox is that certain conditions can moderate the paradox. That is, perhaps other intervening variables [moderators] intensify or weaken the causal link between a first-rate redress effort and post-failure satisfaction levels. The purpose of this literature review, from this point forward, is to present a framework [see Figure 2] of the variables that can moderate the paradox.

Figure 2: Moderators of the 'Recovery Paradox' and Interaction Effects



- Shaded boxes denote experimentally manipulated variables.
- A frame indicates that the given variable was subjected to a manipulation check.
- A bold line represents a hypothesized interaction effect.

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The Effect of the Severity of the Failure

Service failures differ in terms of severity (Kelley and Davis, 1994; McCollough, Berry, and Yadav, 2000; McDougall and Levesque, 1998; Smith and Bolton, 1998). Many service problems that customers experience can be characterized as only mildly annoying (McDougall and Levesque, 1998), but still others can range to very severe. Satisfaction judgments will vary by the severity of the failure (McCollough, Berry, and Yadav, 2000; McDougall and Levesque, 1998; Smith, Bolton, and Wagner, 1999). Typically, the higher the magnitude or severity of the failure, the lower the level of customer satisfaction (Hoffman, Kelley, and Rotalsky, 1995; Keaveny, 1995; Kelley and Davis, 1994; Richins, 1983, 1987; Singh and Wilkes, 1996). Consequently, the existence of a recovery paradox is conditional upon the magnitude of the failure (McCollough, Berry, and Yadav, 2000; Smith, Bolton, and Wagner, 1999). For example, perhaps an apology, empathy, and compensation could create a paradoxical satisfaction increase after a twenty-minute wait at the front desk of a hotel. But would this paradoxical increase occur if the wait caused the patron to miss a flight? It is unlikely that any realistic recovery is capable of completely erasing the harm caused by such a failure, and a paradoxical increase in post-failure satisfaction is even more improbable.

The influence of failure severity on customer satisfaction is illustrated in a study conducted by McDougall and Levesque (1998) in which restaurant patrons experienced severe failures, and, despite both assistance and compensation, the patrons were unlikely to recommend the restaurant or make the restaurant their first choice in the future. This finding was echoed by McCollough, Berry, and Yadav (2000) when the researchers

found that no ‘recovery paradox’ was evident when airline passengers experienced three-hour delays. The harm caused by the failure could not be entirely mitigated by a generous recovery because missed appointments and ruined agendas fatally impaired satisfaction levels. The fact that severe failures damage satisfaction beyond repair can be traced to prospect theory. Prospect theory contends that in decision-making, resources are weighed differentially according to their utility (Kahneman and Tversky, 1979). Specifically, the theory posits that the customer’s value function is steeper for losses than for gains (Choong, 2001). More specifically, losses are typically weighted more heavily than gains (Kahneman and Tversky, 1979; Oliver, 1997). Therefore, in a failure / recovery scenario, if the redress [gain] is equivalent to the failure [loss] the customer will likely place more psychological emphasis on the loss and exit the situation dissatisfied. In accordance with these discussions, a severe failure may result in a fatal blow to customer satisfaction that is hypothesized as:

H₂: The existence of a recovery paradox is moderated by the severity of the failure. That is, in the event of a service failure, a recovery paradox is more likely to occur if the service failure is less severe than if the failure is more severe.

The Effect of a Prior Failure with the Firm

A person’s satisfaction judgment is a cumulative evaluation of all experiences with the firm (Cronin and Taylor, 1994). If the service failure occurred in a one-time only use, then the satisfaction judgment would be transaction-specific. However, an individual generally has a history of interactions with the firm, in which case satisfaction reflects the cumulative interactions over time between the individual and that firm (Bitner

and Hubert, 1994; Crosby and Stephens, 1987). A customer with a history of positive experiences may be more forgiving of a failure than a first time customer. In fact, an empirical study conducted by Maxham and Netemeyer (2002, pp.57) found that “though satisfactory recoveries may produce a ‘recovery paradox’ after one failure, they do not trigger such paradoxical increases after two failures.” This diminishing satisfaction links back to attribution theory. Attribution theory encompasses attempts of individuals to comprehend the causes and implications of events (Ajzen and Fishbein, 1983; Fincham, 1983; Monson, 1983; Ross and Anderson, 1982). When a customer experiences a second failure s/he is more likely to attribute the cause of that problem to the firm than when the customer experienced the first failure (Maxham and Netemeyer, 2002).

In other words, in the first failure the customer is more likely to perceive that the problem was beyond the control of the firm, but in the second scenario it is highly probable that the customer will attribute the failure to the firm. For instance if you are showering in a hotel and you can only get cold water, you may form the opinion that the failure was caused by a factor outside of the hotel’s control. However, if you encounter another problem in a future visit to the hotel property, you may discount circumstantial attribution and instead arrive at the opinion that the hotel firm consistently makes mistakes. Based upon these discussions, hypothesis three states that:

H₃: The existence of a recovery paradox is moderated by the entire relationship between the firm and the customer. In the event of a service failure, a recovery paradox is more likely to occur if it is the firm’s first failure with the customer than if it is the firm’s second failure.

The Effect of the Quantity of Past Transactions with the Firm

Since overall customer satisfaction is conditional upon a customer's entire history with the firm, a failure happening early in the customer's relationship with the firm will weigh more heavily on customer dissatisfaction because the customer has fewer successful service experiences to counterbalance the failure (Boulding, et al., 1993; Ganesan, 1994). That is, as a customer builds more confidence and experience over time in evaluating a provider, s/he weighs prior assessments of services more heavily and places less weight on new information (Boulding, Kalra, and Staelin, 1995; Botlon, 1998; Tax, Brown, and Chandrashekar, 1998). In other words, the longer the history of satisfactory experiences, the greater the *buffer* when the inevitable failure occurs. This contention is reiterated by two recent studies: First, an empirical study conducted by Jones and Suh (2000) found that a previous level of overall satisfaction may mitigate the effect of a single, less-than-satisfactory service encounter. Second, recent research conducted by Hess, Ganesan, and Klein (2003) concluded that customer relationships provide an important buffer to service firms when failures transpire, resulting in lower levels of customer dissatisfaction. More specifically, a new customer may be more dissatisfied with a failure/ recovery scenario than a customer who has five years of failure-free transactions buffering his/her dissatisfaction. Theoretical support for the existence of this buffer is found in attribution theory. Those customers who have made numerous transactions with a company are more likely to attribute the cause of a failure to a temporary factor than those customers who are relatively new users of the firm's offerings (Hess, Ganesan, and Klein, 1998). Therefore, the next hypothesis states:

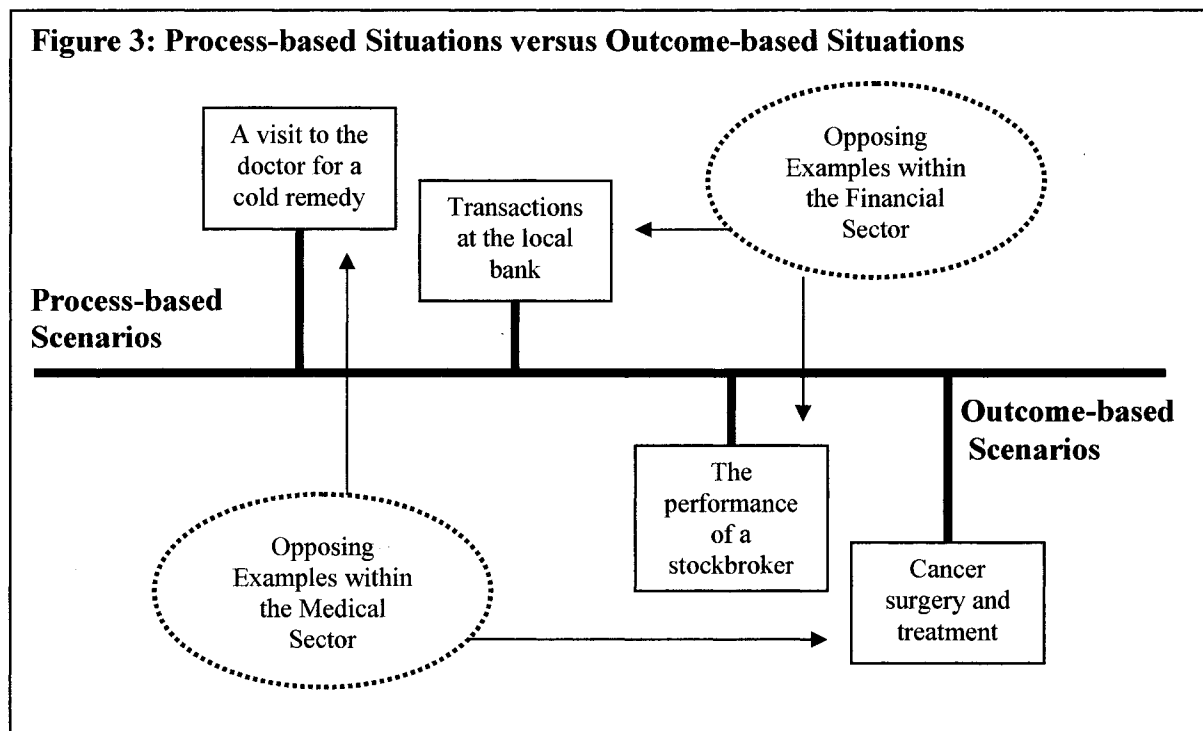
H₄: The existence of a recovery paradox is moderated by the entire relationship between the firm and the customer. In the event of a service failure, a recovery paradox is more likely to occur if the customer has had a lengthy relationship with the firm with no previous failures, than if the customer is a new user of the firm's services.

The Effect of Outcome failures versus Process Failures

Research indicates that there are two primary types of service failures: outcome and process (Bitner, Booms, and Tetreault, 1990; Hoffman, Kelley, and Rotalsky, 1995; Keaveney, 1995; Mohr and Bitner, 1995). The outcome portion of a service encounter entails what customers actually receive from the service; whereas, the process portion is concerned with how they receive the service [the manner in which it is delivered] (Gronroos, 1988, Parasuraman, Zeithaml and Berry, 1985). This distinction can moderate the existence of a paradox. For example, Maxham's (1999) study involving student haircuts [in which no support for a paradox was found] may have produced different results if the individuals were asked questions about the process (i.e. the wait, friendliness of the barber) or about the outcome (i.e. whether they were pleased with the haircut itself).

Outcome failures are more detrimental to satisfaction than errors that transpire throughout the process (Smith and Bolton, 1988). Further, in certain situations, consumers may be tolerant of process failures if they achieve the desired end-result. A robust test of satisfaction is whether or not one would recommend a service establishment to family or friends (Parasuraman, Zeithaml, and Berry, 1988). Perhaps one would recommend a particular barbershop, despite process failures such as long waits and a

discourteous barber, if the resulting haircuts are of consistent quality. Figure 3, further illustrates the distinction between process and outcome-based satisfaction.



As demonstrated in figure 3, an individual may recommend a rude oncologist or an impersonal stockbroker if they produce desirable outcomes. In these situations, outcome failures are weighed much heavier than process failures. One source of theoretical justification for this heavier weight on outcomes is seen in mental accounting principles which contend that individuals utilize various implicit methods to allocate resources to different mental accounts (Hirst, Joyce, and Scadewald, 1994; Kahneman and Tversky, 1984; Prelec and Lowenstein, 1988). Tversky and Kahneman (1981; Kahneman and Tversky, 1984) describe mental accounting as a type of decision framing in which individuals create (psychological) accounts containing the advantages and

disadvantages of an event or option. These advantages and disadvantages are then compared to a multi-attribute reference state to determine whether the event or option will be evaluated as positive or negative (Henderson and Peterson, 1992, pp.92). Mental accounting comes into play because outcome and process scenarios involve different categories of loss (Smith, Bolton, and Wagner, 1999). Another source of theoretical support for satisfaction levels varying with outcome and process is prospect theory. Prospect theory contends that in individual decision making, resources are weighted differentially according to their utility (Kahneman and Tversky, 1979), and consumers track the costs and benefits of a transaction (Thaler, 1980). Prospect theory relates to failure type because the utility received by the customer is impacted by process-centric and outcome-centric situations. As can be seen in Figure 3, this is an important distinction to make because 'process-based' and 'outcome-based' situations are not sector exclusive, but can vary depending upon the given scenario within a sector. As a consequence, the fourth hypothesis predicts that:

H₅: The existence of a recovery paradox is moderated by whether the failure is an outcome failure or a process failure. That is, in the event of a service failure, a recovery paradox is more likely to occur if the failure is a process failure than if it is an outcome failure.

The Effect of Customer Gender

Emerging research posits that males and females differ in how they feel that service recovery should be handled by a firm (McColl-Kennedy, Daus, and Sparks, 2003; Palmer, Beggs, and Keown-McMullan, 2000). An empirical study conducted by McColl-Kennedy, Daus, and Sparks (2003) found that women prefer to voice their views and be

included in the recovery decision process, but this voice is unimportant to men. For example, women prefer to discuss recovery options with the provider and collaboratively arrive at a recovery solution. This relates to women's evaluation of justice, which has been used by researchers to explain people's reactions to conflict scenarios (Gilliland, 1993; Goodwin and Ross, 1992; Lind and Tyler, 1988). Equity theory contends that a customer's assessment of equity entails two criteria: distributive justice (Homans, 1961); and procedural justice (Thibaut and Walker, 1975; Lind and Tyler, 1988). The two forms of justice addressed by equity theory, distributive and procedural, are considered conceptually and operationally distinct constructs (Brashear, Brooks, and Boles, 2004). A number of researchers have utilized equity theory to interpret consumer responses to service failure and recovery situations (Blodgett et al., 1993; Clemmer and Schneider, 1996; Huppertz et al., 1978; Oliver and Swan, 1989; Seiders and Berry, 1998).

The first component of equity theory, distributive justice, entails the perceived fairness of the actual outcome, or consequence of a decision (Palmer, Beggs, and Keown-McMullan, 2000). Procedural justice refers to whether the procedures, or criteria, utilized in making the decision are perceived as being fair. For example, were all parties involved allowed to tell their story? Procedural justice is primarily concerned with satisfaction on a moral and ethical level, and is only achieved when all the information surrounding a scenario is allocated due attention and consideration (Palmer, Beggs, and Keown-McMullan, 2000). Smith, Bolton, and Wagner (1999) found that procedural justice has a significant effect on service encounter satisfaction, and Tax, Brown, and Chandrashekar (1998) stated that it has a positive impact on a customer's satisfaction with the company's redress efforts. Increasing procedural justice is positively correlated

with increasing voice because Tax, Brown, and Chandrashekar (1998) specifically state that facets of procedural justice include the convenience and flexibility of the recovery process to the complainant and the degree of control that the complainant has over the resolution. The strong connection between procedural justice and voice is reflected in Leventhal's (1976) research, which concludes that procedural justice is comprised of the following three components: 1) the completeness of information collected including the participant's opportunity to add to the information or influence the order of presentation; 2) the decision-maker's use of the information; and 3) the extent to which participants believe they influenced the outcome. Therefore, within the realm of equity theory, the finding that women prefer more voice in the recovery process (McColl-Kennedy, Daus, and Sparks, 2003) is not surprising because females place more weight on procedural justice than do men (Palmer, Beggs, and Keown-McMullan, 2000).

The fact that women prefer to be given voice in the recovery process probably means that men are more likely to experience the 'recovery paradox.' This is because most service firms do not train employees to collaboratively select a recovery solution with the customer. Contrarily, service firms typically train the LEARN process [Listen, Empathize, Apologize, React, Notify] (Magnini and Ford, 2004). According to this technique, the employee listens to the customer in the first step, but selects the appropriate recovery tactic in the fourth step. Listening to the customer's complaint and concerns and selecting a recovery strategy are two distinct stages in which the customer is clearly not invited to choose from a list of competing compensation packages. The recovery action that is ultimately implemented is not collectively selected in the LEARN process. Similar to the LEARN process, another service recovery technique which

service employees are taught is the “taking the HEAT” process [Hear them out, Empathize, Apologize, and Take Responsibility] (www.ddiworld.com; www.hawaiiibusiness.cc). Like the LEARN process, the HEAT process does not train service employees to discuss recovery options with the customer. Since these two commonly practiced recovery strategies do not allow customers voice in selecting the redress solution, and because women prefer more voice than men, The following hypothesis is offered:

H₆: The existence of a recovery paradox is moderated by the gender of the customer. That is, in the event of a service failure, a recovery paradox is more likely to occur if the customer is male than if the customer is female.

The Effect of the Stability of the Cause of the Failure

Stability is the extent to which a cause is viewed as temporary [expected to vary over time] or permanent [expected to persist over time] (Folkes, 1988; Hess, Ganesan, and Klein, 2003). Service failures with stable causes are more likely to recur than failures with unstable causes. For example, when a hotel guest is assigned to an incorrect room category due to an outdated property management computer system, this could be considered a failure with a stable (enduring) cause. On the other hand, if the guest’s room assignment was botched because the front desk associate is in the initial stages of training, this could be viewed as an unstable (temporary) cause.

Customers are likely to be more forgiving of failures with unstable (temporary) causes (Kelley, Hoffman, and Davis, 1993; Weiner, 1986). This is because the likelihood of a future inconvenience is minimal. That is, customers perceive the cause of the failure

as a factor that is unlikely to crop up again and, therefore, customers are apt to accept the firm's apology and compensation and continue in the relationship. Conversely, if the customer views the failure's cause as stable [likely to occur again], the service recovery paradox is less likely to materialize because, according to prospect theory, losses are usually weighed more heavily than gains in the mind of the consumer and, therefore, customers do not want to run the risk of another failure regardless of first-rate recoveries employed by the firm. Causal stability has a strong influence on expectations because customer perceptions of unstable causes result in uncertainty about future outcomes (Folkes, 1984; Weiner, 1980c). This line of reasoning is supported by empirical studies conducted by Weiner, Graham, and Chandler (1982) and Folkes, Kolestky, and Graham (1987) which both found that customers were most dissatisfied when they perceived the cause of a failure to be enduring. Based on the above discussion, the following hypothesis is stated:

H₇: The existence of a recovery paradox is moderated by the level of *perceived* stability of the failure. That is, in the event of a service failure, a recovery paradox is more likely to occur if the customer perceives that the failure had an unstable cause rather than if the customer perceived the cause to be stable.

The Effect of Perceived Control

Control attributions should play an integral role in customers' post-failure judgments. A service failure is any situation where something goes wrong, irrespective of responsibility (Palmer, Beggs, and Keown-McMullan, 2000). Nevertheless, "the perceived reason for a product's failure influences how a consumer responds (Folkes, 1984, pp. 398)." Customers are more forgiving if they perceive that the firm had little

control over the occurrence of the failure (Folkes, 1984; Kelley, Hoffman, and Davis, 1993; Kraft, 1977; Maxham and Netemeyer, 2002;). Conversely, customers are less forgiving when they feel that the failure was reasonably foreseeable and should have been prevented (Folkes, 1984). For instance, did a wait occur because of a peculiar and unanticipated spike in demand, or did it transpire because the firm did a poor job in forecasting, planning, or staffing? A bank customer may be understanding of a wait inside a bank lobby if there is an unexpected inflow of customers during a typically slow hour. On the other hand, the same customer may be less understanding if there is only one teller working during lunch hour on a Friday afternoon. In summary, customers are most dissatisfied when they believe the service provider had substantial control over the failure (Folkes, 1984). This notion of control finds its theoretical roots in attribution theory. According to attribution theory, customers partake in spontaneous causal thinking. (Weiner, 1985a, 2000). Causal attributions are developed because of a need for predication and control of an individual's environment (Harvey and Weary, 1984; Ross and Fletcher, 1985; Weiner, 1980, 1985, 1986; Wrightsman and Deaux, 1981). This spontaneous causal thinking is particularly common in failure situations because customers attempt to deduce why a failure transpired (Weiner, 1985a, 2000). Customers are apt to ponder the following questions: "Who is responsible?" and "Did the responsible party have control over the cause?" These attributions impact both affective and behavioral responses (Folkes, 1984, 1988; Folkes, Koletsky, and Graham, 1987; Krishnan and Valle, 1979; Weiner, 1985b). Those attributions that blame the service organization have significant impact on satisfaction levels (Maxham and Netemeyer, 2002).

The absolute control that a firm has over failures is rarely completely known by the customer; therefore, service organizations must manage 'perceived control' (Hui and Tse, 1996; Taylor, 1994). In fact, attribution theory is based almost entirely on perceptions. Customers that attribute failures to controllable factors are less forgiving in satisfaction evaluations. For instance, Taylor (1994) reported that if the cause of a delay is perceived to be under the control of the firm, the customer's anger escalates, the perceived wait length increases and satisfaction declines. Many researchers have recently come to realize the importance of the customer's mental reasoning process (Hui and Tse, 1996; McDougall and Levesque, 1999) and have examined strategies that can be employed to shape customer perceptions in the circumstance of a failure. Therefore, the next hypothesis is:

H₃: The existence of a recovery paradox is moderated by the level of *perceived* control that the firm had over the failure. That is, in the event of a service failure, a recovery paradox is more likely to occur if the customer perceives that the firm had little control over the cause of the failure than if the customer perceived that the firm had sizable control over the cause of the failure.

The Effect of the Relationship Type

Service encounters can be separated into three conceptually distinct mechanisms for delivering service: true relationships, pseudo-relationships, and encounters (Guttek, 1995; Guttek et al., 1999). True relationships occur when the customer has repeated contact with the same provider. Pseudo-relationships are characterized by interactions with a different provider each time, but within a single company. In other words, each interaction transpires between strangers, but the customer has experience purchasing the company's offerings. Lastly, an encounter is a transaction-based one time only

exchange. In an encounter, neither the customer nor the employee expects to interact with each other in the future (Mattila, 2001).

These relationship types may moderate the existence of the recovery paradox because Smith, Bolton, and Wagner (1999) contend that a customer's post-failure satisfaction is influenced by the characteristics of the customer's entire relationship with the firm.² More specifically, service recovery expectations are grounded in the customer's previous service experiences (Kelley and Davis, 1994, pp. 53). Those customers that have a 'true relationship' with the provider may automatically expect a generous recovery due to their history of personal interactions with the provider. Conversely, 'pseudo-relationship' customers may be more taken by a first-rate recovery because they may not have anticipated such extensive redress initiatives. In other words, expectations moderate the impact of recovery. This line of reasoning is consistent with the expectancy disconfirmation paradigm that was extended to include customer reactions to failure recovery (McCollough, Berry, and Yadav, 2000; Oliver, 1981; Singh and Widing, 1991). In relating the expectancy disconfirmation paradigm to relationship type, it can be stated that 'true relationship' customers expect top-notch recovery more than do 'pseudo-relationship' customers. Conversely, customers in 'pseudo-relationships' are likely surprised by first-rate recoveries. According to Oliver (1981), satisfaction stems from when a person's expectations are exceeded to the extent to which s/he is surprised in a positive way by the firm. Since a customer in a pseudo-relationship is more likely to be surprised by a superb recovery initiative. This leads to the next hypothesis:

² Hypothesis eight is only concerned with "pseudo-relationships" and "true relationships" because the recovery paradox theory deals with pre and post-failure satisfaction. If an individual is transacting through a one-time encounter, it is difficult to assess a person's pre-failure satisfaction.

H₉: The existence of a recovery paradox is moderated by the type of relationship between the customer and the firm. In the event of a service failure, a recovery paradox is more likely to occur if the customer has a ‘pseudo-relationship’ with the firm than if the customer has a ‘true-relationship’ with the firm.

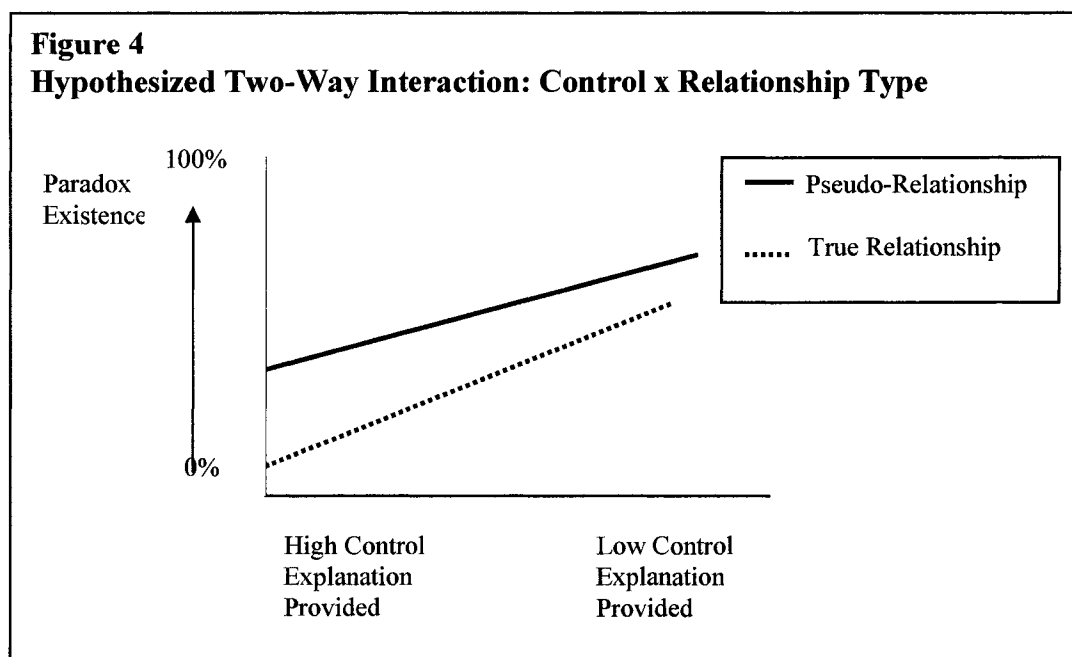
INTERACTIONS EFFECTS INVOLVING THE TYPE OF RELATIONSHIP

An interaction effect exists when the likelihood of the recovery paradox caused by one factor is contingent upon the level of another factor. Interaction effects between the type of relationship and several other factors are predicted to occur [see Figure 2]. As previously stated, pseudo-relationships are defined as transactions with a single company, but the relationship involves strangers transacting with strangers. And true relationships occur when the customer has repeated contact with the same provider (Guttek et al. 1999).

Two-Way Interaction between Control and Relationship Type

Since the extent of control that a company has over the failure often depends on customer perceptions, a true relationship may aid the customer in attributing the cause of the failure away from the firm. Simply put, if the customer knows the provider as a ‘person’, s/he may be more willing to attribute the cause of the failure out of the firm’s control than if the provider is a stranger. Therefore, there may exist some interaction between the relationship-type factor and the control factor, and the following hypothesis is stated [see Figure 4]:

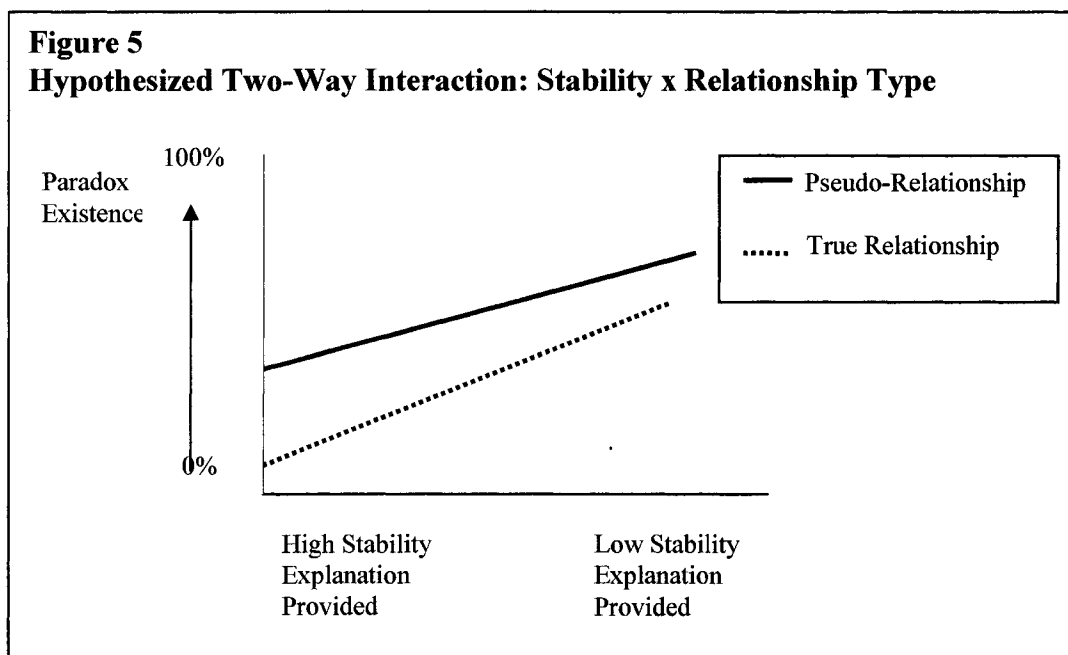
H₁₀: The existence of a recovery paradox is moderated by the interaction of relationship type and control. In the event of a service failure, a recovery paradox is more likely to occur if the customer has a ‘true relationship’ when a low control explanation is provided, than if the customer has a ‘pseudo-relationship’ when a low control explanation is provided.



Two-Way Interaction between Stability and Relationship Type

Because the customer's perception of stability is largely contingent on the employee's explanation, a true relationship may aid the customer in 'buying into' the failure explanation. That is, if the customer knows the provider well enough to be in a true relationship, then that true relationship has a higher level of trust than a pseudo-relationship. Hence, as depicted in Figure 5, the relationship-type variable may show an interaction with the stability variable. The next hypothesis is:

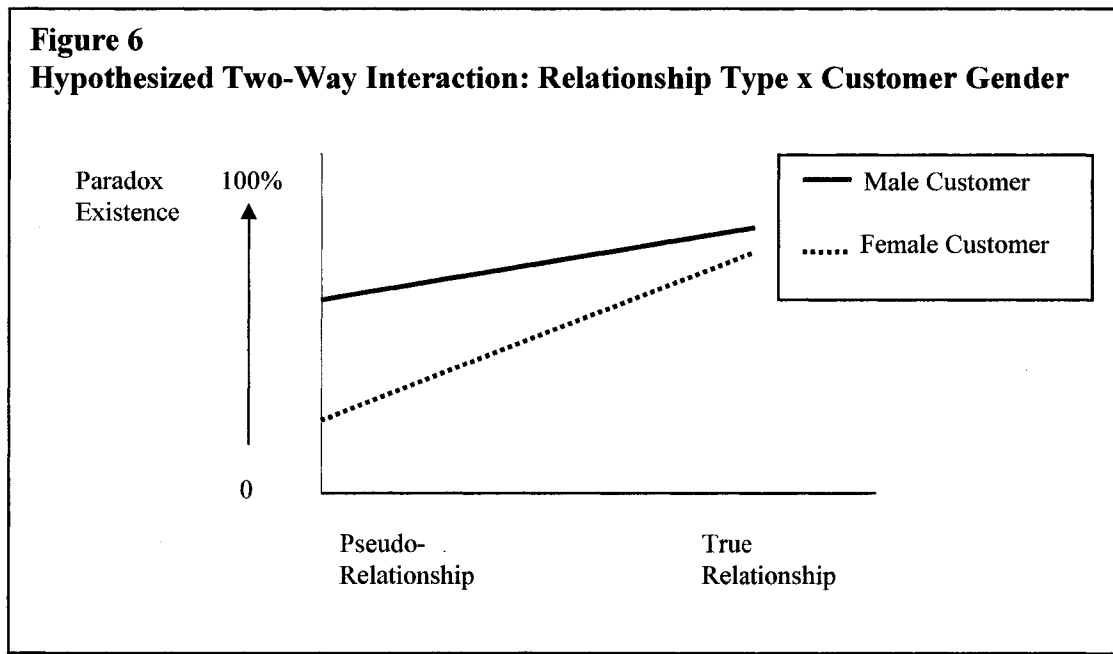
H₁₁: The existence of a recovery paradox is moderated by the interaction of relationship type and stability. In the event of a service failure, a recovery paradox is more likely to occur if the customer has a 'true relationship' when a low stability explanation is provided, than if the customer has a 'pseudo-relationship' when a low stability explanation is provided.



Two-Way Interaction between Gender and Relationship Type

Since female customers want ‘voice’ in the recovery process, a true relationship may be more conducive to the customer’s ability to partake in the recovery decisions than if the scenario involved a pseudo-relationship. In other words, a true relationship may elicit more dialogue and engender more thought exchange than would a pseudo-relationship. Perhaps this could be one plausible explanation for the finding that women might be more interested in relationship building than men (Shemwell, Cronin, and Bullard, 1994). Therefore, there may be interaction between the moderating effects of relationship-type and gender [see Figure 6]. If the guiding wisdom described above is correct, The final hypothesis is:

H₁₂: The existence of a recovery paradox is moderated by the interaction of relationship type and gender. In the event of a service failure, a recovery paradox is more likely to occur if the customer is female and has a ‘true relationship’ than if the customer is male and has a ‘true relationship.’



CHAPTER III

RESEARCH DESIGN AND METHODOLOGY

QUALITATIVE RESEARCH

The first phase of the research is qualitative. Six in-depth interviews were conducted with frequent hotel patrons. Three interviews were held with regular leisure travelers and three were conducted with frequent business travelers. The criteria used for defining “frequent” travel is that the individual stayed in a hotel(s) a minimum of six nights throughout the previous year in their respective category [i.e. business or leisure]. The purpose of these in depth interviews was an attempt to understand the underlying beliefs, attitudes, and feelings of the travelers in terms of factors that can influence the recovery paradox. In-depth interviewing is a common exploratory approach used to assess the basic feel of a problem prior to conducting a more analytical approach (<http://www.sotech/main/eval.asp?PID=208>.) It entails having an unstructured conversation about the topic, in order to provide new insights about paradox moderators. The conversations were recorded on audiotapes, and the tapes were analyzed several times for possible new insights surrounding the subject area. The interviews are an additional attempt to solicit potential paradox moderators that cannot be derived from the existing literature. Table 3 contains the demographic information of those who participated in the interviews.

Table 3: Demographic Profiles of the In-Depth IntervieweesFrequent Leisure Travelers

- Female; 28 years old
- Female; 50 years old
- Male; 54 years old

Frequent Business Travelers

- Female; 43 years old
- Male; 51 years old
- Male; 31 years old



Since in-depth interviews are typically conducted before beginning further analytical work, the information gleaned from the interviews is discussed below. First, it is worth mentioning here, that the six conversations did not reveal any salient differences between service recovery views of business and leisure travelers. Several themes did emerge in the conversations:

- Two of the interviewees provided examples of the double deviation effect in which a poor recovery is viewed as a second failure. An example which was provided by an interviewee: When checking into a hotel in Las Vegas, he was told that the room was not ready, so the front desk associate gave he and his wife free dinner vouchers. They were satisfied by this response, but when they returned to the front desk after dinner, the room was still not ready. They were disgruntled at this point and viewed this as a second failure [a double deviation] on the part of the hotel.

- Each of the interviewees agreed with the potential validity of the eight moderators and the three interaction effects on the model. The only moderator that was called into question by two of the participants was the gender variable. These interviewees [one male and one female] that called this into question feel that both men and women feel more satisfied if they are allowed ‘voice’ in the failure resolution process. They do not foresee a gender difference in the study’s findings.
- When asked if he could think of any moderators of the recovery paradox that are not included in the model, one of the interviewees stated that he thinks that cross-cultural differences could exist. He felt that Christians are mentally conditioned to be more forgiving than other people; therefore, they may be more apt to exhibit a recovery paradox. Consequently, if this is true, recovery paradox situations may be more prone to occur in predominately Christian nations.
- Several of the interviewees stated that they fully understand that mistakes are inevitable in the service sector. Therefore, the respondents made comments consistent with the principles of mental accounting. They stated that when a firm does something well they represent that psychologically as a ‘credit.’ Conversely, a mistake is denoted mentally as a ‘debit.’
- Several of the interviewees commented that the study at hand seems to be pragmatically relevant to service providers because recovery initiatives played-out by firms can be very expensive. Hence, a better understanding of post-recovery customer satisfaction could potentially shed some light on the debate as to whether generous redress tactics are a wise investment. If so, in which circumstances?
- In our dialogue surrounding service failure and redress, several interesting inputs emerged regarding the design of recovery initiatives. Specifically, two of the participants felt that a firm’s employee should state that management will be made aware of the failure. The participants felt that this promise to notify management helps put to rest dissatisfaction on the part of the customer. Further, another interviewee stated that in the recovery process the customer should be asked what s/he feels that the firm should do to rectify the problem and repair satisfaction. Putting the ball in the customer’s court could result in one of two beneficial outcomes: 1) the customer makes an overly demanding and unrealistic request, in which case, the firm can call into question whether business should really be conducted with this customer [recovery can be expensive for a firm; particularly if the likelihood that the customer will return is low]; or 2) the customer could make a reasonable recovery request which the firm’s subsequent redress strategy could exceed. This would create a situation of positive disconfirmation and perhaps a paradoxical increase in satisfaction.

EXPERIMENTAL PROCEDURES

The main study will be conducted on a convenience sample of 400 undergraduate students in a large Mid-Atlantic university. Participants will be randomly assigned to one treatment condition in each of six treatment groups in a between-subjects experimental design. A listing of all the treatment conditions is presented in Table 4. Each respondent will be subjected to one condition from each treatment group because this quantity can comfortably be completed in one sitting.³ Since the respondent is able to complete the experiment in one sitting, this limits the likelihood of the experiment's validity being damaged by *history* [events external to the experiment, but occurring at the same time, that may affect the criterion or response variable⁴] or *maturation* [changes occurring within the test units that are not due to the effect of the experimental variable, but result from the passage of time] (Churchill and Iacobucci, 2001). Also, with the experiment being administered in one sitting, this significantly reduces the odds of an *interactive testing effect* in which subjects become more aware of service failures and recoveries in the time spans between treatments. Administering the study in one sitting also controls for *instrument variation* in which the respondent is affected by potentially varying conditions such as room temperature or noise (Churchill and Iacobucci, 2001). Furthermore, conducting the study in one sitting eliminates response bias problems associated with *experimental mortality* in which test units dropout during the course of the experiment (Churchill and Iacobucci, 2001). Lastly, since each respondent will

³ It is estimated that it should take approximately 15-20 minutes for a subject to respond to the six treatment conditions.

respond to only one condition from each group, the validity of the experiment is less likely to be hindered by a *main testing effect* [learning effect] in which the a prior observation creates an influence on a later observation (Churchill and Iacobucci, 2001). For example, a single participant will not be asked to rate two levels of a given moderator such as high and low severity.

⁴ An example of a situation in which history could come into play would be if a hotel company were to receive media attention due to some sort of public relations issue involving a service failure, such as a food-borne illness outbreak.

Table 4: The Experiment's Treatment Conditions*

- 1) Baseline scenario – TREATMENT GROUP 1
- 2) Low severity scenario – TREATMENT GROUP 2
- 3) High severity scenario – TREATMENT GROUP 2
- 4) Prior Failure scenario – TREATMENT GROUP 3
No prior failure [same as treatment #1] – TREATMENT GROUP 3
- 5) Nine past transactions with the provider – TREATMENT GROUP 4
One past transactions [same as treatment #1] – TREATMENT GROUP 4
- 6) Outcome-based failure – TREATMENT GROUP 5
- 7) Process-based scenario - TREATMENT GROUP 5
- 8) Pseudo x High Control x High Stability – TREATMENT GROUP 6
- 9) Pseudo x Low Control x High Stability – TREATMENT GROUP 6
- 10) Pseudo x Low Control x Low Stability – TREATMENT GROUP 6
- 11) Pseudo x High Control x Low Stability – TREATMENT GROUP 6
- 12) True x High Control x High Stability – TREATMENT GROUP 6
- 13) True x Low Control x High Stability – TREATMENT GROUP 6
- 14) True x Low Control x Low Stability – TREATMENT GROUP 6
- 15) True x High Control x Low Stability – TREATMENT GROUP 6

*Each participant will be assigned only one treatment from each of the first six treatment groups. This prevents problems associated with dependence and learning effects.

A hotel visit serves as the context of this study. This setting is chosen for a number of reasons. First, the literature indicates that service failures are frequent in hotels (Bitner, Booms, and Tetreault, 1990; Lockwood, 1994; Smith and Bolton, 1998). Therefore, it is anticipated that most subjects will find manipulations surrounding service failures and recoveries believable. Second, since its inception in 1994, the American Customer Satisfaction Index (ACSI) indicates that customer satisfaction with the six leading American hotel chains is not high. ACSI reports an average customer satisfaction score of 71.8 on a 100 point scale for first quarters of 1995-2003 for the six major hotel corporations which are included on the index.⁵ (http://www.theacsi.org/first_quarter.htm). Therefore, the study of hotel customer satisfaction is managerially relevant. Third, all of the variables under investigation could be readily manipulated in this setting. Fourth, the results of pretest 1 [outlined in the next section] indicate that undergraduate business students stay in hotels regularly and the vast majority have experienced a dissatisfying hotel experience.

The research hypotheses are tested through the use of role-playing experiments (scenarios), wherein subjects read scenarios and respond accordingly. The scenario for each condition depicts a service failure followed by an excellent recovery [the excellent recovery is determined in pretest 2]. The instructions on the paper and pencil questionnaires ask participants to carefully read the scenario and assume that the scenario has just happened to them and they are asked to project how they would react [i.e. rate satisfaction; purchase intent; propensity to spread positive word of-mouth]. This

scenario approach enables costly and difficult manipulations to be more easily operationalized and avoids ethical considerations associated with observing or enacting actual service failures (Smith and Bolton, 1998). Moreover, this approach gives the researcher control over otherwise unmanageable factors, and facilitates the compression of time by summarizing happenings that might otherwise transpire over weeks (Bitner, 1990). This scenario-based method also eliminates the managerial undesirability of intentionally subjecting customers to failure situations (Smith, Bolton, and Wagner, 1999). Lastly, this approach has advantages over asking subjects to recall actual service failures and recoveries using a retrospective-type approach [such as the critical incident technique] because retrospection is often plagued with response bias due to memory lapse, re-interpretation, and rationalization (Johnston, 1995; Smith and Bolton, 1998; Smith, Bolton, and Wagner, 1999). Also, findings may be misleading with a recall approach because customers are more prone to report extreme examples in retrospection (Smith and Bolton, 1998). Because of these suitable characteristics, the role-playing (scenario) approach used in this study is commonly utilized for the study of service failure and recovery (Michel, 2001). Furthermore, like this study, a number of past service failure and customer satisfaction studies have also employed undergraduate students as respondents (Goodwin and Ross, 1992; Hess, Ganesan, and Klein, 2003; Matilla, 2001; Maxham, 2001; Smith, Bolton, and Wagner, 1999). The scenario method can have a high degree of realism if the scenarios [hotel service failures] are suitable for the chosen sample [undergraduate business students] (Brown, 1962; Kelman, 1968; Schultz, 1969). In terms of sample suitability, in order for the results to have adequate

⁵ The hotel corporations included in the ACSI index are Hyatt Corporation, Marriott International, Hilton Hotels Corporation, Starwood Hotels and Resorts Worldwide, Holiday Inn [Intercontinental Hotels Group

external validity, undergraduate business students must possess the ability to project their behavior and to respond as they actually would in a real situation. This ability only exists if the participants have experience interacting in the experiment's setting. Therefore, a pretest is conducted to assess the suitability of using undergraduate students.

Pretest 1: Suitability of the Sample for the Sampling Frame

If a hotel setting is depicted in the scenarios, it must be determined that typical undergraduate students possess the ability to evaluate their satisfaction in encountering these hypothetical vignettes. Therefore, a pretest was conducted to assess the suitability of the perspective sample for the sample setting of the scenarios. The pretest contained in Appendix 1, was given to 63 undergraduate students. Of the 63 respondents, 56% were female and 44% were male. The average age of the participants was 24. They were queried regarding their frequency of hotel stays by being asked: on average, how many nights per year do they stay in hotel rooms [zero; 1-3 nights; 4-6 nights; >6 nights]? And, whether they have ever experienced a dissatisfying hotel stay?

The findings of this pretest confirm that undergraduate students are a suitable sample for this study. As seen in Table 5, the results of this pretest indicate that undergraduate students regularly stay in hotels. 92.1 percent of respondents indicate that they utilize hotel lodging at least 1-3 times per year. In fact, 27 percent of the pretest participants stay in hotels an average of 4-6 nights per year, and 14.3 percent indicated that they frequent hotel rooms greater than 6 nights per year. In order to preclude undergraduates who never stay in hotels from participating in the main experiment, the survey instrument for the main study will ask respondents how often they stay in hotels.

PLC], and Ramada Franchise Systems.

A response of ‘zero nights’ will result in the removal of the respondent’s survey from the analysis.

The results of this pretest also indicate that the sample should have little trouble finding hotel failure vignettes believable because 69.8 percent of the respondents indicated that they have experienced a dissatisfying hotel stay in the past (see Table 6). Hence, a hotel setting is a realistic and relevant context for the study of service failure and recovery.

Number of Nights	Frequency	Percent	Cumulative Percent
Zero nights	5	7.9%	7.9%
1-3 nights	32	50.8%	58.7%
4-6 nights	17	27.0%	85.7%
> 6 nights	9	14.3%	100%
Total	63		

Response	Frequency	Percent	Cumulative Percent
Yes	44	69.8%	69.8%
No	19	30.2%	100%
Total	63		

MEASUREMENT OF VARIABLES

Pretest 2: Manipulation Checks

Before finalizing the experimental design, this study requires a second pretest in order to conduct the manipulation checks on the subjective variables [excellent recovery, control, stability, and severity]. By subjective variables, we are referring to latent variables which are unobservable and involve perceptions. Because these latent variables cannot be changed directly, they must be manipulated indirectly by altering particular facets of the hypothetical vignette. However, Cook and Campbell (1979, p.60) warn that manipulating these latent constructs begins with a “careful pre-experimental explication of constructs so that the definitions are clear and in conformity with public understanding of words being used.” A wise way to assess if the “words being used” are perceived as intended is to perform pre-experiment manipulation checks on these variables (Festinger, 1953; Perdue and Summers, 1986).

Data collected in this pretest will guide further development and refinement of the measures. The manipulation check vignettes are contained in Appendix 2. The pretest was administered to a sample of 45 undergraduate students. Undergraduate students were employed in the pretest since this will be the sample of the main experiment. Conducting manipulation checks via a pretest is an effective technique when the procedures, instruments, and subjects are similar to those of the final study (Perdue and Summers, 1986). Of the 45 respondents, 51% were female and 49% were male. The average age of the participants was 23. The purpose of the pretest is two-fold: 1) to find a “recovery effort” to be used in the main study that is viewed as excellent, but also realistic; and 2) to help ensure that manipulations on the “severity”, “stability”, and

“control” variables are appropriate. That is, do the manipulations provide the intended variance in the experimental variables? The goal is strong, but pragmatically realistic, manipulations.

For the “excellent recovery” manipulation, the students were given a failure scenario with four subsequent service recovery strategies. The students were asked to rate the four recovery strategies as a poor recovery (coded as 1), an average recovery (coded as 2), or an excellent recovery (coded as 3). As seen in Table 7, Recovery 2 emerged as the “excellent recovery” because it earned a mean rating of 2.93. Consequently, recovery 2 will be the recovery employed in the main study [see Appendix 2].

In the severity manipulation the respondents were provided two scenarios and were asked to rate both in terms of their severity [low level of severity (1); moderate level of severity (2); high level of severity (3)]. As seen in Table 8, the low severity vignette did, in fact, receive a low severity rating in the pretest with a mean of 1.40. Likewise the high severity scenario earned a severity rating of 2.84.

For the “stability” construct, the students were asked to rate scenario failures in terms of the likelihood of re occurrence [unlikely to occur again (unstable, 1); neutral (2); likely to occur again (stable, 3)]. As listed in Table 8, the high stability manipulation received a desired high rating of 2.71, but the low stability scenario did not earn a desirable low stability rating. The low stability scenario had a mean score of 2.09 which indicates that the low stability scenario is not creating the desired manipulation. Since the low stability scenario was not perceived as intended, it was altered, and the revised vignette depicts the scenario’s service failure less likely to occur again because instead of

the hotel in the vignette ‘searching for’ an alternate Internet provider, the hotel ‘has found’ an alternate Internet provider [See Figure 7]. Amending the manipulation in this manner is consistent with the views of Aronson and Carlsmith (1968), Perdue and Summers (1986), and Wetzel (1977) who state that manipulation checks are most useful during the pretest phases of an experiment because poorly designed manipulations can still be amended and the main experiment saved.

In the “control” manipulation respondents were provided two scenarios and were asked to rate both in terms of level of control [low level of control; moderate level of control; high level of control]. As seen in Table 8, the high control scenario was interpreted by the pretest respondents as being of high control (high control mean = 2.71), but the low control manipulation did not perform well (low control mean = 1.60). Therefore, the low control vignette was amended [see Figure 7]. As seen in Figure 7, the revised scenario depicts the hypothetical hotel associate as being less defensive than in the original vignette. Again, changing the vignette is methodologically and theoretically sound because the primary impetus of an effective pretest is to identify when corrective changes are warranted for the manipulations (Perdue and Summers, 1986).

This pretest also assisted in determining the realism of the vignettes. In addition to indicating levels of the manipulated variables, the pretest respondents were asked to indicate their judgment of the realism of the scenarios. Unrealistic manipulations can create confusion in the main study and can also result in findings that are not pragmatically applicable. Insufficient realism also hinders respondents’ ability to relate to the hypothetical vignettes (Summers, 2001). Consistent with an experiment conducted by Goodwin and Ross (1992), subjects were asked to estimate realism of the scenarios on

a 5-point Likert-type scale [1 = “not at all realistic,” 5 = “extremely realistic”]. Assessing the realism of the scenarios in this manner enhances the external validity of the experiment. As indicated in Tables 7 and 8, participants perceived the vignettes as being realistic. Realism scores for recovery, severity, stability, and control were 3.80, 4.00, 3.80, and 3.91 respectively.

Table 7: Recovery Manipulation Check	Mean (Highest Possible)
Recovery 1	1.71 (3)
Recovery 2	2.93 (3)
Recovery 3	2.33 (3)
Recovery 4	2.60 (3)
<i>Recovery Realism</i>	3.80 (5)

Table 8: Vignette Manipulation Checks	Mean (Highest Possible)
Low Severity	1.40 (3)
High Severity	2.84 (3)
<i>Severity Realism</i>	4.00 (5)
Low Stability	2.09 (3)*
High Stability	2.71 (3)
<i>Stability Realism</i>	3.80 (5)
Low Control	1.60 (3)*
High Control	2.71 (3)
<i>Control Realism</i>	3.91 (5)
* Manipulation not strong enough	

Figure 7: Changes made to Vignettes as a Result of the Manipulation Checks

Low Stability Vignette used in the Manipulation Check:*

Upon checking-in, you enter your hotel room and decide to connect your laptop to the free high-speed Internet portal located on the wall above your desk. When you approach the desk you see that the Internet portal is visibly damaged and is dangling from the wall. In fact, there are pieces of plaster from the damaged wall on the carpet and on the surface of the desk. The damage is so severe that there is no way that you can securely connect your computer to the portal.

You call the front desk and the associate states that the Internet portals in the rooms are owned by a third party company and because there has been regular problems, the hotel is currently looking for an alternate provider. The associate explains that the hotel will be switching providers very soon.

Low Stability Vignette used after the Manipulation Check:

Upon checking-in, you enter your hotel room and decide to connect your laptop to the free high-speed Internet portal located on the wall above your desk. When you approach the desk you see that the Internet portal is visibly damaged and is dangling from the wall. In fact, there are pieces of plaster from the damaged wall on the carpet and on the surface of the desk. The damage is so severe that there is no way that you can securely connect your computer to the portal.

You call the front desk and the associate states that the Internet portals in the rooms are owned by a third party company and because there has been regular problems, the hotel has found an alternate provider. The associate explains that the hotel will be switching providers very soon.

Low Control Vignette used in the Manipulation Check:

Upon checking-in, you enter your hotel room and decide to connect your laptop to the free high-speed Internet portal located on the wall above your desk. You complete the steps in the connection process, but you fail to get any web access. While the portal does not appear to be physically damaged, you know that there must be something wrong with it because you frequently connect your laptop to similar portals.

Consequently, you call the front desk associate and explain that the Internet portal in your room is not working. The associate states that he is not aware of any previous guests having problems in that room, nor are any other current hotel guests complaining about problems with Internet connections.

Low Control Vignette used after the Manipulation Check:

Upon checking-in, you enter your hotel room and decide to connect your laptop to the free high-speed Internet portal located on the wall above your desk. You complete the steps in the connection process, but you fail to get any web access. While the portal does not appear to be physically damaged, you know that there must be something wrong with it because you frequently connect your laptop to similar portals.

Consequently, you call the front desk associate and explain that the Internet portal in your room is not working. The associate states that he was not aware of the problem, and he thanks you for bringing the problem to his attention.

Pretest 3: Validating Vignette Alterations and Testing Pre-failure Satisfaction Levels

Before conducting the main study, a third, and final, pretest was performed. Pretest 3 was administered to a sample of 36 undergraduate business students. Of the 36 respondents, 40% were female and 60% were male. The average participant was 25 years old. Pretest 3 had several objectives. The first purpose of this pre-test was to test the alterations to the low stability and low control vignettes which are contained in Figure 7. The retesting of these two scenarios is necessary because according to the guideposts detailed by Perdue and Summers (1986), it must be verified that the manipulations are perceived as intended before the main study can be carried out successfully. As listed in Table 9, the alterations to the low stability and low control scenarios did cause the vignettes to perform their intended manipulations as the mean scores were 1.50 and 1.36 respectively. Further, the two vignettes maintained high levels of realism [stability = 3.97; control = 3.94].

The second objective was to verify that the recovery effort used for the outcome-based and process-based vignettes is rated as excellent, while still retaining realism.⁶ As indicated in Table 9, the recovery effort was perceived as excellent (2.94) with an acceptable level of realism (3.64). These are vital tests before the main study can be performed accurately because a common and serious problem with experiments in marketing is the lack of experimental realism (Summers, 2001).

The third purpose of this final pretest is to determine if the pre-failure satisfaction in all of the scenarios should be specified as six or seven on a nine point likert-type scale.

Theoretical support for setting the pre-failure satisfaction level at six is found in the American customer satisfaction index (ACSI). The ACSI reports that the mean first quarter satisfaction for six major hotel chains from 1995-2003 is 71.8% (http://www.theacsi.org/first_quarter.htm). Since 71.8% lies closer to a six than it does a seven on a nine point scale, it seems conceptually plausible to set pre-failure satisfaction at six. Nevertheless, because the ACSI score is only slightly closer to six than seven, the third motivation behind pretest 3 was to determine if recovery paradox would be significantly different between six and seven pre-satisfaction levels. To test this, half of the sample was given the baseline scenario with pre-failure satisfaction set at six [see Appendix 3] and half of the participants were given the same baseline scenario with pre-failure satisfaction set at seven [see Appendix 4]. As reported in Table 10, the findings reveal no significant differences between the two groups. Consequently, since the average ACSI score (71.8%) lies closer to six than it does a seven on a nine point Likert-type scale, pre-failure satisfaction will be given as a six in all of the vignettes of the main study.

⁶ The outcome-based versus process-based treatment is the only treatment in which the standard “excellent recovery” could not be used because it did not fit the context of the scenario. Therefore, an alternate recovery effort was created and tested in pretest 3.

Table 9: Second Round of Manipulation Checks	Mean (Highest Possible)
Low Stability	1.50 (3)
<i>Stability Realism</i>	3.97 (5)
Low Control	1.36 (3)
<i>Control Realism</i>	3.94 (5)
Recovery	2.94 (3)
<i>Recovery Realism</i>	3.64 (5)

Table 10: Manipulating the Pre-Failure Satisfaction Level	Paradox Yes	Paradox No	Mean Post-failure Satisfaction
Pre-failure satisfaction = 6	15	3	7.22
Pre-failure satisfaction = 7	13	5	7.89

Measurement of the Dependent Variable

The Recovery Paradox

The dependent variable in this study is a binary variable called the “recovery paradox.” As seen in Appendices 5-14, because the recovery paradox theory predicts that secondary satisfaction levels are greater than pre-satisfaction levels, in order for the paradox to be tested, secondary satisfaction must be assessed against a baseline [pre-failure] satisfaction level. Therefore, following each experimental scenario, subjects

were told that their overall-satisfaction with the service provider prior to the scenario was a six out of a possible nine [1 = extremely dissatisfied; 5 = neither; 9 = extremely satisfied]. Theoretical support for setting the pre-failure satisfaction level at six can be found in the American Customer Satisfaction Index (ACSI) which reports mean customer satisfaction for hotel patrons at 71.8% for the first quarters of 1995-2003 (http://www.theacsi.org/first_quarter.htm). Further, empirical support for setting the pre-failure satisfaction level at six is seen in the results of pretest 3 (See Table 10). After being given their overall-satisfaction [baseline satisfaction] prior to the failure, the participants were then asked to indicate their overall satisfaction following the scenario in the given vignette. Like the baseline satisfaction, secondary satisfaction is treated as a bipolar construct, anchored by extremely dissatisfied / extremely satisfied [with the midpoint labeled neither]. This measure is consistent with research conducted by Oliver and Bearden (1985). A 9-point scale is most appropriate for measuring satisfaction in order to limit skewness (Fornell, 1992). Therefore, if a subject rated secondary satisfaction greater than six then the binary dependent measure is coded as “1” indicating that “yes” a recovery paradox exists. Conversely, if a respondent rated secondary satisfaction less than or equal to six, then the binary dependent variable is coded as a “0” indicating that, “no,” the recovery paradox did not occur.

Additional Measures to assess the Validity of the Subject’s Satisfaction Response

Purchase Intent and Word-of-Mouth

Respondents were given two additional 9-point Likert-type scales ranging from “extremely likely” to “extremely unlikely” and were asked to indicate levels of two more

variables, word-of-mouth and purchase intent, which are not included in any hypothesized relationship in Figure 2.⁷ The word-of-mouth and purchase intent constructs were incorporated into the model as additional measures of secondary customer satisfaction. This is due to the fact that current marketing literature overwhelmingly demonstrates evidence supporting a strong positive correlation between customer satisfaction and word-of-mouth (Blodgett, Granbois, and Walters, 1993; Blodgett, Hill, and Tax, 1997; Brown and Beltramini, 1989; Richins, 1983; Tax and Chandrashekar, 1992; Wilson and Peterson, 1989). Likewise, it is also a well-accepted maxim in the marketing literature that satisfaction and purchase intent move in tandem (Gilly and Gelb, 1982; Goodwin and Ross, 1989; 1990; LaBarbera and Mazursky, 1983; Swan and Trawick, 1981a, b; Tax and Chandrashekar, 1992; Yi, 1990). Dubé and Maute (1998) found the strong positive correlation between satisfaction and loyalty to be particularly true for service failure situations. In fact, Rusbult et al. (1998) and Rusbult, Zembrodt, and Gunn (1982) posited that satisfaction can be used to predict relational commitment. Therefore, these two constructs are robust indicators of satisfaction and are used in this study to assess the validity of a respondent's satisfaction reply on the survey. For example, if a respondent indicates a high satisfaction score, but low word-of-mouth and/or purchase intent, this could be an indicator of a response bias. Specifically, the respondent may not have taken the study seriously and circled responses without reading the items. Therefore, if a respondent indicates a paradoxical increase in post-failure

⁷ Word of mouth and purchase intent responses are not hypothesized because the recovery paradox theory is a theory that deals specifically with pre-satisfaction and post-satisfaction surrounding a service failure. Therefore, the objective of this study would have been confounded by hypothesizing relationships involving word of mouth and purchase intent.

satisfaction, but the average of the word-of-mouth and purchase intent responses is below a neutral rating, this will result in the respondent's survey being excluded from the study.

Collecting word-of-mouth and purchase intent data is also beneficial to the study because it aids in reducing the odds that the participants will be able to guess the purpose of the study. Therefore, if a particular respondent already holds an opinion regarding the validity of marketing's recovery paradox theory, collecting responses on items other than satisfaction opens up the possibility that the hypotheses are not attempting to test the paradox theory.

Measurement of the Mediating Variable

An Excellent Recovery Effort

Service recovery strategies describe the actions that service providers take in response to defects or failures (Gronroos, 1988). In operationalizing this construct, care is taken not to make the recovery effort overly weak or strong. That is, even studies which do not support the recovery paradox take an "excellent recovery" as an axiomatic mediator in the modeled relationship. An excellent recovery is an axiomatic mediator in the paradox theory because one of the theoretical cornerstones of the recovery paradox theory is the expectancy disconfirmation paradigm. The only way for customers to achieve elevated secondary satisfaction is through positive disconfirmation of their expectations. If a recovery is good, but not excellent, than the customer does not experience positive disconfirmation because most customers expect a reasonable recovery after a failure (Berry and Parasuraman, 1991; Bodgett, Hill, and Tax, 1997; Goodwin and Ross, 1992). Therefore, the manipulation check contained in Appendix 2 is

conducted on the variable to assess what constitutes an “excellent recovery.” Prior research is considered in creating the manipulation check scenarios because the findings of Johnston (1995) indicate the importance of responsiveness, empathy, communication, and friendliness in the recovery initiative.

As seen in Appendix 2, respondents in the manipulation check are also asked to rate the ‘realism’ of the scenarios because even the most generous recovery efforts in the scenario must be realistic and not overly charitable. A pragmatically realistic portrayal of an “excellent recovery” is important for two reasons: 1) the results of this study should be managerially applicable; and 2) extreme compensation may not heal the relationship because it is possible that customer satisfaction can be harmed by ‘over-compensation’ in the recovery effort (Austin and Walster, 1974). This is because equity theory postulates that over-rewarded customers may be less satisfied than those who receive equitable rewards because they experience distress and guilt regarding the exchange (Austin and Walster, 1974).

Since an “excellent recovery” is modeled as a mediator (See Figure 2), it is predicted that the effect of the experimentally manipulated variables will be mediated through the recovery strategy to the resulting secondary satisfaction rating. In other words, it is expected that the “recovery effort” mediator *will affect* secondary satisfaction, and *will be affected* by the manipulated variables. Therefore, after completing the manipulation check, and finding in the manipulation check that the “excellent recovery”, as, in fact, perceived as being excellent, it is not manipulated in the vignettes because it serves as a mediating variable. Instead, the recovery effort remains consistent throughout the treatments and it is the moderating variables that are experimentally manipulated.

Measurement of the Moderating Variables

Severity:

The objective is to create a strong manipulation of failure severity, but at the same time avoid unrealistic scenarios which may preclude the findings of this study being embraced by practitioner readership. Both severity treatments depict a hotel patron not given access to in-room internet access. As seen in Appendix 6, the low severity scenario depicts the respondent wanting to gain access to the internet for casual use. In contrast, the high severity condition [Appendix 7] describes the respondent needing to gain access to the web for immediate business reasons. The ultimate goal in manipulating this condition is to vary failure severity while keeping other facets of the failure vignettes as similar as possible.

Existence of a Prior Failure with the Firm:

Creating the scenario for this variable is relatively straightforward and does not require a manipulation check. Scenario manipulations incorporate two levels: “one previous failure” and “no previous failure.” The ‘prior failure’ scenario is contained in Appendix 8. Care is taken not to make the “prior failure” overly severe because the scenario requires that the customer return for a second visit to the hotel. If the prior failure was too severe then odds are that the guest would not have returned for a second visit. Therefore, the prior failure describes a problem with the cleanliness of the guest room bathroom during the previous stay, but the vignette states that the bathroom was rapidly cleaned when the customer voiced a complaint.

Quantity of Past Experiences with the Firm:

It is predicted that a failure happening early in the customer's relationship with the firm will weigh more heavily on customer dissatisfaction because the customer has fewer successful service experiences to counterbalance the failure. To test this prediction a high quantity vignette [see Appendix 9] was written which states that the respondent had nine prior visits to the hotel property. Nine was the chosen number of prior visits because it seems plausible that nine visits would allow for this satisfaction buffer to develop, but at the same time nine visits to a hotel property is not an unrealistic quantity. Conversely, the low quantity scenario is operationalized as one prior visit to the hotel; therefore, the baseline scenario contained in Appendix 5 for this manipulation. One prior visit is used in the scenario to depict the low quantity option because a vignette with no prior hotel visits would not have allowed for the testing of the recovery paradox [it would be difficult to ascertain pre-failure satisfaction judgments].

Outcome-based versus Process-based Failure

The outcome-based versus process-based failure is operationalized through two scenarios involving the respondent receiving a haircut in the hotel's hair salon [see Appendix 9 and 10]. The outcome-based scenario describes the respondent receiving a poor-quality haircut. The process-based condition depicts the respondent waiting 45 minutes for a haircut, despite having an appointment. These scenarios are consistent with an earlier study conducted by Maxham (2001) which also employed hypothetical haircut scenarios. The impetus for remaining consistent with Maxham's (1999) study is two-

fold: First, the haircut scenarios make distinct manipulations of process and outcome failures. Secondly, Maxham (1999) found no support for a recovery paradox, and based on the reasoning in the literature review, it seems plausible that whether a failure is process-based or outcome-based intervenes to determine the existence [or non-existence] of a recovery paradox.

Gender of the Customer

The gender variable is operationalized simply by asking all respondents to indicate their sex. As discussed in Chapter 2, the typical service firm's failure procedures do not involve giving the customer 'voice' in choosing between a list of recovery alternatives; therefore, the standard 'excellent recovery' in the main experiment does not either. Therefore, this hypothesis is tested by measuring which gender experienced more occurrences of a recovery paradox. Because of gender's predicted intervening influence on the recovery paradox, it is modeled as a covariate when testing hypotheses other than H6 and H12.

Stability

The potential moderating influence of stability requires a manipulation check that is found in Appendix 2. In creating the scenarios care is taken to make the depictions pragmatically realistic. Caution is also exercised in attempting to only manipulate the portion of the failure that involves perceptions of stability. The treatments used to measure stability can be seen in Appendices 12-19. In the low stability vignettes, upon hearing a complaint from the respondent involving problems with in-room internet

access, the hypothetical hotel employee states that these problems occur from time to time. Conversely, in the high stability condition, the hotel associate states that problems do occur from time to time, but it is for that reason that the hotel company is switching internet providers in the near future. This switch is an attempt on the part of hotel management to preclude future internet-related problems in the guest rooms.

Control

Due to its subjective nature, the level of control mandates a manipulation check which is depicted in Appendix 2. Again, a strong manipulation is desired for the experiment, but not one that is unrealistic; and not one that manipulates facets other than perceptions relating to control. The survey instruments for control are found in Appendices 12-19. The low control vignette entails the respondent not being able to gain internet access from the guest room, but the portal is not physically damaged and the front desk has no other current or prior reports of problems. On the contrary, the high control situation describes the respondent not gaining guestroom internet access. Further, the guestroom portal is physically damaged and the front desk associate states that the room is red-flagged in the system as being out of order and, therefore, the respondent should not have been assigned that room.

Relationship Type

Guttek's (1995) relationship-type typology can be operationalized because the two categories used in this study are easily differentiated. According to Guttek's (1995) categorization, a *true relationship* involves being familiar enough with an establishment that the customer knows the name of the employee who partakes in the transaction. Conversely, a *pseudo-relationship* involves visiting a service establishment on more than one occasion, but the transaction still involves strangers dealing with strangers. The survey mechanisms to test the influence of relationship type are found in Appendices 12-19. In Appendices 12-15, the treatments illustrate a pseudo-relationship in which the provider and respondent are strangers; and Appendices 16-19 depict a true relationship in which the respondent remembers the name of the front desk associate and the level of quality service received during the previous stay.

Interactions Effects Involving the Type of Relationship

Interaction effects between relationship type and control, stability, and gender are hypothesized to exist; therefore, Appendices 12-19 contain the survey mechanisms for the eight combinations of relationship type, control and stability. Since demographic information is collected for all respondents, the interaction between gender and relationship type is analyzed by using these demographic data. Further, while there are no explicit hypotheses concerning three-way interactions between control, stability, and gender, the experimental design used in this study allows us to test for these.

TESTING THE BASELINE SCENARIO

While hypotheses 2-12 are designed to test the effects of moderating variables, hypothesis 1 aims to test the existence of the recovery paradox in the absence of the manipulations (See Figure 2). Therefore, a simple baseline scenario is created to test hypothesis 1. The scenario is contained in Appendix 5. In the vignette, the respondent is unable to get internet access in his/her guest room, but the vignette does not incorporate potentially moderating influences, such as cues for attributing control or for assessing stability. Further, the vignette incorporates the “excellent recovery” that became salient in the manipulation check. Consistent with the other experimental treatments, the subject is provided with a pre-failure satisfaction rating and is requested to indicate a secondary rating. Also, in tandem with all the other treatments, the respondent is asked to indicate the likelihood of repurchase and positive word of mouth. These scores will serve to verify the validity of the satisfaction response.

DATA ANALYSIS

Data collected in pretest one are interpreted by using SPSS software to tabulate the frequency of each response category. Data from pretests two and three are analyzed using t-tests. In the main study, results will be initialized summarized to indicate the rate of recovery paradox for different levels of the moderators as well as combinations of levels of several moderators. The research hypotheses will then be tested for statistical significance using logistic regression (Logit). The binary variable “recovery paradox” [1 = yes; 0 = no] is the dependent variable and the experimentally manipulated variables in Figure 2 serve as the independent variables. Logit is used because the dependent variable

is dichotomous. The dichotomous nature of the dependent variable mandates differences in estimation methods and assumptions about the underlying distribution; hence, logit is the preferred technique. The foundations of logit are centered upon several alterations of the linear regression model. First, while a binary outcome variable is observed, logit is really interested in not the actual outcome, but rather the probability of a certain outcome (Lehmann, Gupta, and Steckel, 1998). Therefore, logit does not aim to minimize the sums of squares, but rather uses maximum likelihood estimation. This is an iterative algorithm which begins with an initial arbitrary “guesstimate” of what the logit coefficient should be. Once this initial function is estimated, the residuals are tested and a re-estimate is made with an improved function and the process is repeated until convergence is reached (Hair et al., 1998). The second modification to the linear regression model addresses the following:

If p (the probability that the observation takes on the value $y = 1$ for a given set of X 's) is substituted, the regression equation looks like this:

$$p = B_0 + B_1X_1 + B_2X_2 + \dots + B_kX_k$$

This expression can still generate values for p outside the range for probabilities (0 to 1). Consequently, the logit transformation of p , $\ln\{p/(1-p)\}$, is substituted into the equation for p to solve this potential problem. The logit transformation can range between positive and negative infinity even if p is restricted between 0 and 1. Therefore, the following logit model is used (Lehmann, Gupta, and Steckel, 1998):

$$\ln \frac{p}{1-p} = B_0 + B_1X_1 + B_2X_2 + \dots + B_kX_k$$

Further, statistical tests employed in linear regression assume that the errors follow a normal distribution. Conversely, in logit, the error can only take on two values. If y is 1, the error is $1 - p$, and if y is 0, the error is p . Hence, it is desirable to choose estimates of the B s so that the predicted values of p would be close to 1 when $y = 1$, and close to 0 when $y = 0$ (Lehmann, Gupta, and Steckel, 1998).

CHAPTER IV

RESULTS OF THE STUDY

Preparation of the Data and Demographic Profile of the Respondents

Once the data were collected, each survey was checked for discrepancies between post-failure satisfaction, repurchase intent, and word-of-mouth intentions (WOM). Specifically, if a participant indicated a paradoxical satisfaction increase, but the mean of repurchase intent and positive WOM was below a neutral rating, then the survey would be excluded from the analysis under the suspicion that the respondent did not actually read the items. This check was conducted because the marketing literature heartily demonstrates evidence supporting strong positive correlations between customer satisfaction, repurchase intent, and word-of-mouth (Blodgett, Granbois, and Walters, 1993; Blodgett, Hill, and Tax, 1997; Brown and Beltramini, 1989; Richins, 1983; Tax and Chandrashekar, 1992; Wilson and Peterson, 1989). Each of the 316 completed surveys passed this test; therefore, none were excluded from the study in this stage.

In the final question on the survey respondents were asked to estimate how many nights per year, on average, they stay in hotel rooms. This question was asked because in order for a scenario-based experiment to be effective, subjects must possess the ability to relate to the vignettes (Perdue and Summers, 1986; Summers, 2001) and not staying in hotels hinders the capability of the respondents to relate to the scenarios of this study. Therefore, the completed surveys were inspected and respondents that indicated that they stay in hotels zero nights per year had their responses removed from the data set. This

step resulted in 25 surveys (8% of the total surveys collected) to be extracted from the study. Therefore, the final number of usable surveys was 291.

As detailed in Chapter III, all respondents were enrolled in marketing courses at a Mid-Atlantic University. Of the 291 final respondents in the main study, 54% were female and 46% were male. The average age of the participants was 24. Subjects were also asked to indicate their academic major on the survey. As reported in Table 11, the most common major was marketing (27.8%) followed by management (15.1%) and Information technology (14.8%). Nearly one-quarter (23.4%) of the participants were enrolled in majors outside of the business school.

Major	Frequency	Percent	Cumulative Percent
Accounting	24	8.2	8.2
Economics	1	.3	8.5
Finance	26	8.9	17.4
Information Technology	43	14.8	32.2
International Business	4	1.4	33.6
Management	44	15.1	48.8
Marketing	81	27.8	76.5
Other (non-business)	68	23.4	100
Total	291	100	

Hypothesis Testing and Research Findings

The hypotheses were tested through the use of 15 treatment conditions. These treatments are listed in Table 12 along with the findings generated by each. Table 12 shows that the treatment with the greatest mean post-failure satisfaction was the process-based vignette (mean=7.70) followed by the baseline scenario (mean=7.38). The scenario with the lowest mean post-failure satisfaction was the high severity vignette (mean=4.68).

Since the overriding goal of this research is to identify which variables can moderate the existence of a recovery paradox, columns were established in SPSS to compute whether a recovery paradox occurred. For each case, if the post failure satisfaction exceeded a rating of a 6 on the 9-point Likert type index, this was coded as a "1" (Paradox Yes=1). Likewise, because the pre-failure satisfaction in all treatments is a 6 on a 9-point Likert type scale, if a case has a post-failure less than or equal to a 6, then this was coded as a 0 (Paradox No=0). As seen in Table 12, the likelihood of a recovery paradox occurring varied considerably across the various treatments. The scenario in which subjects most often experienced a recovery paradox was the process-based vignette (Yes=86.8%). Conversely, the treatment which least often produced paradoxical satisfaction increases was the high severity vignette (Yes=14.3%).

Table 12: Results from the 15 Experimental Treatments				
Treatment Condition	Mean Post-failure Satisfaction of the Scenario	Number of Paradox – Yes for the Scenario	Number of Paradox – No for the Scenario	Percentage of Paradox – Yes for the Scenario
Baseline Scenario	7.38	232	59	79.7%
Low Severity Scenario	6.11	62	74	45.6%
High Severity Scenario	4.68	22	133	14.2%
Prior Failure Scenario	5.83	102	189	35.1%
Nine Past Transactions Scenario	7.18	212	79	72.9%
Outcome-based Scenario	5.79	50	105	32.3%
Process-based Scenario	7.70	118	18	86.8%
Pseudo Relationship x High Control x High Stability Scenario	5.23	8	31	20.5%
Pseudo Relationship x Low Control x High Stability Scenario	5.89	12	23	34.3%
Pseudo Relationship x Low Control x Low Stability Scenario	6.47	18	14	56.3%
Pseudo Relationship x High Control x Low Stability Scenario	5.92	14	24	36.8%
True Relationship x High Control x High Stability Scenario	5.35	7	36	16.3%
True Relationship x Low Control x High Stability Scenario	6.73	19	14	57.6%
True Relationship x Low Control x Low Stability Scenario	7.21	32	6	84.2%
True Relationship x High Control x Low Stability Scenario	6.56	18	14	56.3%

Table 13 lists the twelve hypotheses and reports how they are analyzed. The impetus of Hypothesis 1 is to test the existence of the recovery paradox within the baseline scenario, but before the hypothesis can be tested the intervening impact of gender must be determined. In order to identify gender's potential influence, a crosstabulation between the baseline data and gender was conducted. The chi-square statistic had a value of .092 ($p=0.762$) which is evidence that a respondent's gender did not influence whether s/he experienced a recovery paradox. Next the aggregate data set (males and females) was analyzed. The baseline scenario yielded 232 (79.7%) occurrences of a recovery paradox and 59 (20.3%) incidents with no recovery paradox. As seen in Table 14, a chi-square test of significance is conducted. Consistent with expectations, a chi-square of 102.849 ($p=0.000$) indicates that there is a significant difference between the paradox occurrences and the absence of a paradox. **Thus Hypothesis 1 is supported.**

Before Hypothesis 2 can be tested in a prudent fashion, the potential influence of gender must be ascertained. Therefore, a logistic regression was run with the occurrence of a paradox as the dependent variable [for the severity treatments] and with severity (high or low) and gender as covariates. Gender was not significant ($p=0.892$), which is evidence that the relationship between severity and a recovery paradox does not depend on gender. In order to further validate the finding that gender does not intervene in the severity / paradox relationship, separate crosstabs of the severity data were run for males and females and were compared to each other, and also to aggregate results. All three data sets yielded p -values = 0.000. The identical p -values are further verification that gender does not intervene. As an additional check, odds ratios were calculated for each

group. An odds ratio is a way of comparing whether the probability of a particular event is the same for two groups (Agresti, 1996). The odds ratios of the analyses were 5.601, 4.680, and 5.065 for males, females, and the aggregate set respectively. The similarity between the odds ratios further confirms that gender does not play a role in these results.

Therefore, having concluded that gender can be ignored in testing Hypothesis 2, the hypothesis was then tested by comparing the number of recovery paradox incidents in the low and high severity vignettes. The results are reported in Table 13. In the low severity treatment, 62 (45.6%) of the subjects witnessed a recovery paradox while 74 (54.4%) did not. On the other hand, only 22 (14.3%) of the participants in the high severity treatment experienced a paradox and 133 (85.7%) did not report paradoxical satisfaction ratings. As anticipated, a chi-square of 34.772 ($p=0.000$) supports the hypothetical expectation that a recovery paradox is more likely to occur when the service mistake is of low severity than if the failure is severe (See Table 14). An odds ratio of 5.065 for the two severity conditions also lends robust support to the notion that a recovery paradox is moderated by the degree of failure severity. The odds ratio of 5.065 is interpreted as meaning that a recovery paradox is roughly five times more likely to occur after a low severity failure than after a high severity scenario. Further, it can be stated with 95 percent confidence that a low severity scenario is 2.9 times more likely to produce a recovery paradox than a high severity situation. **Hypothesis 2 is therefore supported.**

Hypothesis 3 posits that a recovery paradox is more likely to occur if it is the firm's first failure with the customer than if it is the firm's second failure. Since the baseline treatment depicts the participant having one failure, data are collected from a

scenario describing a second failure (a current failure and a past failure) and is compared to the responses in the baseline vignette. As in the cases of H1 and H2, before Hypothesis 3 can be tested in a conceptually sound manner, it must first be determined whether gender exerts an influence in the hypothesized relationship. To test for gender effects a logistic regression model was run in which the occurrence of a recovery paradox in the prior failure treatment was regressed against gender. A non-significant p-value of 0.405 for gender is evidence that the factor does not intervene in the hypothesized relationship.

In the past failure treatment, 102 (35.1%) subjects experienced a recovery paradox and 189 (64.9%) did not. A crosstab employing the McNemar test is employed to test the results for significance. McNemar's test is used because the prior failure treatment is compared against the baseline treatment which categorizes this hypothesis test as a within subjects comparison. The chi-square statistic of the McNemar test is 122.360 ($p=0.000$) which supports the notion that a prior failure can moderate the occurrence of a recovery paradox. As depicted in Table 15, the off-diagonal elements of the McNemar test also provide testimony that a prior failure experience can intervene to influence the recovery paradox. Specifically, 133 of the respondents who reported paradoxical increases in the baseline scenario indicated no paradox in the prior failure situation. Furthermore, only three subjects witnessed a recovery paradox in the prior failure treatment, but no paradox in the baseline condition. **Hypothesis 3 is therefore supported.**

Hypothesis	Tested by comparing	Baseline	Baseline
H1: If the firm exercises an excellent recovery, the customer's post-failure satisfaction level will be greater than the pre-failure level.	yes with no within the baseline scenario	Yes=232[79.7%]	No=59[20.3%]
H2: A recovery paradox is more likely to occur if the service failure is less severe than if the failure is more severe.	low and high scenarios	Low Severity Yes=62[45.6%] No=74[54.4%]	High Severity Yes=22[14.3%] No=133[85.7%]
H3: A recovery paradox is more likely to occur if it is the firm's first failure with the customer than if it is the firm's second failure.	the prior failure scenario to the baseline	Prior Failure Yes=102[35.1%] No=189[64.9%]	Baseline Yes=232[79.7%] No=59[20.3%]
H4: A recovery paradox is more likely to occur if the customer has had a lengthy relationship with the firm with no previous failures, than if the customer is a new user of the firm's services.	the many past transaction scenario to the baseline	Many Past transactions Yes=212[72.9%] No=79[27.1%]	Baseline Yes=232[79.7%] No=59[20.3%]
H5: A recovery paradox is more likely to occur if the failure is a process failure than if it is an outcome failure.	the process to the outcome scenario	Process-based Yes=118[86.8%] No=18[13.2%]	Outcome-based Yes=50[32.3%] No=105[67.7%]
H6: A recovery paradox is more likely to occur if the customer is male than if the customer is female.	female responses with male responses	Female Yes=127[80.4%] No=31[19.6%]	Male Yes=105[78.9%] No=28[21.1%]
H7: A recovery paradox is more likely to occur if the customer perceives that the failure had an unstable cause rather than if the customer perceived the cause to be stable.	the low stability scenario with the high stability scenario	Low Stability Yes=83[58.9%] No=58[41.1%]	High Stability Yes=46[30.7%] No=104[69.3%]
H8: A recovery paradox is more likely to occur if the customer perceives that the firm had little control over the cause of the failure than if the customer perceived that the firm had sizable control over the cause of the failure.	the low control scenario with the high control scenario	Low Control Yes=82[59%] No=57[41%]	High Control Yes=47[30.92%] No=105[69.08%]

H9: A recovery paradox is more likely to occur if the customer has a 'pseudo-relationship' with the firm than if the customer has a 'true-relationship' with the firm.	Tested by comparing the true relationship scenario with the pseudo-relationship scenario	True Relationship Yes=92[52.1%] No=70[47.9%]	Pseudo-Relationship Yes=53[41.1%] No=76[58.9%]
H10: A recovery paradox is more likely to occur if the customer has a 'true relationship' when a low control explanation is provided, than if the customer has a 'pseudo-relationship' when a low control explanation is provided.	Tested through the use of scenarios which manipulated both relationship type and control	True/Low Control Yes=51[71.8%] True/High Control Yes=25[33.3%]	Pseudo/Low Control Yes=31[58.5%] Pseudo/High Control Yes=22[41.5%]
H11: A recovery paradox is more likely to occur if the customer has a 'true relationship' when a low stability explanation is provided, than if the customer has a 'pseudo-relationship' when a low stability explanation is provided.	Tested through the use of scenarios which manipulated both relationship type and stability	True/Low Stability Yes=50[71.4%] True/High Stability Yes=26[34.2%]	Pseudo/Low Stability Yes=33[46.5%] Pseudo/High Stability Yes=20[27%]
H12: A recovery paradox is more likely to occur if the customer is female and has a 'true relationship' than if the customer is male and has a 'true relationship.'	Since gender data are collected for all respondents this is tested by manipulating relationship type	True/Male Yes=29[50.9%] True/Female Yes=47[52.8%]	Pseudo/Male Yes=28[36.8%] Pseudo/Female Yes=25[36.2%]

To test Hypothesis 4, subjects were asked to react to a scenario which states that they had nine prior failure-free encounters with the service provider. Since the only difference between the baseline treatment and the "many past transactions" treatment are the nine prior encounters, Hypothesis 4 is tested by comparing the many past transactions vignette to the baseline. In the many past transactions treatment, 212 (72.9%) of the respondents underwent a paradoxical post-failure satisfaction increase, while 79 (27.1%) of the subjects did not experience a recovery paradox.

Before H4 can be tested directly, any potential gender influences must be identified. Therefore, logistic regression was performed with the occurrence of a recovery paradox in the many past transactions treatment as the dependent variable and gender data as the covariate. A p-value of 0.178 is evidence that gender does not intervene in the hypothesized relationship.

Like Hypothesis 3, because the prior failure treatment is analyzed against the baseline scenario, a McNemar test is necessary to test the results for significance. While the chi-square statistic of the McNemar test is 5.309 ($p=.021$) which shows significance, H4 is not supported. H4 predicts the proportion of “yeses” (recovery paradoxes) to be higher for the many past transactions treatment, but in reality the proportion of “yeses” is actually greater in the baseline scenario. Furthermore, the off-diagonal elements of Table 16 indicate that H4 is not supported by the data. That is, only 44 of the participants who experienced a recovery paradox in the baseline situation failed to witness a paradox in the ‘many past transaction’ treatment. Also, 24 other subjects who had no paradoxical satisfaction

increases in the baseline condition did report a recovery paradox in the ‘many past transaction’ situation. **As a result, H4 is not supported**

Hypothesis	Outcome	Method	Significance Statistics	Odds Ratio	Lower 95% Confidence	Upper 95% Confidence
H1: If the firm exercises an excellent recovery, the customer's post-failure satisfaction level will be greater than the pre-failure level.	Supported	Chi-square test of significance	$\chi^2=102.849$ ($p=0.000$)			
H2: A recovery paradox is more likely to occur if the service failure is less severe than if the failure is more severe.	Supported	Crosstab with chi-square test	$\chi^2=34.772$ ($p=0.000$)	High/Low 5.065	2.884	8.897
H3: A recovery paradox is more likely to occur if it is the firm's first failure with the customer than if it is the firm's second failure.	Supported	Crosstab with McNemar test	122.360 ($p=.000$)	See off-diagonal elements in Table 15		
H4: A recovery paradox is more likely to occur if the customer has had a lengthy relationship with the firm with no previous failures, than if the customer is a new user of the firm's services.	Rejected	Crosstab with McNemar test	$\chi^2=5.309$ ($p=0.021$)	See off-diagonal elements in Table 16		
H5: A recovery paradox is more likely to occur if the failure is a process failure than if it is an outcome failure.	Supported	Crosstab with chi-square test	$\chi^2=88.196$ ($p=0.000$)	Outcome/ Process 13.767	7.559	25.072
H6: A recovery paradox is more likely to occur if the customer is male than if the customer is female.	Rejected	Chi-square test of significance	$\chi^2=0.092$ ($p=0.762$)	Female/ Male 0.915	0.516	1.623
H7: A recovery paradox is more likely to occur if the customer perceives that the failure had an unstable cause rather than if the customer perceived the cause to be stable.	Supported	Logistic regression	$p=0.000$	High /Low 3.235	1.997	5.243
H8: A recovery paradox is more likely to occur if the customer perceives that the firm had little control over the cause of the failure than if the customer perceived that the firm had sizable control over the cause of the failure.	Supported	Logistic regression	$p=0.026$	High / Low 3.214	1.984	5.206

H9: A recovery paradox is more likely to occur if the customer has a 'pseudo-relationship' with the firm than if the customer has a 'true-relationship' with the firm.	Rejected	Logistic regression	p=0.002	Pseudo/True .896	.563	1.426
H10: A recovery paradox is more likely to occur if the customer has a 'true relationship' when a low control explanation is provided, than if the customer has a 'pseudo-relationship' when a low control explanation is provided.	Marginal Support	Logistic regression	p=0.117			
H11: A recovery paradox is more likely to occur if the customer has a 'true relationship' when a low stability explanation is provided, than if the customer has a 'pseudo-relationship' when a low stability explanation is provided.	Rejected	Logistic regression	p=0.156			
H12: A recovery paradox is more likely to occur if the customer is female and has a 'true relationship' than if the customer is male and has a 'true relationship.'	Rejected	Logistic regression	p=0.830			

Table 15: McNemar Test for the Moderating Influence of a Prior Failure		
	Prior Failure Treatment: Paradox "No"	Prior Failure Treatment: Paradox "Yes"
Baseline Treatment: Paradox "No"	56	3
Baseline Treatment: Paradox "Yes"	133	99

Table 16: McNemar Test for the Moderating Influence of Many Past Transactions		
	Many Past Treatment: Paradox "No"	Many Past Treatment: Paradox "Yes"
Baseline Treatment: Paradox "No"	35	24
Baseline Treatment: Paradox "Yes"	44	188

Hypothesis 5 posits that process-based scenarios generate more recovery paradoxes than outcome-centric situations. H5 is tested by comparing the responses from the process-based treatment with data collected in the outcome-based scenario. First, any gender influences must be identified so as not to confound hypothesis testing. Consequently, a logistic regression was run with the occurrence of a paradox in the outcome/process treatment as the dependent variable. In the logistic regression model, outcome/process and gender served as covariates. Gender was found to be insignificant ($p=0.507$), which is evidence that the hypothesized relationship is not impacted significantly by gender. To further validate the finding, separate crosstabs of the outcome/process data were run for males and females and were compared not only to each other, but also to aggregate results. All three data sets yielded p-values of 0.000, and the odds ratios of the analyses were 15.377, 13.377, and 13.767 for males, females,

and the aggregate set, respectively. The identical p-values and the similarity between the odds ratios both suggest that gender does not play a role in these results.

In the process-based treatment, 118 (86.8%) subjects experienced a recovery paradox and 18 (13.2%) of the respondents did not report paradoxical satisfaction scores. On the other hand, in the outcome-centric treatment, the ratio of recovery paradoxes to lack of paradoxes was 50 (32.3%) to 105 (67.7%) respectively. When the results of the two treatments are compared, a chi-square of 88.196 ($p=0.000$) is found. The prediction that process-based situations lend themselves to recovery paradoxes more than outcome-based situations is further validated by an odds ratio value of 13.767 for outcome-centric versus process-centric data. The odds ratio of 13.767 is interpreted as meaning that a recovery paradox is almost 14 times more likely to occur after a process-based failure scenario than after an outcome-centric scenario. Further, it can be stated with 95 percent confidence that a process-based scenario is 7.6 times more likely to produce a recovery paradox than an outcome-based failure situation. **Consequently, Hypothesis 5 is supported.**

Hypothesis 6 predicts that males are more likely to experience a recovery paradox than females. Due to its potential intervening influence in all of the other hypothesized relationships, effect of gender has been tested for each treatment thus far in the study. As already reported, gender does not have a significant influence in the baseline, severity, prior failure, many past, or outcome/process treatments [the gender results listed in Table 14 are for the baseline condition]. To test the effect of gender in the remainder of the treatment conditions, a logistic regression model was created in which recovery paradox was the dependent variable. The covariates in the model included control, stability,

relationship type, control x stability, control x relationship type, stability x relationship type, and gender. The findings of this logistic regression strongly indicate that gender has no significant influence ($p=0.643$). As an additional test for the effect of gender, an amended model without the interaction terms was analyzed. Again, gender clearly emerged as insignificant ($p=0.643$). The resounding conclusion of these findings is that gender does not moderate the existence of the recovery paradox. **Hence, hypothesis 6 is not supported.**

The next set of analyses involves the testing of Hypotheses 7-12. Data surrounding the testing of these hypotheses are generated through scenarios which intertwine control, stability, and relationship type (refer to Table 12). The experiment adopts this design to allow for the analysis of interaction effects. The first step in testing these hypotheses was to conduct a logistic regression with a comprehensive model representing all of the variables in the hypothesized relationships. As listed in Table 17, stability ($p=0.057$), control ($p=0.083$) emerged as significant at the .10 level, and relationship type ($p=0.016$) was significant at the .05 level. The significance of these main effects lends some initial support to hypotheses 7-9. The two-way interactions, the three-way interaction, and gender were not found to be significant.

Variable	B	S.E.	Df	Sig.
Relationship type	1.370	.568	1	.016
Stability	-.959	.503	1	.057
Control	-.845	.487	1	.083
Relationship type x Control	-.577	.750	1	.441
Relationship type x Control x Stability	-.665	1.070	1	.534
Relationship type x Stability	-.410	.757	1	.588
Control x Stability	.144	.724	1	.842
Gender	.017	.268	1	.948
Constant	.280	.531	1	.599

Based on the results of the comprehensive model, a revised logistic regression model was run. The amended model differed from the previous in two ways: 1) the three- way interaction was deleted because it emerged as insignificant in the first model (no three-way interaction was hypothesized to exist), and 2) gender was removed from the analysis because it was insignificant in the first model and it has proven to be insignificant thus far throughout this study.

The results of the second logistic regression are listed in Table 18. The results of this model continue to indicate that stability ($p=0.065$) and relationship type ($p=0.001$) are significant at the .10 and .05 levels, respectively. A third main effect, control ($p=0.101$) is marginally significant in this model and the two-way interaction between relationship type and control is also marginally significant.

Variable	B	S.E.	df	Sig.
Relationship type	1.559	.488	1	.001
Stability	-.812	.440	1	.065
Relationship type x Control	-.906	.536	1	.091
Control	-.708	.432	1	.101
Relationship type x Stability	-.746	.536	1	.164
Control x Stability	-.162	.534	1	.762
Constant	.234	.331	1	.480

To further validate the results, the model was again amended through the removal of the ‘control x stability’ interaction term. There is no known theoretical foundation for predicting that control and stability should interact and, therefore, the interaction was never hypothesized. Consequently, there is no reason to be concerned with the elimination of the control and stability interaction from the model. As reported in Table 19, results of this model are consistent with the findings of the previous model; thus, further validating the findings. All three main effects are significant at the 95% confidence level. The p-values for stability, control, and relationship type are 0.014, 0.030, and 0.001, respectively. As anticipated, these figures confirm that there is a significant relationship between these factors and the occurrence of a recovery paradox. Also consistent with the previous model, the two-way interaction between relationship type and control ($p=0.084$) remains marginally significant in these results as well.

Variable	B	S.E.	df	Sig.
Relationship type	1.577	.488	1	.001
Stability	-.889	.361	1	.014
Control	-.781	.360	1	.030
Relationship type x Control	-.923	.533	1	.084
Relationship type x Stability	-.758	.535	1	.156
Constant	.272	.307	1	.376

Since the two-way interaction between relationship type and stability has not approached significance in the previous three logistic regression results, **it is conceded that H11 is not supported.** As seen in Table 19, the prediction that the stability of the cause of the failure moderates the occurrence of a service recovery paradox (hypothesis 7) is strongly supported by the data ($p=0.014$). Moreover, the results also emphatically support the notion that the level of control that the service provider had over the failure intervenes to influence the existence of a recovery paradox ($p=0.030$). **Hence, Hypotheses 7 and 8 are supported.**

Hypothesis 9 posits that customers who are in a pseudo-relationship with a firm are more likely to experience paradoxical post-failure satisfaction ratings than those who have a true relationship. At first glance it would appear that H9 is strongly supported by the data ($p=0.001$); however, a closer examination of the results (see Table 20) reveals that the significance is in the opposite direction to that hypothesized. **Hypothesis 9 is therefore not supported.**

	Paradox “No”	Paradox “Yes”
Pseudo-relationship	92[63.4%]	53 [36.6%]
True relationship	70[47.9%]	76[52.1%]

Hypothesis 10 contends that an interaction between relationship type and control moderates the occurrence of a recovery paradox. The argumentation supporting the prediction entails the notion that a customer who is in a true relationship with the service provider is most likely to attribute the cause of the service failure to factors outside of the firm’s control. As stated above, the interaction is only supported at the 0.1 level in the logistic regression results ($p=0.84$), but additional analyses of the data were conducted. Specifically, only the low control cases were selected and relationship type was cross-tabulated against paradox occurrences (see Table 21). In a separate step, the same procedure was carried out for the high control cases (see Table 22). The discrepancy between the odds ratio for the low control cases (3.044) and the odds ratio for the high control cases (1.25) serves as additional support in favor of hypothesis 10. That is, in the low control cases a true relationship is approximately three times more likely to generate a recovery paradox than a pseudo-relationship, but in the high control cases both relationship types are roughly equally likely to generate a paradox.

Moreover, the data pertaining to paradox “yeses” from Tables 21 and 22 are plotted in Figure 8. When these data are plotted the two-way interaction between relationship type and control becomes visible. As depicted in Figure 8, there is a 4.7%

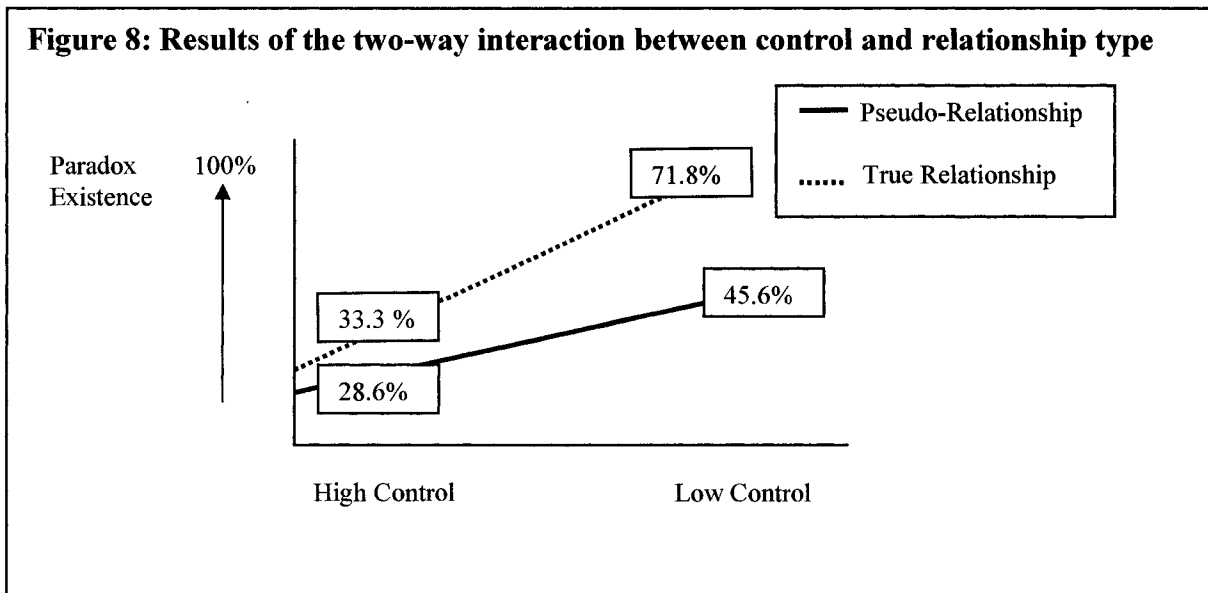
gap in recovery paradox occurrences between relationship types in the low control treatment, but the gap sharply widens to 26.2% for the high control situation. The two-way interaction evident in Figure 8 coupled with the discrepancy between the odds ratios between low control and high control cases is sufficient evidence to support Hypothesis 10. **Hence, Hypothesis 10 is supported.**

Table 21: Crosstab of relationship type and recovery paradox for the low control cases

	Paradox "No"	Paradox "Yes"
Pseudo-relationship	37[54.4%]	31[45.6%]
True relationship	20[28.2%]	51[71.8%]
Odds Ratio: Pseudo/True = 3.044	Lower Bound: 1.506 (95% confidence)	Upper Bound: 6.151 (95% confidence)

Table 22: Crosstab of relationship type and recovery paradox for the high control cases

	Paradox "No"	Paradox "Yes"
Pseudo-relationship	55[71.4%]	22[28.6%]
True relationship	50[66.7%]	25[33.3%]
Odds Ratio: Pseudo/True = 1.250	Lower Bound: .627 (95% confidence)	Upper Bound: 2.490 (95% confidence)



As was previously mentioned, Hypothesis 11 was not supported, and the final analysis involved Hypothesis 12. Hypothesis 12 predicts an interaction between gender and relationship type. More precisely, H12 posits that a recovery paradox is more likely to occur if the customer is female and has a true relationship with the service provider than if the customer is male and has a true relationship. Although, gender fails to demonstrate any significant effects throughout this study, the interaction between gender and relationship type is tested. A logistic regression was built with recovery paradox as the dependent variable. The covariates were relationship type, gender, and the interaction between the two. Contrary to expectations, but consistent with findings for the other hypotheses, the interaction term failed to reach a statistical level of significance ($p=0.830$). **Thus, hypothesis 12 is not supported.**

A POST HOC TEST TO VERIFY THE ADEQUACY OF THE SAMPLE

Evidence that undergraduate students are a suitable sample for this study was first gleaned from the results of pretest 1. In that pretest, subjects were asked how many nights per year, on average, they stay in hotel rooms. Respondents were provided the following four answer categories from which to choose: zero nights; 1-3 nights; 4-6 nights; and greater than 6 nights. Since only 7.9% of the respondents indicated that they never stay in hotels, the proposed sample appeared to be adequate if those who never stay in hotels are not permitted to participate in the main study. Therefore, the same question asked in pretest 1 was repeated at the end of the main study's survey instrument. In addition, the same answer categories provided in pretest 1 were listed on the main study's

questionnaire. The primary impetus for including this item on the survey was to identify subjects who never stay in hotels and extract their responses from the data set. In fact, 25 respondents circled “zero nights” and their responses were eliminated from the analysis.

The secondary motivation for asking participants of the main study to indicate how often they stay in hotels is so that a post-hoc test could be conducted to determine if there is a difference between responses of those who stay in hotel rooms 1-3 nights annually and those who frequent hotel rooms greater than three nights per year. If no difference between the responses is found, then this provides additional justification for having permitted both groups to partake in the main study. Therefore, in a post hoc test, the data were separated into cases in which 1-3 nights was selected, and into cases indicating greater than three nights. The results indicate that the two groups of responses are not significantly different with respect to recovery paradox occurrences for any of the treatments [baseline $p=0.804$; severity $p=0.173$; prior failure $p=0.124$; many transactions $p=0.186$; outcome/process $p=0.554$].

Next, potential differences between the two respondent groups were sought through the use of logistic regression. The first model that was generated included the occurrence of a recovery paradox as the dependent variable. Relationship type, control, stability, relationship type x control, relationship type x stability, relationship type x gender, and ‘sample’ [coded 0 for 1-3 nights; coded 1 for >3 nights] served as covariates in the model. The ‘sample’ term was not significant ($p=0.119$). As an additional check, a second logistic regression was conducted without the interaction terms. Again, ‘sample’ did not emerge as significant ($p=0.148$). These results clearly indicate that those respondents who stay in hotel rooms 1-3 nights annually possess the same ability to

evaluate hotel service failure scenarios as those subjects who utilize hotel lodging more than 3 nights per year.

CHAPTER V

CONCLUSIONS AND RECOMMENDATIONS

CONCLUSIONS AND ACADEMIC IMPLICATIONS

This study examined the effects of service recovery on customer satisfaction by using a scenario-based design to analyze the intervening influence of moderating factors and the interactions among them. The overriding conclusion that can be drawn from this study is that, under the correct conditions, an excellent failure recovery can not only mollify customers, but can also catapult their satisfaction to above pre-failure levels. In other words, the recovery paradox theory is indeed a valid theory, but the paradoxical post-failure satisfaction increase is moderated by a number of contextual influences. Therefore, researchers should take a more fine-grained analytical approach to the study of the recovery paradox. That is, rather than offering evidence for or against the existence of the paradox, researchers would be well served to approach the subject by analyzing intervening factors [and interactions between those intervening factors] which could enhance or hinder the odds of the occurrence of a paradoxical satisfaction after a failure and a first-rate redress. This approach is recommended because this study clearly indicates that customer post-failure satisfaction is influenced by an array of contextual variables.

One contextual variable that moderates the existence of a recovery paradox is the severity of the failure. The results of this study are consistent with those found by McCollough et al. (2000) which indicate that it is unlikely that a first-rate redress initiative can return the satisfaction of a severe failure recipient to par. If the loss

experienced by the customer as a result of the failure is too great, no reasonable apology or redress can create a recovery paradox. For example, generous offerings cannot recoup failed business opportunities or missed one-time-only social events.

The occurrence of a recovery paradox is also influenced by the history of the customer's relationship with the firm. The findings of this investigation indicate that a customer who has experienced a prior failure with the firm is less likely to be impressed by a superb recovery than a customer who has never encountered a problem with the service provider. This is likely because when a customer experiences a second failure s/he is more likely to attribute the cause of that problem to the firm than when the customer experienced the first failure. This finding is consistent with a study conducted by Maxham and Netemeyer (2002) that revealed similar results pertaining to the effect of a previous failure. Nevertheless, the findings of this study do not support the notion that a longer customer relationship with the provider increases the likelihood of a recovery paradox. That is, the data indicate that those who have had one past transaction and those who have undergone nine past encounters [*ceteris paribus*] both have equal chances of experiencing a recovery paradox. This finding is inconsistent with the concept of a satisfaction "buffer" proposed by Hess, Ganesan, and Klein (2003).

The results also suggest that a paradoxical post-failure satisfaction increase is much more likely to transpire during a process-based scenario as opposed to an outcome-centric situation. Customers are more forgiving of failures that occur during a process [for example: a wait at a hairstylist despite an appointment] than mistakes that occur as part of the outcome [for example: a bad haircut]. This can be explained by the fact that outcome-based failures are more likely to result in longer-lasting negative consequences

for the customer. Further explanation of these results can be seen in the principles of mental accounting which posit that consumers assign economic and social resources to different mental accounts (Smith, Bolton, and Wagner, 1999).

Both control and stability intervene to affect the likelihood of increases in post-failure customer satisfaction. That is, consistent with attribution theory (Ajzen and Fishbein, 1983; Fincham, 1983; Monson, 1983; Ross and Anderson, 1983) people are more forgiving if they feel that the failure was not reasonably foreseeable to the service provider. Further, in agreement with prospect theory (Kahneman and Tversky, 1979; Oliver, 1997) customers are more apt to exonerate the firm if they assess that the failure is unlikely to happen again. Therefore, both perceived control and perceived stability moderate the recovery paradox.

Contrary to expectations, a customer who is in a true relationship with the firm has better odds of experiencing a recovery paradox than one who has a pseudo-relationship. This finding also appears to contradict the expectancy disconfirmation paradigm developed by Bearden and Teel (1983); Oliver (1980, 1981, 1989, 1993); and Oliver and Bearden, 1985), because it would seem that a pseudo-relationship customer would be more surprised by a first-rate recovery effort. However, as anticipated, a significant interaction exists between relationship type and control. That is, a customer who has a true relationship with the service firm is more likely to accept an explanation or inference by the provider that the error which occurred was out of the firm's control.

At no point in this study did gender exert an influence on customer satisfaction ratings as a result of a service failure. While McColl-Kennedy et al., (2003) and Palmer, Beggs, and Keown-McMullan (2000) contend that women have react differently to

redress initiatives than men, this study finds no gender differences pertaining to the likelihood of the occurrence of a recovery paradox. Furthermore, the interaction between gender and relationship type also does not appear to impact the recovery paradox. Consequently, because gender does not moderate the paradox, top-rate failure recovery initiatives are equally essential for both males and females.

The final academic implication of this research project pertains to the teaching of service marketing courses. From a pedagogical perspective, those who teach services marketing courses may consider implementing a discussion of the recovery paradox moderators. Such a discussion [even at the undergraduate level] would have merit since students are often emerging marketers and managers. In fact, the odds of students using this information in their careers is likely because at many universities services marketing courses are offered as electives to those students specifically interested in pursuing careers in service organizations. Furthermore, it may be prudent to include a discussion of the moderators in services marketing textbooks. Since service mistakes are inevitable, and the 'recovery paradox' has merit, a section of the text that addresses moderators of the service recovery paradox should prove beneficial.

MANAGERIAL IMPLICATIONS

Since failures are a common occurrence in service settings this study has important implications for practitioners. This research deepens the understanding of service failure and recovery by providing the most comprehensive view to date of the recovery paradox. **First, these results tell managers that because failure recovery**

offers a unique opportunity to build customer satisfaction, the training of employees in this area should be of reasonable importance. If managed correctly the failure redress procedures of a service firm can serve as a powerful tool in increasing customer loyalty. Perhaps if recovery procedures are well-managed to the extent that the competition cannot easily duplicate them, then it can be argued that a firm's failure recovery constitutes a core competency.

Also from a managerial viewpoint, because past problems are discovered to moderate the 'paradox,' a customer who has experienced a past problem could be 'red flagged' in the database and employees can be trained to take additional care to ensure that the particular customer does not encounter a second failure scenario.

Not all service industries maintain formal databases of customers; for example, most restaurants do not. Nevertheless, many other businesses within the service arena, such as hotels, airlines, auto maintenance, pest control, and lawn and tree services, do actively use customer databases and these databases provide the opportunity to track and monitor the customer service failure history.

Further, inspection with a managerial lens contends that because the severity of the failure is found to moderate the occurrence of a 'paradox,' resources should be allocated to establish and reinforce training and operational systems that limit the odds of a severe failure. This initiative would first involve the service firm collecting customer data that define which failures are viewed as severe in the eyes of the various customer segments. Upon collection of these customer-driven data, managerial programs can be implemented that reduce the likelihood of future severe failures.

Likewise, because the distinction between process-based and outcome-based failures moderates the ‘paradox,’ employee training should reflect this finding. In process-based satisfaction, employees should receive extensive training in delivery processes. In outcome-based satisfaction, training should reflect the important nature of achieving the customer-desired end result.

Since a customer is more forgiving when s/he deduces the cause of the failure to be outside the firm’s realm of control, service personnel should be trained to manage customer perceptions in the event of a service failure. Moreover, because a customer is more likely to have a post-failure satisfaction increase if the stability of the failure is perceived as low, front-line employees should actively manage these perceptions as well. For example, employees should be trained to build a customer’s confidence in the redress process by exuding a feeling of competence and by engaging in dialogue with the customer that instills confidence to ensure that the problem is unlikely to reoccur.

Managers should also be advised to convert as many pseudo-relationships into true relationships as possible. This is important for two reasons: 1) Customers in true relationships have better odds of experiencing recovery paradoxes; and 2) These odds are bolstered further when the situation mandates that the customer make an assessment of the firm’s control over the failure. While it is not possible to transform all relationships to a personal level, it is certainly reasonable to convert some. One tactic that a service firm can utilize is to train front-line employees and customer contact managers in the art of face recognition and name recall. Employees and managers alike

can be taught a number of relatively simple mnemonic techniques that aid in remembering customer's faces and names.

Most importantly, recovery paradox effects are constrained by the requirement that in most cases, customers must seek redress for the recovery to occur (McCollough, Berry, and Yadav, 2000). Therefore, companies should actively encourage complaining behavior (Halstead et al., 1993). One direct way to solicit complaints is to ask straight-to-the-point questions like, "How is everything?" Some service providers offer money back guarantees and other substantial benefits for those who complain. Embassy Suites (Spreng, Harrell and MacKoy, 1995) and Hampton Inns (Zeithaml and Bitner, 2003) both have 100% satisfaction guarantee policies which are likely to elicit complaints. Also, front-line service providers may adopt an improved attitude toward customer complaints if they are reminded by management that most service failures go unreported.

RESEARCH LIMITATIONS

Any research project makes a certain amount of compromises. While the results of this study provide useful managerial implications, they must be tempered by limitations. Although the scenario-based experiment is a technique with strong precedence, one shortcoming is the limited capability of respondents to project their behavior and to respond as they really would in an actual situation. Since the experiment entailed rating paper-and-pencil vignettes, feelings and emotions surrounding an actual service failure were not fully experienced. In other words, how accurately can a respondent project how s/he would feel in the event of the described scenario? In spite of

this limitation, it is believed that the restrained external validity is offset by enhanced control over the various nuances of the failure scenario which is provided through the use of the scenario-based approach.

Also, generalizability is a concern for all studies, and this investigation is no exception. The conclusions of this study are based upon findings from a hotel-setting and caution must be exercised in generalizing the results to other service industries. Discretion is advised in globally applying the conclusions of this study to all service settings because of the broad array of potential settings (see Table 24). Furthermore, while the findings here appear to be applicable to retail venues, distinctions between retail and service settings are nebulous and caution should be employed in generalizing these conclusions.

**Table 23: Businesses Typically Categorized in the Service Sector
(Zeithaml and Bitner, 2003)**

Health care	Tree maintenance
Accounting	Counseling
Financial	Health club
Hotel	Internet providers
Restaurant	Entertainment
Travel agencies	Commercial equipment repair
Hair styling	Auto repair
Pest control	Message Therapy
Plumbing	Ad Agencies
Landscaping	Forecasting
Counseling	Electricity
Health club	Cable TV
Internet	Education
Lawn maintenance	

A final caveat that is necessary in interpreting these results is the fact that only a minority of dissatisfied customers make their complaints known to the service provider (Andreasen and Best, 1977; Bolting, 1989; Bearden, 1983; Day et al., 1981). In order for a recovery initiative to be implemented, the firm must be made aware of the problem. The expression of dissatisfaction through other than normal channels is a common and perennial phenomenon. Grievances regarding government, employers, and service providers are typically made to fellow sufferers rather than to the individuals in positions of influence (Etzel and Silverman, 1981, pp. 133).

RECOMMENDATIONS FOR FUTURE RESEARCH

A number of directions for future research are evident. First, it would be informative to test the recovery paradox model derived from this study in other service settings. Each of the intervening variable manipulations could likely be created in settings such as auto repair, auto rental, dry cleaners, airlines, and restaurants. Future testing in various service sectors could potentially enhance the external validity of the model. The conclusions of this investigation could be tested in retail venues as well. Although the current performance of the model warrants optimism, it should also be further tested and refined through the use of a more restrictive methodological process such as structural equations modeling.

A second issue for future consideration pertains to experimentally manipulating the firm's recovery initiative. Consider the research possibility of creating scenarios in which the customer is asked what s/he feels that the firm should do to rectify the problem and repair satisfaction. Putting the ball in the customer's court could result in one of two

beneficial outcomes: 1) the customer makes an overly demanding and unrealistic request, in which case, the firm can call into question whether business should really be conducted with this customer [recovery can be expensive for a firm; particularly if the likelihood that the customer will return is low]; or 2) the customer could make a reasonable recovery request that the firm's subsequent redress strategy could exceed. This would create a situation of positive disconfirmation and perhaps a paradoxical increase in satisfaction.

A third avenue for future inquiry involves the correlation between post-failure satisfaction, propensity to spread word-of-mouth, and purchase intent. Do these three constructs always move in tandem in the event of a service failure? Further study may reveal correlation facets not yet discovered. For instance, perhaps after a failure and an excellent recovery, a customer may experience paradoxical increases in satisfaction and future purchase intent, but may be reluctant to recommend the establishment to friends and family because of the service failure that occurred. Conversely, future studies may reinforce the notion that satisfaction, word-of-mouth, and purchase intent are strongly correlated even in the circumstance of a service failure. This may lead to the revision of the recovery paradox theory to include predictions surrounding word-of-mouth and purchase intent levels.

Fourth, while this study did not reveal any differences in customers who have had a single transaction with those who have experienced nine, research is warranted that explores when a satisfaction "buffer" is created through past encounters and when it is not. For example, perhaps a customer may accumulate a level of comfort and forgiveness with a firm, after a number of encounters, but perhaps the person would be less-forgiving

as the relationship progresses further. The less-forgiving mentality might be based on the belief that the firm should go the extra mile because of the loyalty and commitment involved in the relationship. Therefore, perhaps future relationship may reveal a bell-shaped satisfaction buffer between a firm and its patrons.

A fifth area that currently remains unexplored, but one with high relevance for the service manager, is whether a service encounter with a long interaction time during the transaction has better odds in generating a recovery paradox than a short service encounter. For example, would a fine dining restaurant have an edge over a fast food establishment in creating a recovery paradox if the failure occurred early in the transaction? Would an extended stay hotel have an advantage over a transient hotel property? In other words, can a recovery paradox be generated by spreading the redress initiative over the length of the transaction; or, should the redress be swift in hopes that the customer will “forgive and forget?”

Also, the fact that relationship type had a highly significant moderating influence, but diametrically opposite the predicted direction, presents a pressing research opportunity. Although strongly refuted by the findings of this study, the expectancy disconfirmation paradigm suggests that a person in a pseudo-relationship would be more impressed with an excellent recovery than someone in a true relationship. In this era of relationship marketing, further exploration of relationship type’s influence on customer satisfaction in the event of a service failure is highly relevant and warrants additional consideration.

Another area ripe for exploration is the study of within-respondent trends. There is paucity within the services marketing literature of studies that examine the influence of

the customer's personality in service failure situations. Personality has been researched in regard to the customer's propensity to complain, but has not been examined in terms of whether or not particular personality traits influence the probability of paradoxical post-failure satisfaction. Perhaps researchers could subject respondents to a battery of failure scenarios and solicit their reactions, but also ask each respondent to complete a personality profile. It seems plausible that the nuances of one's personality may impact the probability of the occurrence of a recovery paradox.

Lastly, future research should consider how cultural characteristics of both the customer and the company representative affect the likelihood of post failure customer satisfaction exceeding pre-failure satisfaction. Does complaint behavior vary among cultures? Does complaint handling differ between cultures? And, what happens when cross-cultural failure and recovery encounters occur?

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APPENDICES

Appendix 1
Pretest 1: Test for Sample Suitability

Please circle the appropriate response:

On average, how many nights per year do you stay in hotel rooms?

- A) Zero
- B) 1-3 nights
- C) 4-6 nights
- D) >6 nights

Have you ever had a dissatisfying stay in a hotel?

- A) Yes
- B) No

I am a: **Female** **Male**

My age is: _____

Appendix 2
Pretest 2: Manipulation Checks

Manipulation Check: Recovery Effort

Instructions: Carefully read the scenario and assume that this just happened to you.

The Scenario:

Upon checking-in, you enter your hotel room and decide to connect your laptop to the free high-speed Internet portal located on the wall above your desk. You complete the steps in the connection process, but you fail to get any web access. While the portal does not appear to be physically damaged, you know that there must be something wrong with it because you frequently connect your laptop to similar portals.

Consequently, you call the front desk and explain that the Internet portal in your room is not working.

Please circle the most appropriate response:

The front desk associate apologizes and tells you that if you'd like to return to the front desk you can pick up the key to a different room.

You assess this as being:

A Poor Recovery

An Average Recovery

An Excellent Recovery

The front desk associate apologizes and immediately sends a member of the bell staff to your room so that he can help you with your belongings and show you to a much nicer suite-style room (which typically costs about \$50 more per night than a standard room) in which you stay at no additional charge. Once you've been in your new room for a short time, the front desk associate calls you to once again apologize for the inconvenience of the room switch and inquires regarding your satisfaction with the new accommodations.

You assess this as being:

A Poor Recovery

An Average Recovery

An Excellent Recovery

The front desk associate apologizes and tells you that if you'd like to return to the front desk you can pick up the key to a much nicer suite-style room (which typically costs about \$50 more per night than a standard room) in which you stay at no additional charge.

You assess this as being:

A Poor Recovery

An Average Recovery

An Excellent Recovery

The front desk associate apologizes and tells you that if you'd like to return to the front desk you can pick up the key to a much nicer suite-style room (which typically costs about \$50 more per night than a standard room) in which you stay at no additional charge. Once you've been in your new room for a short time, the front desk associate calls to once again apologize for the inconvenience of the room switch and inquires regarding your satisfaction with the new accommodations.

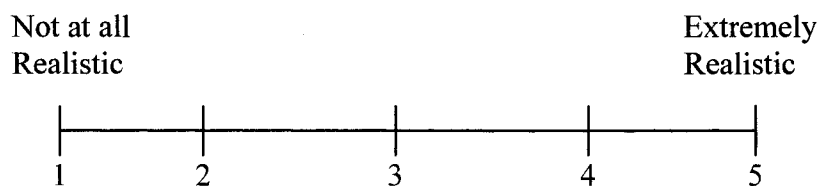
You assess this as being:

A Poor Recovery

An Average Recovery

An Excellent Recovery

Please use the scale provided below to rate the realism of these scenarios:



Manipulation Check: Severity

Instructions: Carefully read the scenario and assume that this just happened to you.

Scenario A:

Upon checking-in, you enter your hotel room and decide to connect your laptop to the free high-speed Internet portal located on the wall above your desk. The reason that you want to connect to the Internet is because you're a baseball fan and you are curious about the hitting statistics from the previous night's game. You complete the steps in the connection process, but you fail to get any web access. While the portal does not appear to be physically damaged, you know that there must be something wrong with it because you frequently connect your laptop to similar portals.

Consequently, you call the front desk and explain that the Internet portal in your room is not working. The front desk associate apologizes and immediately sends a member of the bell staff to your room so that he can help you with your belongings and show you to a much nicer suite-style room (which typically costs about \$50 more per night than a standard room) in which you stay at no additional charge. Once you've been in your new room for a short time, the front desk associate calls you to once again apologize for the inconvenience of the room switch and inquires regarding your satisfaction with the new accommodations.

What was the level of severity of the problem for you? Please circle one:

- A low level of severity
- A moderate level of severity
- A high level of severity

Instructions: Please assume that this scenario had just happened to you.

Scenario B:

Upon checking-in, you enter your hotel room and decide to connect your laptop to the free high-speed Internet portal located on the wall above your desk. The reason that you need to connect to the Internet is because you are giving a sales presentation to a big prospective client later in the evening and you need the Internet in order to gain access to some recent statistics and information which you plan to incorporate into your sales presentation. You need for your presentation to go well because this client has the potential to be one of your firm's largest and most profitable customers. Needing the information, you complete the steps in the Internet connection process, but you fail to get any web access. While the portal does not appear to be physically damaged, you know that there must be something wrong with it because you frequently connect your laptop to similar portals.

Consequently, you call the front desk and explain that the Internet portal in your room is not working. The front desk associate apologizes and immediately sends a member of the bell staff to your room so that he can help you with your belongings and show you to a much nicer suite-style room (which typically costs about \$50 more per night than a standard room) in which you stay at no additional charge. Once you've been in your new room for a short time, the front desk associate calls you to once again apologize for the inconvenience of the room switch and inquires regarding your satisfaction with the new accommodations.

Despite the hotel's initiatives to rectify the problem, the time that you lost in switching rooms cut into the time which you needed to prepare your sales presentation. Due to lack of time you were not able to get all of the information which you wanted from the Internet to incorporate into your presentation. You went and gave the presentation, but did not win the client. You feel that if you would have had more time to prepare the presentation that you could have won the client.

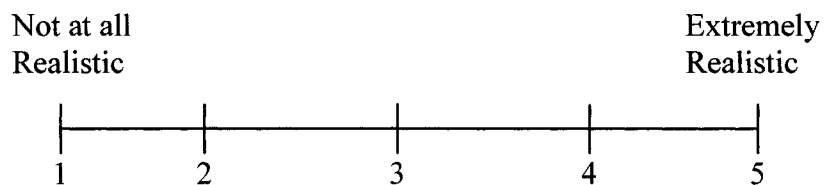
What was the level of severity of the problem for you? Please circle one:

A low level of severity

A moderate level of severity

A high level of severity

Please use the scale provided below to rate the realism of these scenarios:



Manipulation Check: Stability

Instructions: Carefully read the scenario and assume that this just happened to you.

Scenario A:

Upon checking-in, you enter your hotel room and decide to connect your laptop to the free high-speed Internet portal located on the wall above your desk. You complete the steps in the connection process, but you fail to get any web access. While the portal does not appear to be physically damaged, you know that there must be something wrong with it because you frequently connect your laptop to similar portals.

You call the front desk and the associate states that the Internet portals in the guest rooms fail to work from time to time.

What is your assessment of the stability of the cause of the failure [in other words, what is your assessment of the likelihood that the problem will occur again in a future stay?] Please circle one:

Unlikely to occur again [Low level of stability]

Neutral

Likely to occur again [High level of stability]

Instructions: Please assume that this scenario had just happened to you.

Scenario B:

Upon checking-in, you enter your hotel room and decide to connect your laptop to the free high-speed Internet portal located on the wall above your desk. You complete the steps in the connection process, but you fail to get any web access. While the portal does not appear to be physically damaged, you know that there must be something wrong with it because you frequently connect your laptop to similar portals.

You call the front desk and the associate states that the Internet portals in the rooms are owned by a third party company and because there has been regular problems, the hotel is currently looking for an alternate provider. The associate explains that the hotel will be switching providers very soon.

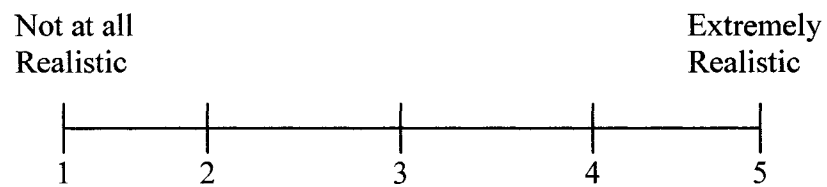
What is your assessment of the stability of the cause of the failure [in other words, what is your assessment of the likelihood that the problem will occur again in a future stay?] Please circle one:

Unlikely to occur again [Low level of stability]

Neutral

Likely to occur again [High level of stability]

Please use the scale provided below to rate the realism of these scenarios:



Manipulation Check: Control

Instructions: Carefully read the scenario and assume that this just happened to you.

Scenario A:

Upon checking-in, you enter your hotel room and decide to connect your laptop to the free high-speed Internet portal located on the wall above your desk. You complete the steps in the connection process, but you fail to get any web access. While the portal does not appear to be physically damaged, you know that there must be something wrong with it because you frequently connect your laptop to similar portals.

Consequently, you call the front desk associate and explain that the Internet portal in your room is not working. The associate states that he is not aware of any previous guests having problems in that room, nor are any other current hotel guests complaining about problems with Internet connections.

What level of control did the provider have in preventing you from experiencing the problem? Please circle one

A low level of control

A moderate level of control

A high level of control

Instructions: Please assume that this scenario had just happened to you.

Scenario B:

Upon checking-in, you enter your hotel room and decide to connect your laptop to the free high-speed Internet portal located on the wall above your desk. When you approach the desk you see that the Internet portal is visibly damaged and is dangling from the wall. In fact, there are pieces of plaster from the damaged wall on the carpet and on the surface of the desk. The damage is so severe that there is no way that you can securely connect your computer to the portal.

You call the front desk and the associate states that the room which you are in is red-flagged in the database as being 'out of order' and that the person that checked you in should not have assigned you to that room.

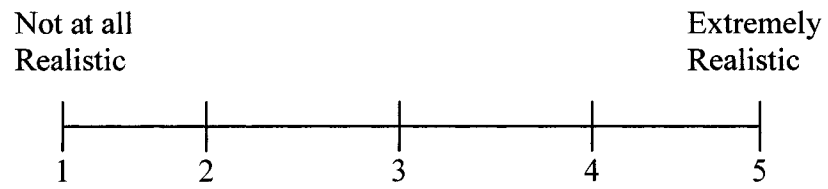
What level of control did the provider have in preventing you from experiencing the problem? Please circle one

A low level of control

A moderate level of control

A high level of control

Please use the scale provided below to rate the realism of these scenarios:



I am a: **Female** **Male**

My age is: _____

Appendix 3

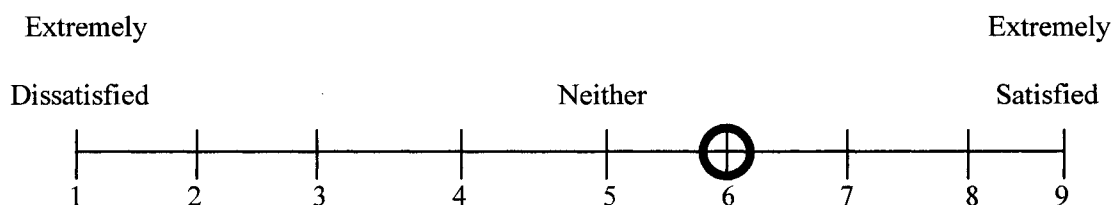
Pretest 3 – Pre-failure satisfaction set at 6

Scenario A:

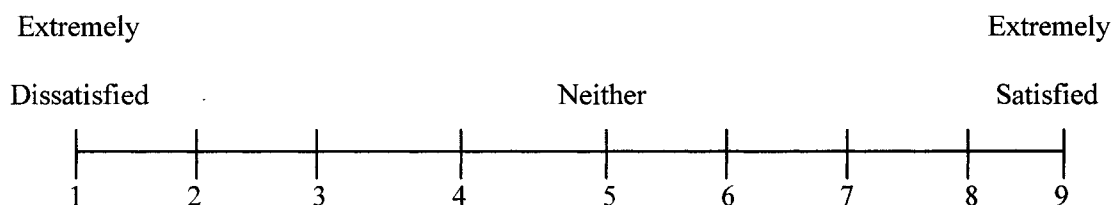
Upon checking-in, you enter your hotel room and decide to connect your laptop to the free high-speed Internet portal located on the wall above your desk. You complete the steps in the connection process, but you fail to get any web access. While the portal does not appear to be physically damaged, you know that there must be something wrong with it because you frequently connect your laptop to similar portals.

Consequently, you call the front desk and explain that the Internet portal in your room is not working. The front desk associate apologizes and immediately sends a member of the bell staff to your room so that he can help you with your belongings and show you to a much nicer suite-style room (which typically costs about \$50 more per night than a standard room) in which you stay at no additional charge. Once you've been in your new room for a short time, the front desk associate calls you to once again apologize for the inconvenience of the room switch and inquires regarding your satisfaction with the new accommodations.

This was your second stay at the hotel. Your first stay was enjoyable and this is how you ranked your satisfaction with the hotel after your first stay:



Based on the information given above, please use the scale below to rank your overall satisfaction with the hotel after your second stay:



Scenario B:

You arrive for your 10:00 AM appointment at the hotel's hair salon. Despite the fact that you have an appointment, the hotel's hair stylist is severely backed-up with customers and you wait until 10:45 until he finally cuts your hair. Even though you are disgruntled about the wait, you are extremely pleased with the quality of the haircut. It looks really good on you.

Despite your pleasure with the quality of the haircut, you go to the front desk and explain to the hotel's manager that you had to wait 45 minutes even though you had an appointment. You further explain that this cuts into your sightseeing plans for the day. The hotel's manager is extremely empathetic and sincerely apologizes. Further, the hotel manager deducts the cost of the haircut from your room bill. And the manager also arranges for the hotel limousine to immediately take you to your first sightseeing destination.

You assess this as being (Please circle one):

A Poor Recovery by the hotel
 An Average Recovery by the hotel
 An Excellent Recovery by the hotel

Please use the scale provided below to rate the realism of this scenario:

**Scenario C:**

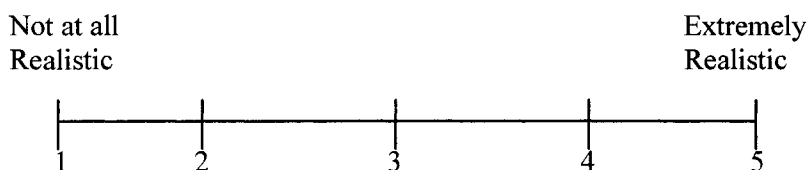
Upon checking-in, you enter your hotel room and decide to connect your laptop to the free high-speed Internet portal located on the wall above your desk. You complete the steps in the connection process, but you fail to get any web access. While the portal does not appear to be physically damaged, you know that there must be something wrong with it because you frequently connect your laptop to similar portals.

You call the front desk and the associate states that the Internet portals in the rooms are owned by a third party company and because there has been regular problems, the hotel has found an alternate provider. The associate explains that the hotel will be switching providers very soon.

What is your assessment of the stability of the cause of the failure [in other words, what is your assessment of the likelihood that the problem will occur again in a future stay?] Please circle one:

Unlikely to occur again [Low level of stability]
 Neutral
 Likely to occur again [High level of stability]

Please use the scale provided below to rate the realism of this scenario:

**Scenario D:**

Upon checking-in, you enter your hotel room and decide to connect your laptop to the free high-speed Internet portal located on the wall above your desk. You complete the steps in the connection process, but you fail to get any web access. While the portal does not appear to be physically damaged, you know that there must be something wrong with it because you frequently connect your laptop to similar portals.

Consequently, you call the front desk associate and explain that the Internet portal in your room is not working. The associate states that he was not aware of the problem, and he thanks you for bringing the problem to his attention.

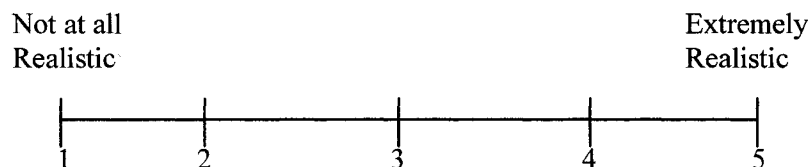
What level of control did the provider have in preventing you from experiencing the problem?

A low level of control

A moderate level of control

A high level of control

Please use the scale provided below to rate the realism of this scenario:



I am a: Male Female

My age is _____

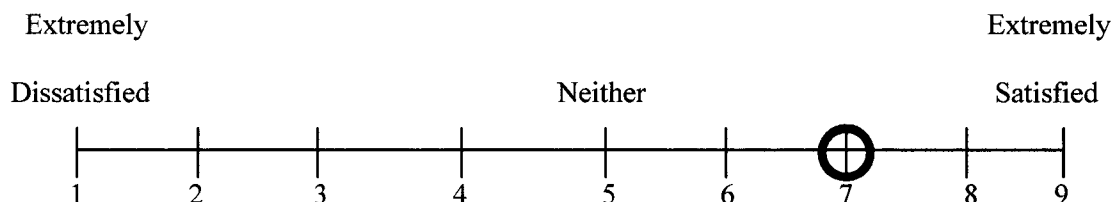
Appendix 4
Pretest 3 – Pre-failure satisfaction set at 7

Scenario A:

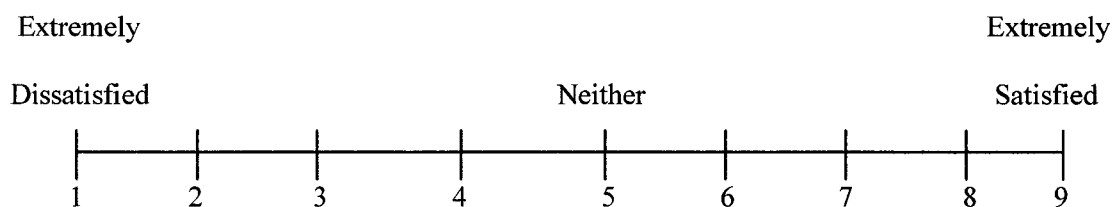
Upon checking-in, you enter your hotel room and decide to connect your laptop to the free high-speed Internet portal located on the wall above your desk. You complete the steps in the connection process, but you fail to get any web access. While the portal does not appear to be physically damaged, you know that there must be something wrong with it because you frequently connect your laptop to similar portals.

Consequently, you call the front desk and explain that the Internet portal in your room is not working. The front desk associate apologizes and immediately sends a member of the bell staff to your room so that he can help you with your belongings and show you to a much nicer suite-style room (which typically costs about \$50 more per night than a standard room) in which you stay at no additional charge. Once you've been in your new room for a short time, the front desk associate calls you to once again apologize for the inconvenience of the room switch and inquires regarding your satisfaction with the new accommodations.

This was your second stay at the hotel. Your first stay was enjoyable and this is how you ranked your satisfaction with the hotel after your first stay:



Based on the information given above, please use the scale below to rank your overall satisfaction with the hotel after your second stay:

**Scenario B:**

You arrive for your 10:00 AM appointment at the hotel's hair salon. Despite the fact that you have an appointment, the hotel's hair stylist is severely backed-up with customers and you wait until 10:45 until he finally cuts your hair. Even though you are disgruntled about the wait, you are extremely pleased with the quality of the haircut. It looks really good on you.

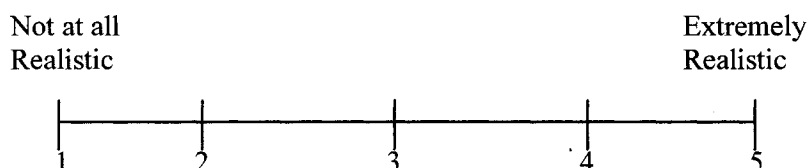
Despite your pleasure with the quality of the haircut, you go to the front desk and explain to the hotel's manager that you had to wait 45 minutes even though you had an appointment. You further explain that this cuts into your sightseeing plans for the day. The hotel's manager is extremely empathetic and sincerely apologizes. Further, the hotel manager deducts the cost of the

haircut from your room bill. And the manager also arranges for the hotel limousine to immediately take you to your first sightseeing destination.

You assess this as being (Please circle one):

- A Poor Recovery by the hotel
- An Average Recovery by the hotel
- An Excellent Recovery by the hotel

Please use the scale provided below to rate the realism of this scenario:



Scenario C:

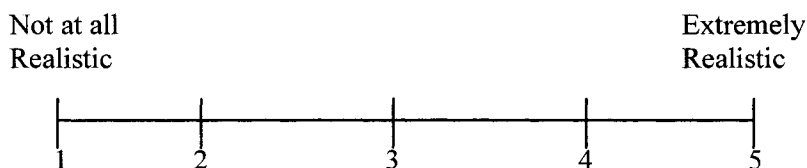
Upon checking-in, you enter your hotel room and decide to connect your laptop to the free high-speed Internet portal located on the wall above your desk. You complete the steps in the connection process, but you fail to get any web access. While the portal does not appear to be physically damaged, you know that there must be something wrong with it because you frequently connect your laptop to similar portals.

You call the front desk and the associate states that the Internet portals in the rooms are owned by a third party company and because there has been regular problems, the hotel has found an alternate provider. The associate explains that the hotel will be switching providers very soon.

What is your assessment of the stability of the cause of the failure [in other words, what is your assessment of the likelihood that the problem will occur again in a future stay?] Please circle one:

- Unlikely to occur again [Low level of stability]
- Neutral
- Likely to occur again [High level of stability]

Please use the scale provided below to rate the realism of this scenario:



Scenario D:

Upon checking-in, you enter your hotel room and decide to connect your laptop to the free high-speed Internet portal located on the wall above your desk. You complete the steps in the connection process, but you fail to get any web access. While the portal does not appear to be physically damaged, you know that there must be something wrong with it because you frequently connect your laptop to similar portals.

Consequently, you call the front desk associate and explain that the Internet portal in your room is not working. The associate states that he was not aware of the problem, and he thanks you for bringing the problem to his attention.

What level of control did the provider have in preventing you from experiencing the problem?

A low level of control

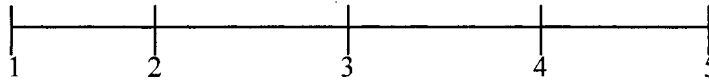
A moderate level of control

A high level of control

Please use the scale provided below to rate the realism of this scenario:

Not at all
Realistic

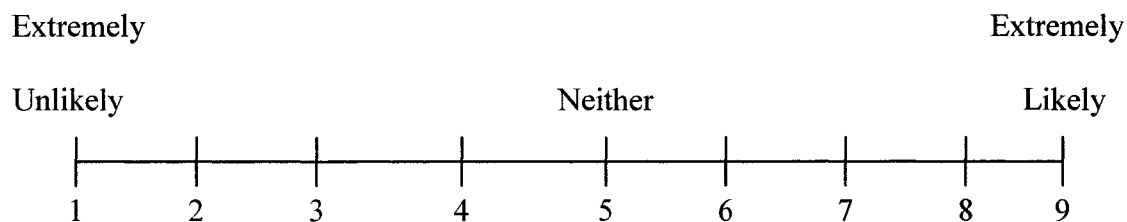
Extremely
Realistic



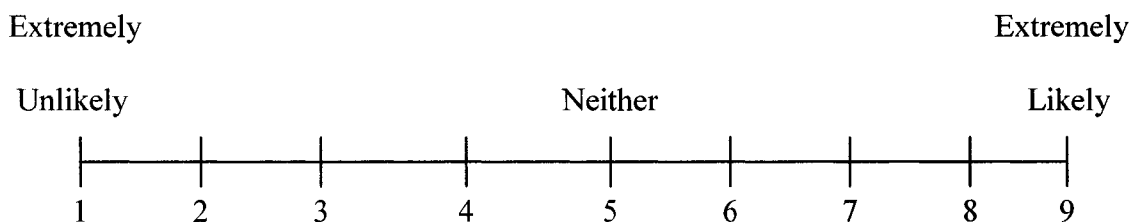
I am a: Male Female

My age is _____

Please use the scale below to indicate your likelihood of spreading positive word-of-mouth about this hotel property:



Please use the scale below to indicate your likelihood of wanting to stay at this hotel again if you ever have the need to travel to that area in the future:



I am a:	Female	Male
My age is:	_____	
My major is:	_____	
On average, how many nights per year do you stay in hotel rooms?		
A) Zero		
B) 1-3		
C) 4-6		
D) >6		

Appendix 6 Low Severity Treatment

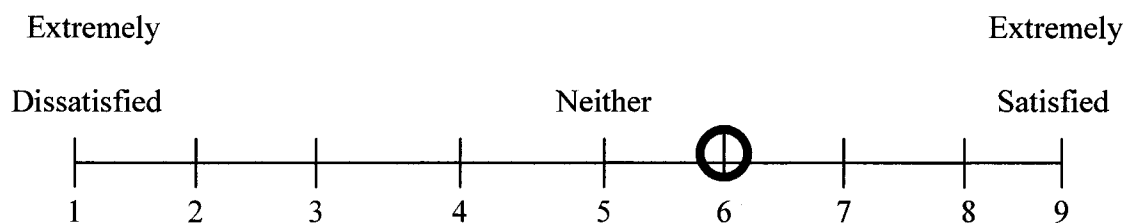
Instructions: Carefully read the scenario and assume that this just happened to you.

The Scenario :

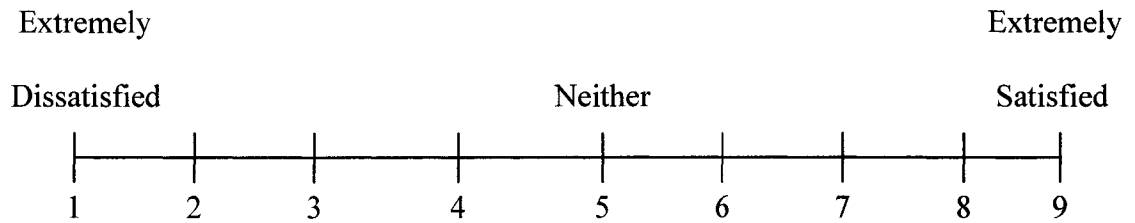
Upon checking-in, you enter your hotel room and decide to connect your laptop to the free high-speed Internet portal located on the wall above your desk. The reason that you want to connect to the Internet is because you're a baseball fan and you are curious about the hitting statistics from the previous night's game. You complete the steps in the connection process, but you fail to get any web access. While the portal does not appear to be physically damaged, you know that there must be something wrong with it because you frequently connect your laptop to similar portals.

Consequently, you call the front desk and explain that the Internet portal in your room is not working. The front desk associate apologizes and immediately sends a member of the bell staff to your room so that he can help you with your belongings and show you to a much nicer suite-style room (which typically costs about \$50 more per night than a standard room) in which you stay at no additional charge. Once you've been in your new room for a short time, the front desk associate calls you to once again apologize for the inconvenience of the room switch and inquires regarding your satisfaction with the new accommodations.

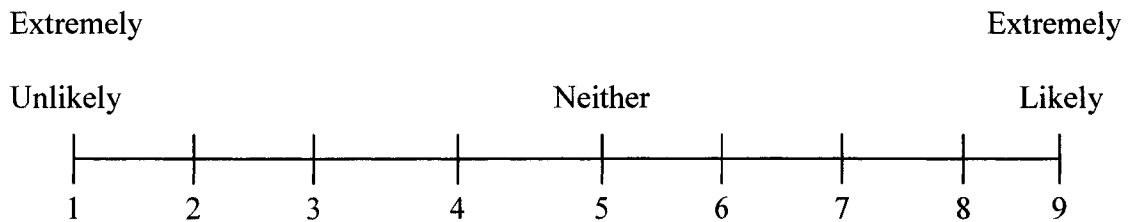
This was your second stay at the hotel. Your first stay was fairly enjoyable, but you did experience a problem involving the cleanliness of your room. Specifically, you found several hairs on your bathroom floor when you checked-in for your previous stay, but the hotel immediately cleaned your bathroom when you notified them. This is how you ranked your satisfaction with the hotel after your first stay:



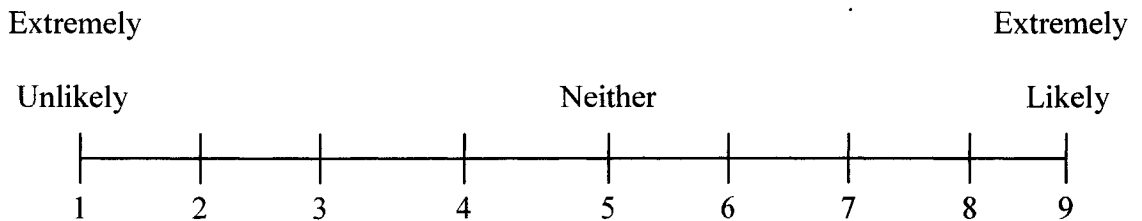
Based on the information given above, please use the scale below to rank your overall satisfaction with the hotel after your second stay:



Please use the scale below to indicate your likelihood of spreading positive word-of-mouth about this hotel property:



Please use the scale below to indicate your likelihood of wanting to stay at this hotel again if you ever have the need to travel to that area in the future:



I am a: **Female** **Male**

My age is: _____

My major is: _____

On average, how many nights per year do you stay in hotel rooms?

- A) Zero
- B) 1-3
- C) 4-6
- D) >6

Appendix 7 High Severity Treatment

Instructions: Carefully read the scenario and assume that this just happened to you.

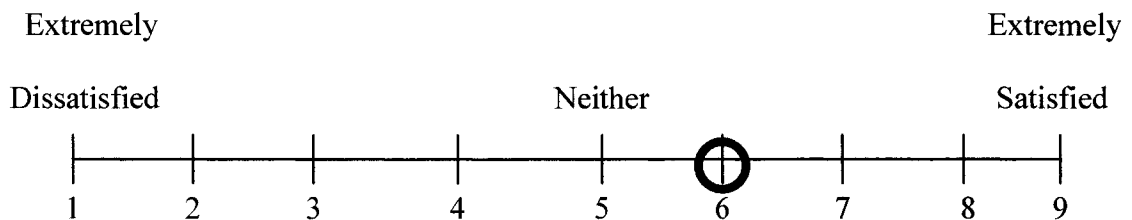
The Scenario:

Upon checking-in, you enter your hotel room and decide to connect your laptop to the free high-speed Internet portal located on the wall above your desk. The reason that you need to connect to the Internet is because you are giving a sales presentation to a big prospective client later in the evening and you need the Internet in order to gain access to some recent statistics and information which you plan to incorporate into your sales presentation. You need for your presentation to go well because this client has the potential to be one of your firm’s largest and most profitable customers. Needing the information, you complete the steps in the Internet connection process, but you fail to get any web access. While the portal does not appear to be physically damaged, you know that there must be something wrong with it because you frequently connect your laptop to similar portals.

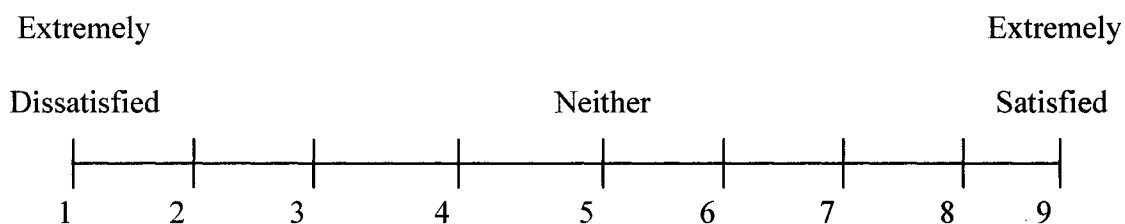
Consequently, you call the front desk and explain that the Internet portal in your room is not working. The front desk associate apologizes and immediately sends a member of the bell staff to your room so that he can help you with your belongings and show you to a much nicer suite-style room (which typically costs about \$50 more per night than a standard room) in which you stay at no additional charge. Once you’ve been in your new room for a short time, the front desk associate calls you to once again apologize for the inconvenience of the room switch and inquires regarding your satisfaction with the new accommodations.

Despite the hotel’s initiatives to rectify the problem, the time that you lost in switching rooms cut into the time which you needed to prepare your sales presentation. Due to lack of time you were not able to get all of the information which you wanted from the Internet to incorporate into your presentation. You went and gave the presentation, but did not win the client. You feel that if you would have had more time to prepare the presentation that you could have won the client.

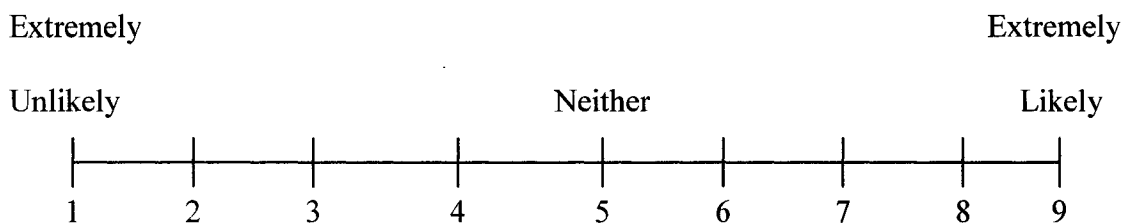
This was your second stay at the hotel. Your first stay was fairly enjoyable, but you did experience a problem involving the cleanliness of your room. Specifically, you found several hairs on your bathroom floor when you checked-in for your previous stay, but the hotel immediately cleaned your bathroom when you notified them. This is how you ranked your satisfaction with the hotel after your first stay:



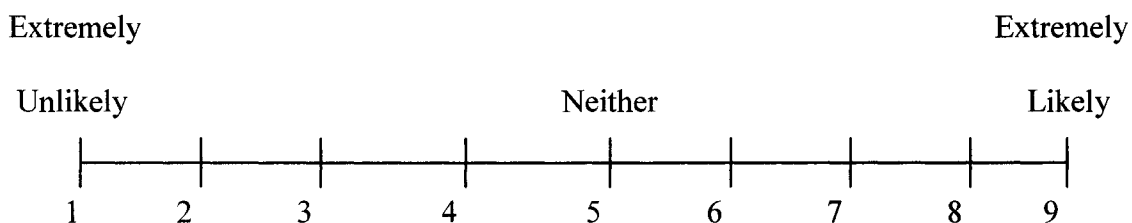
Based on the information given above, please use the scale below to rank your overall satisfaction with the hotel after your second stay:



Please use the scale below to indicate your likelihood of spreading positive word-of-mouth about this hotel property:



Please use the scale below to indicate your likelihood of wanting to stay at this hotel again if you ever have the need to travel to that area in the future:



I am a:

Female

Male

My age is:

My major is:

On average, how many nights per year do you stay in hotel rooms?

- A) Zero
- B) 1-3
- C) 4-6
- D) >6

Appendix 8 Prior Failure Treatment

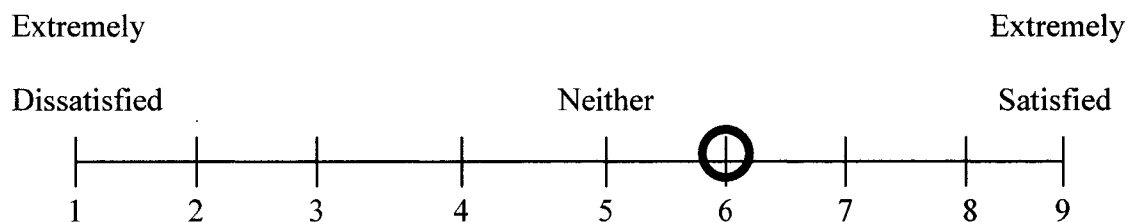
Instructions: Carefully read the scenario and assume that this just happened to you.

The Scenario:

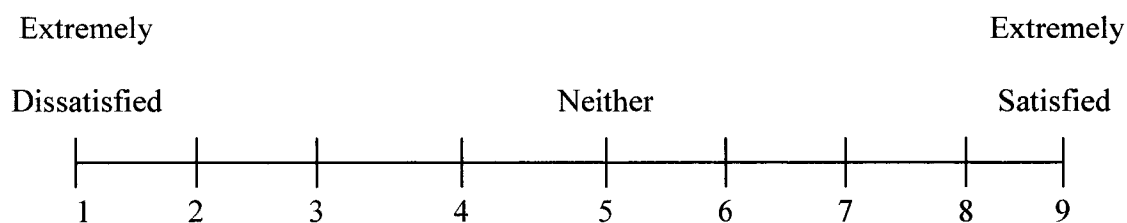
This is your second stay at this particular hotel property. Upon checking-in, you enter your hotel room and decide to connect your laptop to the free high-speed Internet portal located on the wall above your desk. You complete the steps in the connection process, but you fail to get any web access. While the portal does not appear to be physically damaged, you know that there must be something wrong with it because you frequently connect your laptop to similar portals.

Consequently, you call the front desk and explain that the Internet portal in your room is not working. The front desk associate apologizes and immediately sends a member of the bell staff to your room so that he can help you with your belongings and show you to a much nicer suite-style room (which typically costs about \$50 more per night than a standard room) in which you stay at no additional charge. Once you've been in your new room for a short time, the front desk associate calls you to once again apologize for the inconvenience of the room switch and inquires regarding your satisfaction with the new accommodations.

Again, this was your second stay at the hotel. Your first stay was fairly enjoyable, but you did experience a problem involving the cleanliness of your room. Specifically, you found several hairs on your bathroom floor when you checked-in for your previous stay, but the hotel immediately cleaned your bathroom when you notified them. This is how you ranked your satisfaction with the hotel after your first stay:



Based on the information given above, please use the scale below to rank your overall satisfaction with the hotel after your second stay:



Appendix 9 Many Past Transactions Treatment

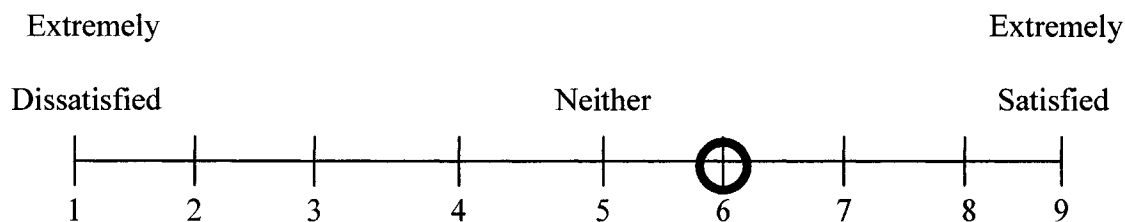
Instructions: Carefully read the scenario and assume that this just happened to you.

The Scenario:

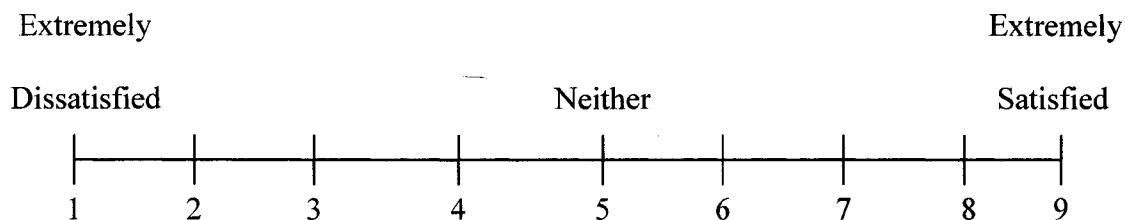
This is your tenth stay at a particular hotel property. Upon checking-in, you enter your hotel room and decide to connect your laptop to the free high-speed Internet portal located on the wall above your desk. You complete the steps in the connection process, but you fail to get any web access. While the portal does not appear to be physically damaged, you know that there must be something wrong with it because you frequently connect your laptop to similar portals.

Consequently, you call the front desk and explain that the Internet portal in your room is not working. The front desk associate apologizes and immediately sends a member of the bell staff to your room so that he can help you with your belongings and show you to a much nicer suite-style room (which typically costs about \$50 more per night than a standard room) in which you stay at no additional charge. Once you've been in your new room for a short time, the front desk associate calls you to once again apologize for the inconvenience of the room switch and inquires regarding your satisfaction with the new accommodations.

Again, this was your tenth stay at the hotel. All of your previous nine stays at the hotel were enjoyable with no problems transpiring. This is how you rated your overall satisfaction with the hotel before this current stay:



Based on the information given above, please use the scale below to rank your overall satisfaction with the hotel after your tenth (current) stay:



Appendix 10 Process-based Treatment

Instructions: Carefully read the scenario and assume that this just happened to you.

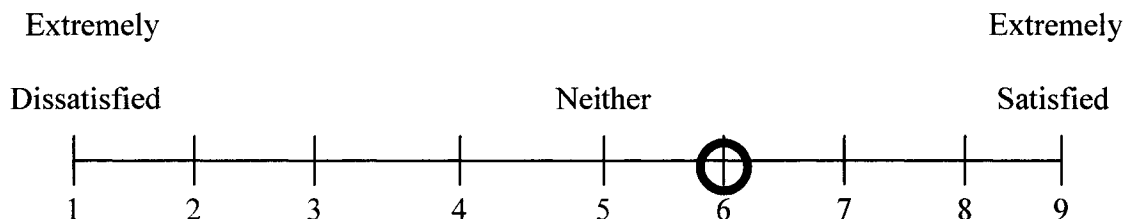
The Scenario:

You arrive for your 10:00 AM appointment at the hotel's hair salon. Despite the fact that you have an appointment, the hotel's hair stylist is severely backed-up with customers and you wait until 10:45 until he finally cuts your hair. Even though you are disgruntled about the wait, you are extremely pleased with the quality of the haircut. It looks really good on you.

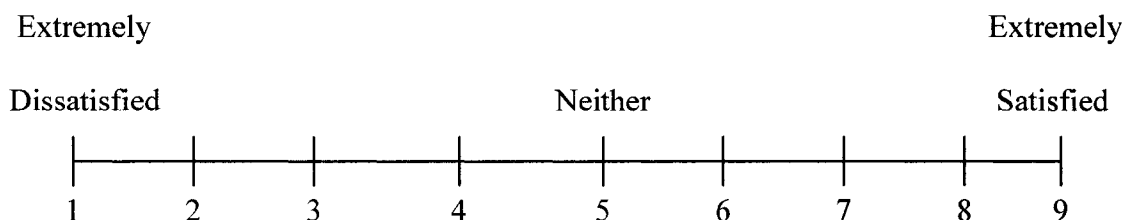
Despite your pleasure with the quality of the haircut, you go to the front desk and explain to the hotel's manager that you had to wait 45 minutes even though you had an appointment. You further explain that this cuts into your sightseeing plans for the day.

The hotel's manager is extremely empathetic and sincerely apologizes. Further, the hotel manager deducts the cost of the haircut from your room bill. And the manager also arranges for the hotel limousine to immediately take you to your first sightseeing destination.

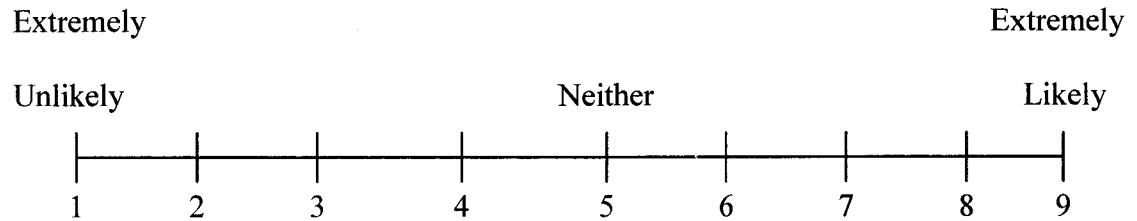
This was your second stay at the hotel. Your first stay was enjoyable and this is how you ranked your satisfaction with the hotel after your first stay:



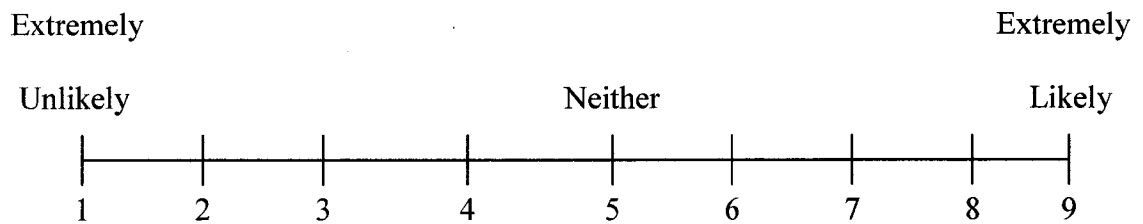
Based on the information given above, please use the scale below to rank your overall satisfaction with the hotel after your second stay:



Please use the scale below to indicate your likelihood of spreading positive word-of-mouth about this hotel property:



Please use the scale below to indicate your likelihood of wanting to stay at this hotel again if you ever have the need to travel to that area in the future:



I am a:	Female	Male
My age is:	_____	
My major is:	_____	
On average, how many nights per year do you stay in hotel rooms?		
A) Zero		
B) 1-3		
C) 4-6		
D) >6		

Appendix 11 Outcome-based Treatment

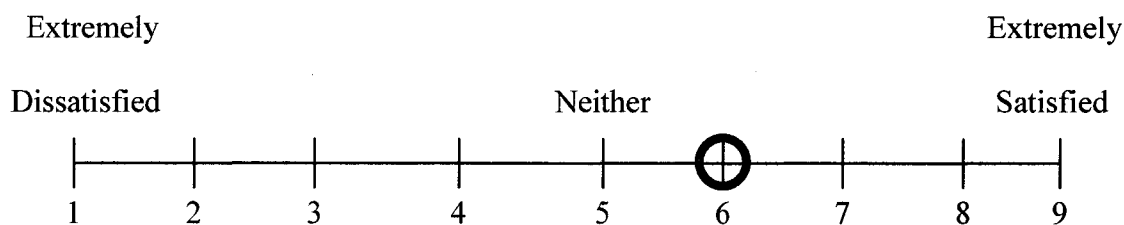
Instructions: Carefully read the scenario and assume that this just happened to you.

The Scenario:

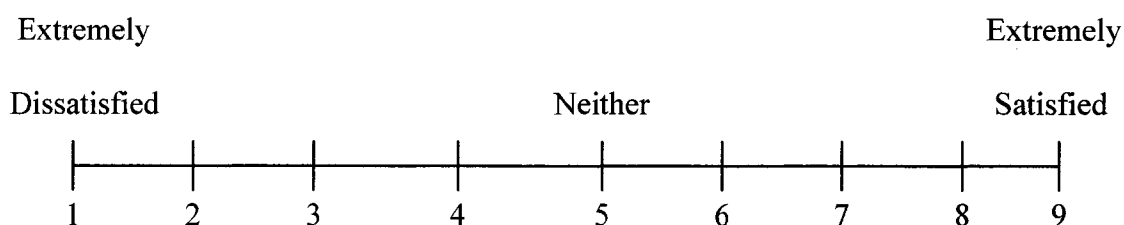
You arrive for your 10:00 AM appointment at the hotel's hair salon. You explain how you want your haircut, and the hotel's hairstylist immediately begins working. When the stylist is finished working, you look in the mirror and you feel that this is the worst haircut that you have ever received. Your hair is much too short and you think that it looks horrible.

You walk across the lobby and air your complaint with the hotel's manager. The manager is extremely empathetic and sincerely apologizes. Further, the hotel manager deducts the cost of the haircut from your room bill. And the manager also arranges for the hotel limousine to immediately take you to your first sightseeing destination.

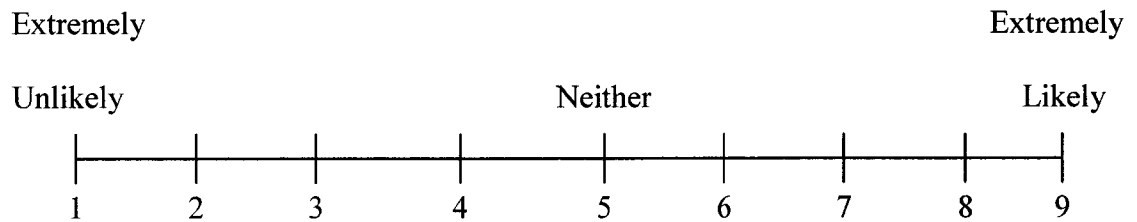
This was your second stay at the hotel. Your first stay was enjoyable and this is how you ranked your satisfaction with the hotel after your first stay:



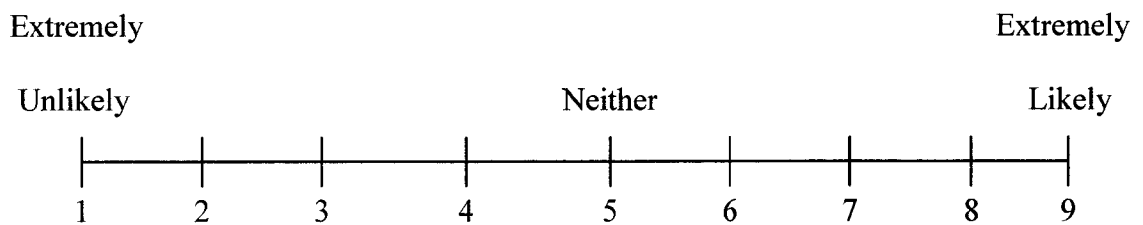
Based on the information given above, please use the scale below to rank your overall satisfaction with the hotel after your second stay:



Please use the scale below to indicate your likelihood of spreading positive word-of-mouth about this hotel property:



Please use the scale below to indicate your likelihood of wanting to stay at this hotel again if you ever have the need to travel to that area in the future:



I am a:	Female	Male
My age is:	_____	
My major is:	_____	
On average, how many nights per year do you stay in hotel rooms?		
A) Zero		
B) 1-3		
C) 4-6		
D) >6		

Appendix 12
Pseudo Relationship x High Control x High Stability

Instructions: Carefully read the scenario and assume that this just happened to you.

The Scenario:

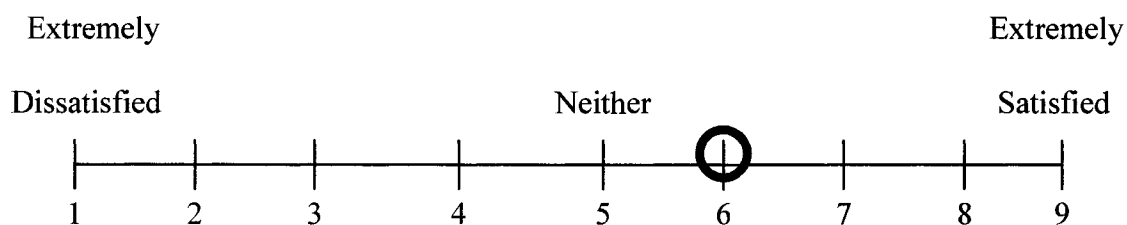
Upon checking-in, you enter your hotel room and decide to connect your laptop to the free high-speed Internet portal located on the wall above your desk. When you approach the desk you see that the Internet portal is visibly damaged and is dangling from the wall. In fact, there are pieces of plaster from the damaged wall on the carpet and on the surface of the desk. The damage is so severe that there is no way that you can securely connect your computer to the portal.

You call the front desk and the associate states that the room which you are in is red-flagged in the database as being ‘out of order’ and that the person that checked you in should not have assigned you to that room.

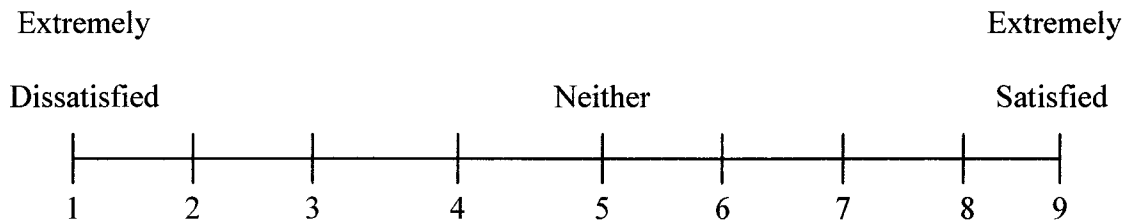
The associate also states that the problems with the Internet portals in the guest rooms are not unusual and that they fail to work from time to time.

Nevertheless, the front desk associate apologizes and immediately sends a member of the bell staff to your room so that he can help you with your belongings and show you to a much nicer suite-style room (which typically costs about \$50 more per night than a standard room) in which you stay at no additional charge. Once you’ve been in your new room for a short time, the front desk associate calls you to once again apologize for the inconvenience of the room switch and inquires regarding your satisfaction with the new accommodations.

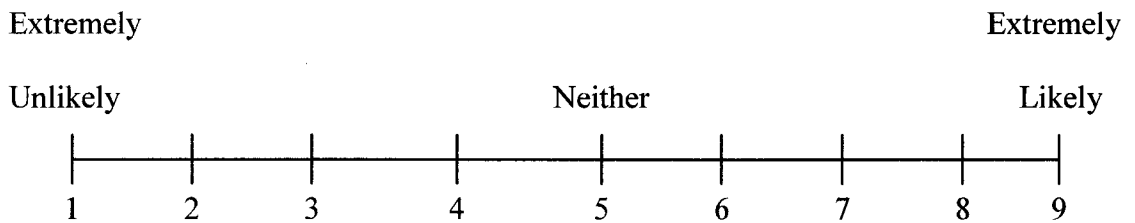
This was your second stay at the hotel. Your first stay was enjoyable and this is how you ranked your satisfaction with the hotel after your first stay:



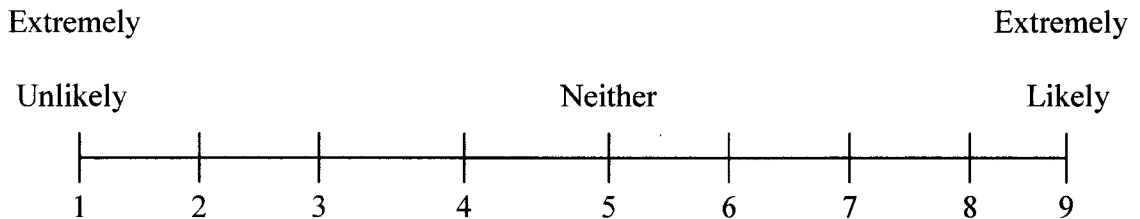
Based on the information given above, please use the scale below to rank your overall satisfaction with the hotel after your second stay:



Please use the scale below to indicate your likelihood of spreading positive word-of-mouth about this hotel property:



Please use the scale below to indicate your likelihood of wanting to stay at this hotel again if you ever have the need to travel to that area in the future:



I am a: Female Male

My age is: _____

My major is: _____

On average, how many nights per year do you stay in hotel rooms?

- A) Zero
- B) 1-3
- C) 4-6
- D) >6

Appendix 13

Pseudo Relationship x Low Control x High Stability

Instructions: Carefully read the scenario and assume that this just happened to you.

The Scenario:

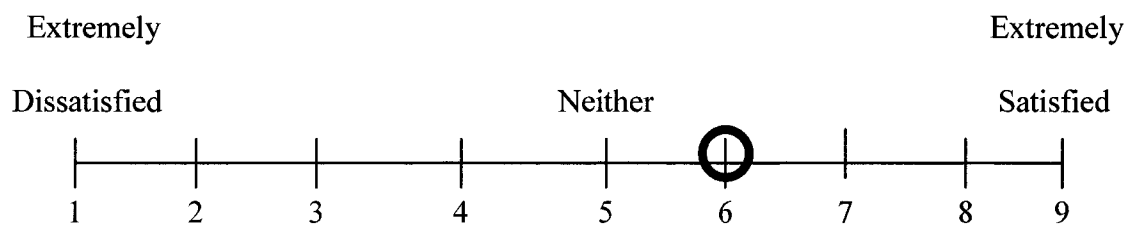
Upon checking-in, you enter your hotel room and decide to connect your laptop to the free high-speed Internet portal located on the wall above your desk. You complete the steps in the connection process, but you fail to get any web access. While the portal does not appear to be physically damaged, you know that there must be something wrong with it because you frequently connect your laptop to similar portals.

Consequently, you call the front desk associate and explain that the Internet portal in your room is not working. The associate states that he was not aware of the problem, and he thanks you for bringing the problem to his attention.

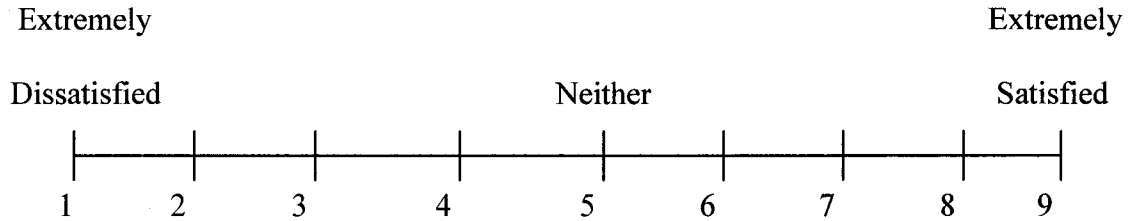
The associate also states that the problems with the Internet portals in the guest rooms are not unusual and that they fail to work from time to time.

Nevertheless, the front desk associate apologizes and immediately sends a member of the bell staff to your room so that he can help you with your belongings and show you to a much nicer suite-style room (which typically costs about \$50 more per night than a standard room) in which you stay at no additional charge. Once you've been in your new room for a short time, the front desk associate calls you to once again apologize for the inconvenience of the room switch and inquires regarding your satisfaction with the new accommodations.

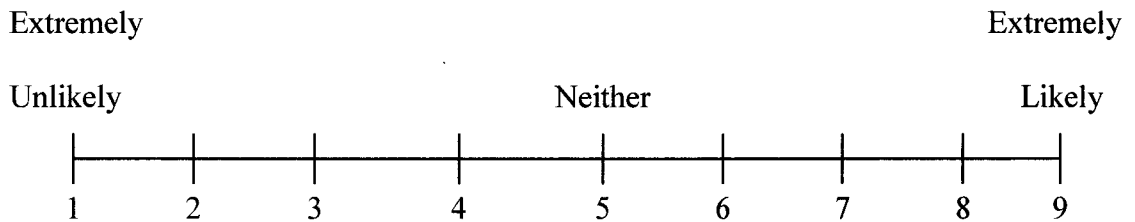
This was your second stay at the hotel. Your first stay was enjoyable and this is how you ranked your satisfaction with the hotel after your first stay:



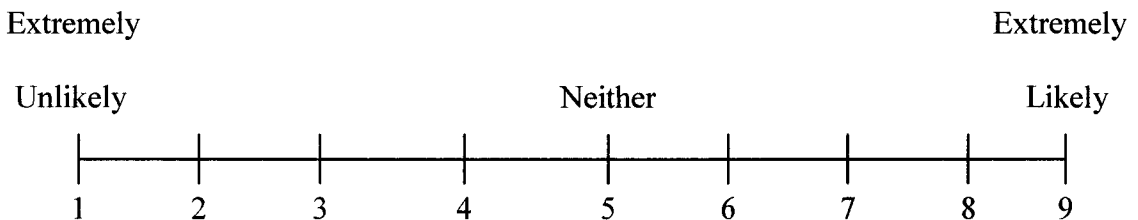
Based on the information given above, please use the scale below to rank your overall satisfaction with the hotel after your second stay:



Please use the scale below to indicate your likelihood of spreading positive word-of-mouth about this hotel property:



Please use the scale below to indicate your likelihood of wanting to stay at this hotel again if you ever have the need to travel to that area in the future:



I am a:

Female

Male

My age is:

My major is:

On average, how many nights per year do you stay in hotel rooms?

- A) Zero
- B) 1-3
- C) 4-6
- D) >6

Appendix 14
Pseudo Relationship x Low Control x Low Stability

Instructions: Carefully read the scenario and assume that this just happened to you.

The Scenario:

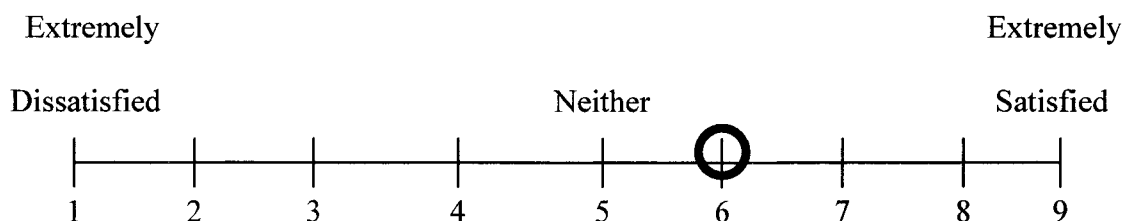
Upon checking-in, you enter your hotel room and decide to connect your laptop to the free high-speed Internet portal located on the wall above your desk. You complete the steps in the connection process, but you fail to get any web access. While the portal does not appear to be physically damaged, you know that there must be something wrong with it because you frequently connect your laptop to similar portals.

Consequently, you call the front desk associate and explain that the Internet portal in your room is not working. The associate states that he was not aware of the problem, and he thanks you for bringing the problem to his attention.

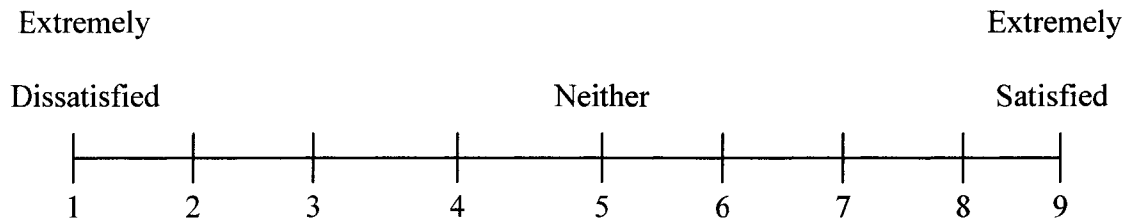
The associate also explains that the Internet portals in the rooms are owned by a third party company and because there has been regular problems, the hotel has found an alternate provider. The associate explains that the hotel will be switching providers very soon.

The front desk associate then apologizes and immediately sends a member of the bell staff to your room so that he can help you with your belongings and show you to a much nicer suite-style room (which typically costs about \$50 more per night than a standard room) in which you stay at no additional charge. Once you've been in your new room for a short time, the front desk associate calls you to once again apologize for the inconvenience of the room switch and inquires regarding your satisfaction with the new accommodations.

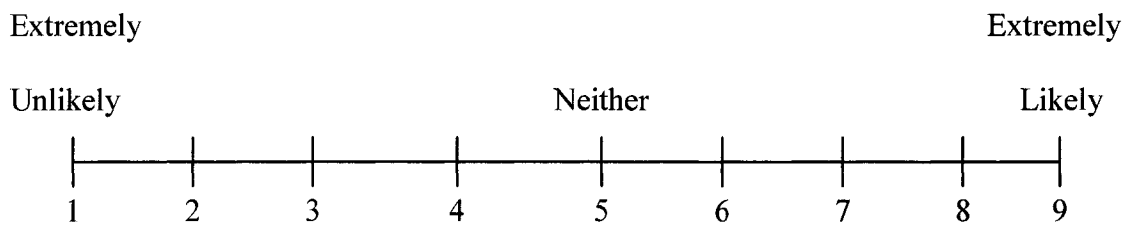
This was your second stay at the hotel. Your first stay was enjoyable and this is how you ranked your satisfaction with the hotel after your first stay:



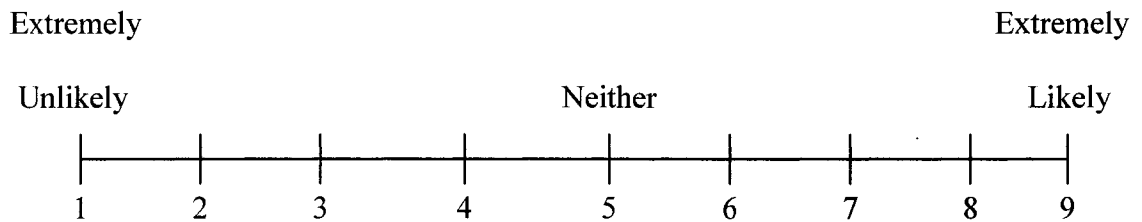
Based on the information given above, please use the scale below to rank your overall satisfaction with the hotel after your second stay:



Please use the scale below to indicate your likelihood of spreading positive word-of-mouth about this hotel property:



Please use the scale below to indicate your likelihood of wanting to stay at this hotel again if you ever have the need to travel to that area in the future:



I am a:

Female

Male

My age is:

My major is:

On average, how many nights per year do you stay in hotel rooms?

- A) Zero
- B) 1-3
- C) 4-6
- D) >6

Appendix 15
Pseudo Relationship x High Control x Low Stability

Instructions: Carefully read the scenario and assume that this just happened to you.

The Scenario:

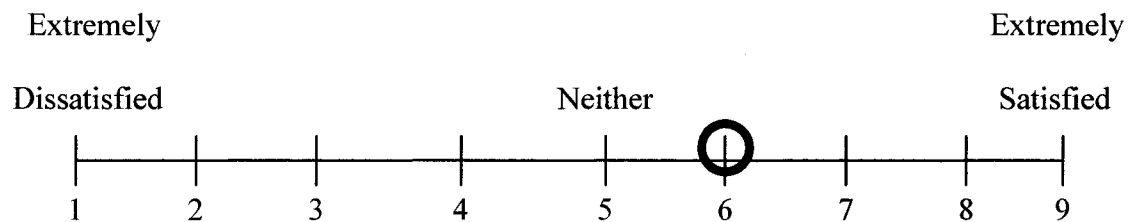
Upon checking-in, you enter your hotel room and decide to connect your laptop to the free high-speed Internet portal located on the wall above your desk. When you approach the desk you see that the Internet portal is visibly damaged and is dangling from the wall. In fact, there are pieces of plaster from the damaged wall on the carpet and on the surface of the desk. The damage is so severe that there is no way that you can securely connect your computer to the portal.

Consequently, you call the front desk associate and explain that the Internet portal in your room is not working. The associate states that the room which you are in is red-flagged in the database as being 'out of order' and that the person that checked you in should not have assigned you to that room.

The associate also explains that the Internet portals in the rooms are owned by a third party company and because there has been regular problems, the hotel has found an alternate provider. The associate explains that the hotel will be switching providers very soon.

The front desk associate then apologizes and immediately sends a member of the bell staff to your room so that he can help you with your belongings and show you to a much nicer suite-style room (which typically costs about \$50 more per night than a standard room) in which you stay at no additional charge. Once you've been in your new room for a short time, the front desk associate calls you to once again apologize for the inconvenience of the room switch and inquires regarding your satisfaction with the new accommodations.

This was your second stay at the hotel. Your first stay was enjoyable and this is how you ranked your satisfaction with the hotel after your first stay:



Appendix 16
True Relationship x High Control x High Stability

Instructions: Carefully read the scenario and assume that this just happened to you.

The Scenario:

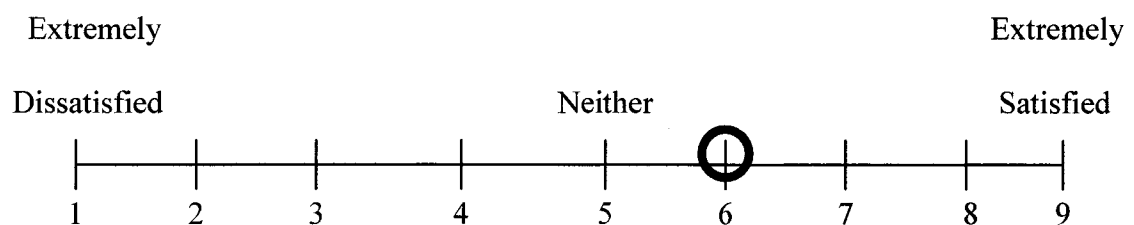
Upon checking-in, you enter your hotel room and decide to connect your laptop to the free high-speed Internet portal located on the wall above your desk. When you approach the desk you see that the Internet portal is visibly damaged and is dangling from the wall. In fact, there are pieces of plaster from the damaged wall on the carpet and on the surface of the desk. The damage is so severe that there is no way that you can securely connect your computer to the portal.

Consequently, you call the front desk associate, Steve, and explain that the Internet portal in your room is not working. You remember Steve from your previous stay because he gave you exceptional customer service at the front desk. Steve explains that the room which you are in is red-flagged in the database as being ‘out of order’ and that the person that checked you in should not have assigned you to that room.

Steve also states that the problems with the Internet portals in the guest rooms are not unusual and that they fail to work from time to time.

Steve then apologizes and immediately sends a member of the bell staff to your room so that he can help you with your belongings and show you to a much nicer suite-style room (which typically costs about \$50 more per night than a standard room) in which you stay at no additional charge. Once you’ve been in your new room for a short time, the Steve calls you to once again apologize for the inconvenience of the room switch and inquires regarding your satisfaction with the new accommodations.

This was your second stay at the hotel. Your first stay was enjoyable and this is how you ranked your satisfaction with the hotel after your first stay:



Appendix 17
True Relationship x Low Control x High Stability

Instructions: Carefully read the scenario and assume that this just happened to you.

The Scenario:

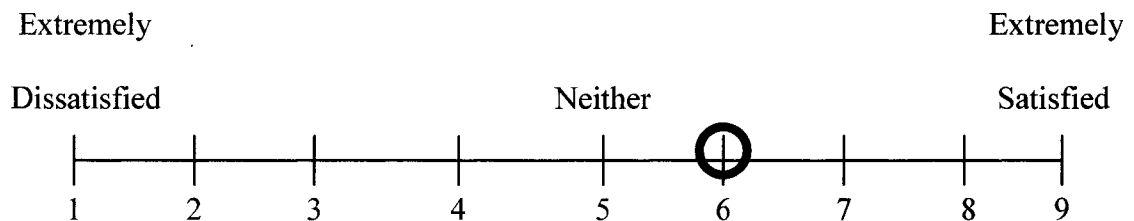
Upon checking-in, you enter your hotel room and decide to connect your laptop to the free high-speed Internet portal located on the wall above your desk. You complete the steps in the connection process, but you fail to get any web access. While the portal does not appear to be physically damaged, you know that there must be something wrong with it because you frequently connect your laptop to similar portals.

Consequently, you call the front desk associate, Steve, and explain that the Internet portal in your room is not working. You remember Steve from your previous stay because he gave you exceptional customer service at the front desk. Steve explains that he was not aware of the problem, and he thanks you for bringing the problem to his attention.

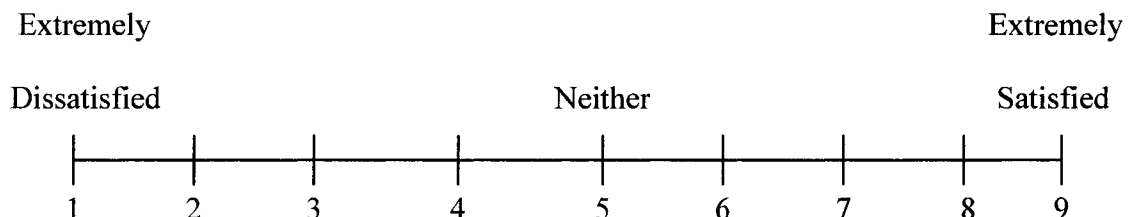
Steve also states that the problems with the Internet portals in the guest rooms are not unusual and that they fail to work from time to time.

Steve then apologizes and immediately sends a member of the bell staff to your room so that he can help you with your belongings and show you to a much nicer suite-style room (which typically costs about \$50 more per night than a standard room) in which you stay at no additional charge. Once you've been in your new room for a short time, Steve calls you to once again apologize for the inconvenience of the room switch and inquires regarding your satisfaction with the new accommodations.

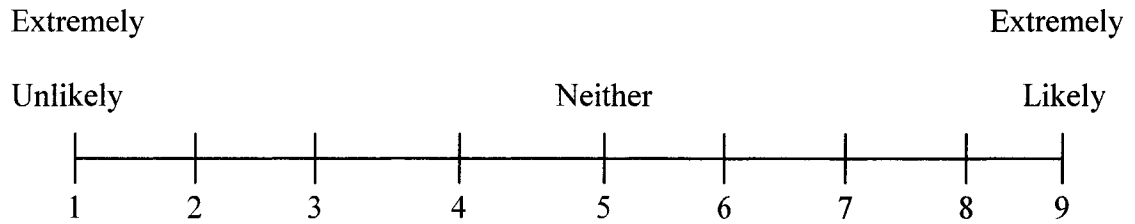
This was your second stay at the hotel. Your first stay was enjoyable and this is how you ranked your satisfaction with the hotel after your first stay:



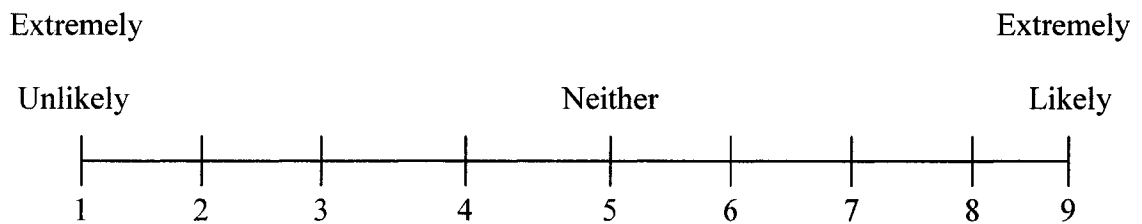
Based on the information given above, please use the scale below to rank your overall satisfaction with the hotel after your second stay:



Please use the scale below to indicate your likelihood of spreading positive word-of-mouth about this hotel property:



Please use the scale below to indicate your likelihood of wanting to stay at this hotel again if you ever have the need to travel to that area in the future:



I am a:	Female	Male
My age is:	_____	
My major is:	_____	
On average, how many nights per year do you stay in hotel rooms?		
A) Zero		
B) 1-3		
C) 4-6		
D) >6		

Appendix 18
True Relationship x Low Control x Low Stability

Instructions: Carefully read the scenario and assume that this just happened to you.

The Scenario:

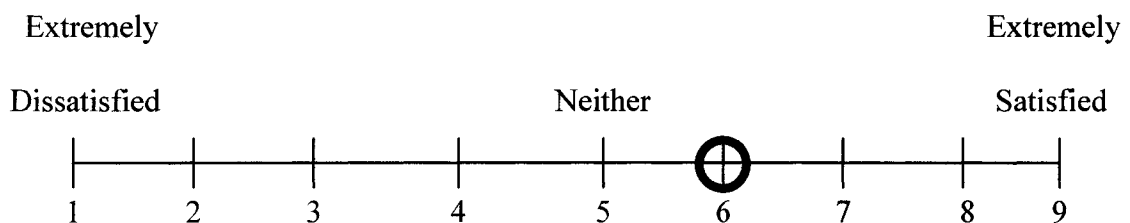
Upon checking in, you enter your hotel room and decide to connect your laptop to the free high-speed Internet portal located on the wall above your desk. You complete the steps in the connection process, but you fail to get any web access. While the portal does not appear to be physically damaged, you know that there must be something wrong with it because you frequently connect your laptop to similar portals.

Consequently, you call the front desk associate, Steve, and explain that the Internet portal in your room is not working. You remember Steve from your previous stay because he gave you exceptional customer service at the front desk. Steve states that he was not aware of the problem, and he thanks you for bringing the problem to his attention.

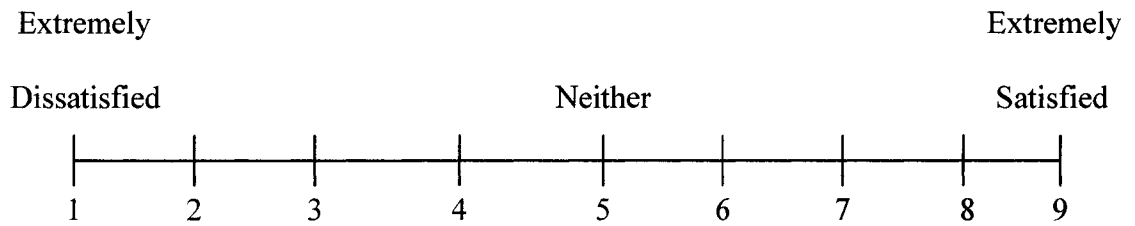
Steve also explains that the Internet portals in the rooms are owned by a third party company and because there has been regular problems, the hotel has found an alternate provider. Steve explains that the hotel will be switching providers very soon.

Steve then apologizes and immediately sends a member of the bell staff to your room so that he can help you with your belongings and show you to a much nicer suite-style room (which typically costs about \$50 more per night than a standard room) in which you stay at no additional charge. Once you've been in your new room for a short time, Steve calls you to once again apologize for the inconvenience of the room switch and inquires regarding your satisfaction with the new accommodations.

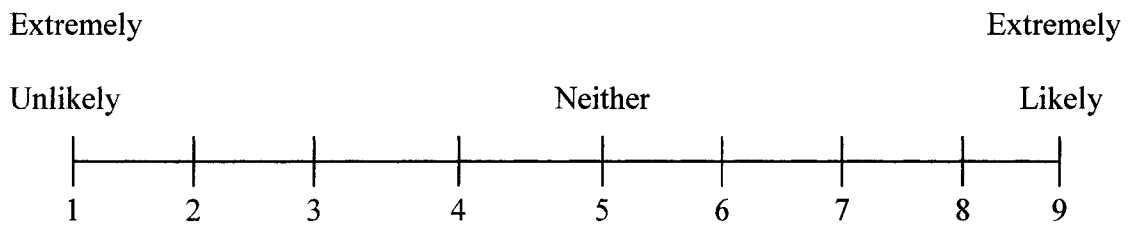
This was your second stay at the hotel. Your first stay was enjoyable and this is how you ranked your satisfaction with the hotel after your first stay:



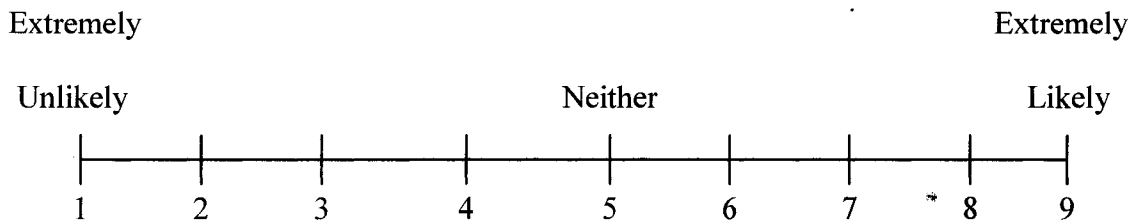
Based on the information given above, please use the scale below to rank your overall satisfaction with the hotel after your second stay:



Please use the scale below to indicate your likelihood of spreading positive word-of-mouth about this hotel property:



Please use the scale below to indicate your likelihood of wanting to stay at this hotel again if you ever have the need to travel to that area in the future:



I am a:	Female	Male	
My age is:	_____		
My major is:	_____		
On average, how many nights per year do you stay in hotel rooms?			
A) Zero			
B) 1-3			
C) 4-6			
D) >6			

Appendix 19
True Relationship x High Control x Low Stability

Instructions: Carefully read the scenario and assume that this just happened to you.

The Scenario:

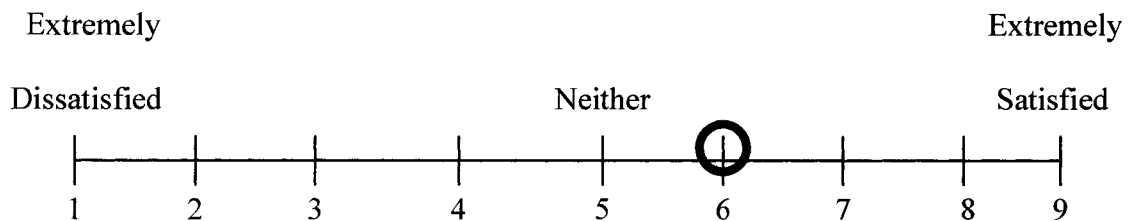
Upon checking-in, you enter your hotel room and decide to connect your laptop to the free high-speed Internet portal located on the wall above your desk. When you approach the desk you see that the Internet portal is visibly damaged and is dangling from the wall. In fact, there are pieces of plaster from the damaged wall on the carpet and on the surface of the desk. The damage is so severe that there is no way that you can securely connect your computer to the portal.

Consequently, you call the front desk associate, Steve, and explain that the Internet portal in your room is not working. You remember Steve from your previous stay because he gave you exceptional customer service at the front desk. Steve explains that the room which you are in is red-flagged in the database as being 'out of order' and that the person that checked you in should not have assigned you to that room.

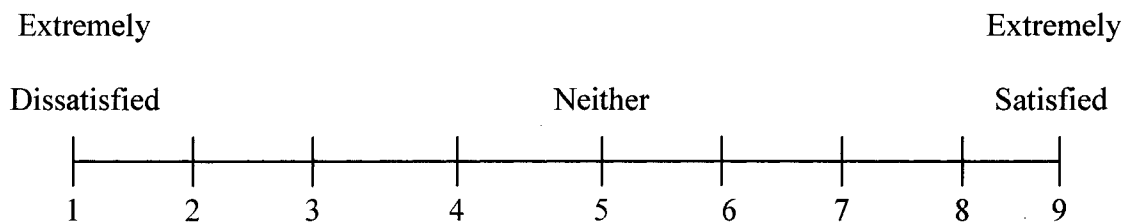
Steve also explains that the Internet portals in the rooms are owned by a third party company and because there has been regular problems, the hotel has found an alternate provider. Steve explains that the hotel will be switching providers very soon.

Steve then apologizes and immediately sends a member of the bell staff to your room so that he can help you with your belongings and show you to a much nicer suite-style room (which typically costs about \$50 more per night than a standard room) in which you stay at no additional charge. Once you've been in your new room for a short time, Steve calls you to once again apologize for the inconvenience of the room switch and inquires regarding your satisfaction with the new accommodations.

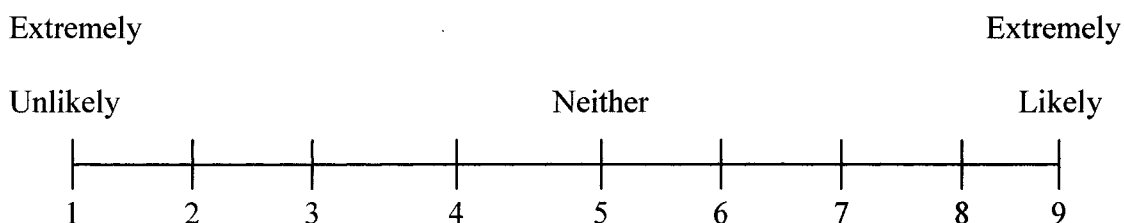
This was your second stay at the hotel. Your first stay was enjoyable and this is how you ranked your satisfaction with the hotel after your first stay:



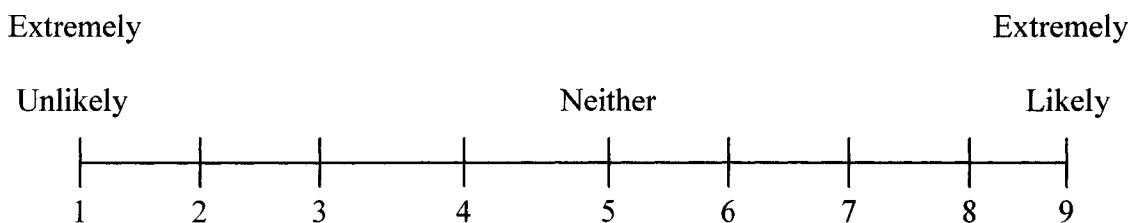
Based on the information given above, please use the scale below to rank your overall satisfaction with the hotel after your second stay:



Please use the scale below to indicate your likelihood of spreading positive word-of-mouth about this hotel property:



Please use the scale below to indicate your likelihood of wanting to stay at this hotel again if you ever have the need to travel to that area in the future:



I am a:	Female	Male
My age is:	_____	
My major is:	_____	
On average, how many nights per year do you stay in hotel rooms?		
A) Zero		
B) 1-3		
C) 4-6		
D) >6		

Vincent P. Magnini

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Education: Doctor of Philosophy in International Business with a major in Marketing:
Old Dominion University
May 2004

Dissertation Title: “An Empirical Examination of the Moderators of the Service Recovery Paradox.”

Masters of Business Administration: Wichita State University
May 2001

Bachelor of Science in Hospitality and Tourism Management: Virginia Tech
December 1996

Teaching Experience: **Old Dominion University, Norfolk, Virginia**
Ph.D. Assistantship and Adjunct Faculty, Department of Marketing
August 2001 - Present

Courses taught:

Mktg 428: Marketing of Services
Mktg 411: Multi-National Marketing
Mktg 402: Consumer Behavior
Mktg 407: Marketing Research
Mktg 311: Marketing Principles and Problems

Butler County Community College, El Dorado, Kansas
Adjunct Faculty, Department of Hospitality Management
August 1999 – May 2001

Courses taught:

HM 258: Hospitality Sales and Marketing
HM 205: Menu Planning and Food Production
HM 243: Work-based Learning

Research & Publications: **Refereed Journal Articles:**

Magnini, Vincent P. and John B. Ford (2004). “Service Failure Recovery in China,” International Journal of Contemporary Hospitality Management, (Accepted for Publication).

Magnini, Vincent P. (2004). “A Look at the Changing Acculturation Pattern in the United States and Implications for the Hospitality Industry,” Journal of Human Resources in Hospitality and Tourism, (Accepted for Publication).

Magnini, Vincent P. and Earl D. Honeycutt (2003). "Learning Orientation and the Hotel Expatriate Manager Experience," International Journal of Hospitality Management, Vol. 22 (3), pp. 267-280.

Magnini, Vincent P., Earl D. Honeycutt, and Sharon K. Hodge (2003). "Data Mining for Hotel Firms: Use and Limitations," Cornell Hotel and Restaurant Administration Quarterly, Vol. 23 (2), pp. 94-106.

International and National Proceedings (Refereed):

Magnini, Vincent P. and Kiran Karande. "Determinants of the Use of Contextual and Temporal Cues in Service Settings," Target: Academy of Marketing Science 2004 Annual Conference in Vancouver, Canada (May 26-29), (Accepted for Publication).

Magnini, Vincent P. (2003) "The Service Recovery Paradox: An Integrative Review," Proceedings of the Society for Marketing Advances 2003 Annual Conference in New Orleans, Louisiana (November 4-8), Published as a Summary Abstract, pp.258-259.

Magnini, Vincent P., Earl D. Honeycutt, and John B. Ford (2003). "Empowering the Sales Force with Pricing Authority: A Cross-Cultural Perspective," Proceedings of the 2003 National Conference in Sales Management in Cincinnati, Ohio (April 10-12), Published as a Summary Abstract, pp.35-37.

Magnini, Vincent P. and Earl D. Honeycutt (2002). "Learning Orientation and Improving the Hotel Expatriate Manager Experience," Proceedings of the Academy of Marketing Science 2002 Multicultural Marketing Conference in Valencia, Spain, Vol. IV, (June 26-29), Published as a Summary Abstract, pp.1156-1161.

Articles Currently Under Revision:

Magnini, Vincent P. "Face Recognition and Name Recall: Training Implications for the Hospitality Industry," Target: Cornell Hotel and Restaurant Administration Quarterly, Status: Granted a revise and resubmit opportunity on 7/21/03.

Research in Progress:

Ford, John B., Michael S. LaTour, and Vincent P. Magnini. "No More Retreat: Headlong into the Eye of the Storm with 26 Years of Achievement in the 'Big Four'," Target: Journal of the Academy of Marketing Science, Status: Data collection stage.

Magnini, Vincent P. "The Role of Organizational Learning in Hotel Joint Ventures in China," Target: Journal of International Business Studies, Status: Survey design stage.

Management Experience: TMH Hotel Corporation 2000 - 2001

Hilton Garden Inn Wichita
Director of Food and Beverage

Stormont Trice Hotel Corporation 1996 - 2000

Hyatt Regency Wichita (1998-2000)
Sous Chef

Norfolk Waterside Marriott (1996 – 1998)

Assistant Restaurant Manager

Military Service: Enlisted in the United States Army Reserve in April 1994 and was Honorably Discharged as an E-4 in April 2002.

Service Activities: Currently serving as a regular ad hoc reviewer for the Cornell Hotel and Restaurant Administration Quarterly.

Served as an ad hoc reviewer for a special issue that focused on cross-cultural issues in the marketing of services in the International Marketing Review.

Served as a competitive paper reviewer for the marketing strategy track of the 2004 Academy of Marketing Science Annual Conference in Vancouver, Canada.

Served as a competitive paper reviewer for the marketing track of the 2003 Decision Sciences Institute Annual Conference in Washington, D.C.

In August 2003, I was chosen as the representative from the College of Business Administration to speak at Old Dominion University's Graduate Teaching Assistants' Institute.

In February 2003, I gave a marketing and merchandising presentation at "no fee" at a SunCom Wireless management retreat.

Professional Association Membership: Academy of Marketing Science
Society for Marketing Advances

Honors and Awards: Awarded Old Dominion University's 2004 Graduate Assistant Excellence Award (This award was in the amount of \$6,923).