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# CONSUMERS' EMOTIONAL RESPONSES TO SERVICE ENCOUNTERS: THE INFLUENCE OF OTHER CONSUMERS

A Dissertation in

Hotel, Restaurant and Institutional Management

by

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#### **ABSTRACT**

Service consumptions often involve sharing the service environment with other consumers. Despite the prevalent presence of other consumers in service settings, research in "other consumers" is sporadic. The global objective of this dissertation is to examine consumers' emotional responses to behaviors of other consumers in service encounters.

Drawing from Script Theory, Social Impact Theory and Social Facilitation

Theory, this dissertation proposes a script-congruence/incongruence scheme to define
behaviors of other consumers in service encounters. This dissertation also offers a

multidimensional conceptualization of presence of other consumers, anchoring presence
of other consumers in a service encounter on temporal, spatial and emotional dimensions.

In the empirical study, the multidimensional presence of other consumers was
operationalized into salience of other consumers, a multiplicative function of temporal
duration, spatial proximity and emotional content of the encounter. This dissertation also
proposes a dual-process model of consumers' emotional responses to behaviors of other
consumers: spontaneous emotional responses and symbolic emotional responses.

The empirical investigation of this research included three pilot studies and one main study. The hypotheses were tested in two service contexts (dining and airline service). Overall, the results suggest that other consumers' script-incongruent behaviors affect both consumers' modes of emotional responses and consumers' encounter satisfaction. The salience effect on consumer responses proves to be robust across the

two contexts. Consumers' coping responses and relationships between other-consumerelicited emotional responses and encounter satisfaction were also explored.

This dissertation contributes to an emerging stream of consumer research that investigates the influence of other consumers in service encounters. The findings presented in this dissertation have both theoretical and managerial implications.

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Thank you.

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Dedicated to Ningyu Liu, my husband, my best friend and love of my life

#### **CHAPTER I**

#### INTRODUCTION

Service consumptions, such as dining in a restaurant or traveling by plane often involve sharing the service environment with other consumers (Grove & Fisk, 1997; Ramanathan & Mcgill, 2007). Presence of other consumers in the service environment weaves a complex social and psychological landscape in which services are consumed. Considerable evidence from social psychology suggests human behavior and judgment are affected by "the actual, imagined, or implied presence of others" (Allport, 1985; p.3).

Despite the prevalent presence of other consumers in service settings, research in "other consumers" is sporadic. Although it has been long recognized that much of consumer behavior is socially interactive (Howard & Gengler, 2001), the social aspect of the service encounter received limited research attention (Tombs & McColl-Kennedy, 2003). Existing research in the social aspect of the service encounter mainly focuses on consumer-provider interactions (e.g., Kraiger, Billings & Isen, 1989), while the influence of other consumers in the service environment is relatively ignored. This neglect is surprising for several reasons. First, the frequency of consumer-to-consumer interactions greatly outnumbers that of consumer-provider interactions (Martin & Clark, 1996). Second, in many service consumption situations, the presence of other consumers is an integral part of the consumption experience. Therefore, research in "other consumers" in service encounters is of both theoretical and practical significance.

This dissertation examines consumers' emotional responses to behaviors of other consumers in service encounters. Specifically, the goal is to examine when behaviors of other

consumers will evoke emotional responses from a focal consumer, how such emotions are subjectively experienced, and how behaviors of other consumers affect encounter satisfaction, or the overall evaluation of the service encounter.

Grounded in the Script Theory (Schank & Abelson, 1977), this dissertation proposes a script-congruence scheme to define behaviors of other consumers. Many service consumptions, such as dining in a restaurant, are repeated frequently throughout a person's life, resulting in standardized and well-rehearsed scripts (Schank & Abelson, 1977). Thus, it is proposed that consumers' perceptions about behaviors of other consumers are largely script-based. When other consumers demonstrate script-incongruent behaviors (positive or negative), emotional responses from the focal consumer are elicited.

Following Buck's (1985, 1988) dual-process conceptualization of emotional communication, this dissertation proposes a dual-process model of emotional responses to behaviors of other consumers. Specifically, the emotional response framework proposes two modes of emotional responses: *spontaneous* emotional responses and *symbolic* emotional responses. The spontaneous emotional responses refer to biologically-based *felt* emotions, while symbolic emotional responses are socially-tinged *expressed* emotions. Symbolic emotional responses proposed in the framework captures the *social* nature of consumer-to-consumer interactions, a salient distinction from consumer-provider interactions that are largely commercial (Goodwin, 1996; Price & Arnould, 1999). Adapting a Social Facilitation Paradigm (e.g., Zajonc, 1965), this dissertation proposes that symbolic emotional responses to other consumers' script-incongruent behaviors, particularly when the incongruence is negative in valence, can manifest in a form of expression inhibition, or a mismatch between felt emotions and expressed emotions. For example, people are found to deliberately bring emotional

expressions in line with expected emotional display rules in social situations. Social facilitation studies (e.g., Berger, Hampton, Carli, Grandmaison, Sadow & Donath; 1981; Blank, 1980; Geen, 1985) demonstrate that individuals have the tendency to inhibit socially undesirable emotional expressions, such as anger toward others.

Drawing on the theorizing of three dimensions of service encounters (Price, Arnould & Deibler, 1995), this dissertation offers a multidimensional conceptualization of presence of other consumers, anchoring the presence of other consumers in a service encounter on temporal, spatial and emotional dimensions. Based on Social Impact Theory (Latane, 1981), the multidimensional presence of other consumers is operationalized into salience of other consumers, a multiplicative function of temporal duration, spatial proximity and emotional content of an encounter. It is further proposed that salience of other consumers moderates the effects of other consumers' script-incongruent behaviors on emotional responses and encounter satisfaction, such that the effects of other consumers' script-incongruent behaviors on the focal consumer's emotional responses and encounter satisfaction will be more pronounced when salience of other consumers is high.

#### **Statement of Purpose and Research Questions**

The global objective of the present research is to examine consumers' emotional responses to behaviors of other consumers in service encounters. This dissertation addresses four important issues related to consumers' emotional responses to behaviors of other consumers. Specifically, 1) this research explores when behaviors of other consumers are likely to evoke emotional responses from the focal consumer. The proposed script perspective suggests that

consumers' emotional responses are likely to be elicited when other consumers' behaviors are script-incongruent; 2) this research also examines how other consumers' script-incongruent behaviors affect a focal consumer's emotional responses. It is proposed that the valence of other consumers' script-incongruent behaviors is positively related to the valence of the focal consumer's spontaneous emotional responses. For symbolic emotional responses, this research proposes an emotional expression inhibition hypothesis, suggesting that when script-incongruent behaviors are negatively valenced, consumers are likely to engage in expression inhibition; 3) this dissertation also investigates the moderating role of salience of other consumers in relationships between incongruent behaviors and consumer responses; and 4) finally, this research explores the relationships between emotional responses and encounter satisfaction.

#### **Contributions of the Research**

#### **Theoretical Contributions**

The research questions raised in this dissertation are of both theoretical and practical significance. This research contributes to the current research in "other consumers" in several ways. First, this dissertation proposes a script theoretical perspective of behaviors of other consumers in service encounters. The significance of the script approach lies in its capacity to capture the social nature of consumer-to-consumer interactions. In addition, the script-congruence scheme provides an encompassing yet parsimonious taxonomy for behaviors of other consumers and addresses the drawbacks of context-specific classifications in earlier studies (e.g., Grove & Fisk, 1997; Martin, 1996).

Second, this dissertation proposes a multidimensional conceptualization of presence of other consumers in service encounters, anchoring presence of other consumers in a service encounter on temporal, spatial and emotional dimensions. This research represents one of the early attempts to systematically define the presence of other consumers in service encounters. This conceptualization highlights the importance of modeling situational factors in consumer responses in service encounters.

Third, our understanding of consumer responses in service encounters is amplified with the demonstration of a dual-process model of emotional responses to behaviors of other consumers. The framework captures the social nature of consumer-to-consumer interactions and the empirical evidence of symbolic emotional responses revealed in this study sheds light on the psychological implications of the presence of other consumers in service encounters.

Fourth, this research demonstrates that presence of other consumers affects encounter satisfaction at multiple levels. Such impact can be behavioral, situational, emotional, psychological and contextual. The findings of this study reveal the complexity of the phenomenon in question and provide important building blocks for future studies in this area of research.

#### **Managerial Contributions**

This dissertation also has several important managerial implications for the service industry. First, this research brings to the attention of service practitioners the significance of other consumers in influencing the focal consumer's consumption experiences. This study demonstrates that service firms need to place an emphasis on the management of an important social element in service encounters: consumer-to-consumer interactions.

Second, the script theoretical perspective allows service practitioners a way to better understand consumer responses to behaviors of other consumers. The results demonstrate that, although service firms do not usually have much leverage in directly managing behaviors of their consumers, they can indirectly motivate script-congruent or positive-valenced script-incongruent behaviors through establishing explicit behavioral scripts at service encounters.

Third, the multidimensional conceptualization of presence of other consumers and empirical evidence for its effects on consumer responses provide important implications for service management and service design. The findings reveal that service managers may want to strategically build consumer-to-consumer interactions into service offerings and to effectively manage the interactions in service delivery process.

Fourth, the dual-process model provides service managers a framework to understand how consumers react emotionally to other consumers in service encounters. One important tenet of this framework is that consumers respond not only spontaneously, but also symbolically to behaviors of other consumers. The findings suggest to service managers that, just like service providers, consumers might also engage in "emotional labor" to deal with other-consumerelicited negative emotions. Developing an appreciation of the social nature of consumer-to-consumer interactions and its implications for consumer behaviors will help service practitioners to manage the human component of the service delivery more effectively.

# **Summary**

This dissertation examines the impact of other consumers in service encounters. The global objective of the present research is to examining consumers' emotional responses to behaviors of other consumers in service encounters. Drawing from Script Theory, Social Impact Theory and Social Facilitation Theory, this research provides three important building blocks to this area of research. These three theoretical contributions are script theoretical perspective of behaviors of other consumers, multidimensional conceptualization of presence of other consumers and a dual-process model of consumers' emotional responses to behaviors of other consumers.

The following chapter provides a review of literature in consumer research and social psychology research as relevant to the topic of this dissertation. The theoretical framework and research hypotheses are also presented.

#### **CHAPTER II**

#### REVIEW OF LITERATURE

#### Overview

This dissertation proposes a dual-process model of consumers' emotional responses to behaviors of other consumers in service encounters. In this chapter, the theoretical background of the framework and hypothesized relationships are discussed.

Chapter II contains five sections. The first section reviews the theoretical work on presence of other consumers in service encounters. A multidimensional presence of other consumers is then proposed in this section. The second section provides background information on script theoretical perspective of behaviors of other consumers. The third section provides the theoretical underpinnings of the dual-process model of emotional responses. The fourth section reviews current research in the relationships between behaviors of other consumers and encounter satisfaction. The chapter concludes with a discussion on individual differences in consumer responses to behaviors of other consumers.

#### **Presence of Other Consumers in Service Encounters**

Presence of other consumers in the service environment has long been recognized in service literature (e.g., Aubert-Gamet & Cova, 1999; Baker, 1986; Bitner, 1997; Booms & Bitner, 1981; Grove & Fisk, 1983, 1997; Langeard, Bateson, Lovelock & Eigler, 1981; Lovelock, 1996; Martin & Pranter, 1989). However, prior studies diverge on how the presence of other consumers is related to other components in a service environment. Several ontologically

different perspectives emerged in service literature. Interestingly, such ontological differences are explicitly reflected in the way presence of other consumers is labeled. For example, some researchers treat the presence of other consumers as "a social factor" in service settings (e.g., Baker, 1986; Bitner, 1994), while others perceive other consumers as "audience" or "cobuilders" of the service (Langeard et al., 1981; Aubert-Gamet & Cova, 1999).

## A Servicescape Perspective

Servicescape researchers (e.g., Baker, 1986; Bitner, 1994; Turley & Milliman, 2000) tend to take a "physical" view of the presence of other consumers in a service environment. The servicescape perspective typically treats the presence of other consumers as an environmental component, orthogonally co-existing with other elements in servicescape (i.e., interior design, music, lighting or olfactory). For example, Baker's (1986) three-component typology of environmental elements labels people (consumers and employees) in a service setting as "social elements". Similarly, Turley and Milliman (2000) define the "human variables" in the servicescape as observable social presences such as employee uniforms, employee characteristics, consumer characteristics and crowding. Despite the recognition of presence of other consumers in servicescape literature, its impact on consumption experiences is not purposively explored in this research stream.

## **An Audience Perspective**

The audience perspective (Grove & Fisk, 1983) views the presence of other consumers in a service environment from a focal consumer's vantage point. This perspective portrays the focal consumer as the center of action and other consumers as audience in the background. In

Booms and Bitner's (1981) Seven P's portrayal of the services marketing mix, other consumers are considered as "participants" of a service encounter. Labeled differently, in Langeard et al.'s (1981) "Servuction Model" of the service encounter, other consumers are collectively called "Customer B".

# A Sociological and Psychological Perspective

The third paradigm in service literature examines presence of other consumers from a broader sociological perspective. This perspective suggests that the impact of other consumers goes well beyond their mere presence in a service setting. The major tenet of this perspective is that other consumers as a "social factor" affect the focal consumer's experience in multiple ways. Not only the sheer number of other consumers in a service environment has an impact, other social factors such as who they are and how they behave also affect the focal consumer's consumption experience (Grove & Fisk, 1997; Lovelock, 1992).

Recent theorizing (Aubert-Gamet, 1997; 1999) describes service environment as a "human architecture" where people (consumers and service providers) play an active role in building and transforming the very environment they are in. A distinctive notion in this perspective is that people in a service environment are "co-builders" or "co-actors" of the environment rather than "spectators" in the environment. The "human architecture" perspective has its sociological and psychological roots. For example, Constructual Theory in sociology (Carley, 1990, 1991, 1995; Kaufer & Carley, 1993) posits that sociocultural environment is continuously constructed and reconstructed by the people in the environment. Similarly, social psychologist Lefebvre (1974) proposes a construction process and suggests that social environment is a "perceived, experienced and imagined" environment.

#### Multidimensional Presence of Other Consumers in Service Encounters

As evident in the preceding discussions, conceptualizations about presence of other consumers in service literature are fragmented. Each perspective explains certain aspects of the phenomenon without fully accounting for its complexity. In this section, based on the literature review of presence of others in social psychology, a multidimensional conceptualization of presence of other consumers is presented.

# **A Social Facilitation Perspective**

In social psychology literature, influence of the presence of others is generally treated as part of the broader phenomenon of social facilitation and inhibition of performance (Geen, 1989). Social facilitation literature classifies the presence of others into two broad categories: *mere* presence and *co-actor* presence. Mere presence refers to the presence of others in which others only serve as passive audiences (Geen, 1989). In contrast, co-actor presence refers to situations where others are active participants of an experience through "provision of social reinforcers, punishments, and feedback cues; the supplying of information, and the elicitation of information from the person in return" (Geen, 1989, p.15).

The social facilitation typology of presence of others has theoretical relevance to the understanding of the presence of other consumers in service settings. Similar to the performance phenomenon addressed by the social facilitation studies, services can also be perceived as intrinsically staged activities or performances (Deighton, 1994). In situations where service consumption is not dependent on presence of other consumers and thus can be accomplished

solely, the presence of other consumers resembles a mere presence situation: other consumers mainly serve as passive audiences in a focal consumer's consumption experience. For example, services such as postal services and bank services fall into the mere presence category.

Conversely, in consumption situations where presence of other consumers is a prerequisite for a consumption to occur (Jones, 1995), the presence of other consumers reflects a co-actor presence. In such situations, other consumers become an integral part of the consumption experience.

Thus, the focal consumer's consumption is contingent on the presence of other consumers and other consumers play an active role in shaping the focal consumer's consumption experience.

Services such as academic conferences, membership clubs and most of sport activities fall into this category.

# **A Social Impact Perspective**

Social Impact Theory (SIT; Latane, 1981) proposes that the impact of the presence of others is determined by three "social forces": *immediacy*, *strength* and *number*. Immediacy refers to the closeness in space or time. Strength means the "salience, power, importance, or intensity of a given source to the target-usually this would be determined by such things as the source's status, age, socio-economic status, and prior relationship with, or future power over, the target" (p.344). Number simply means how many people there are.

According to Latane (1981), social impact is a multiplicative function of the strength, immediacy and number of other people. The core tenet of the Social Impact Theory is that these three "social forces" account for a great variety of changes in a target's physiological states and subjective feelings, emotions and behaviors, as a result of the real, implied, or imagined presence or actions of other individuals.

Despite its relevance to service encounters, there are limited applications of Social Impact Theory in service encounter research. Except for the social impact of number of other consumers that is examined under the rubric of crowding research (e.g., Bateson & Hui, 1986; Hui & Bateson, 1991), the other two social forces (immediacy and strength) in service encounters are not well understood. To bridge the knowledge gap, this dissertation takes into consideration of the social impact of immediacy and strength of other consumers in examining emotional responses. In the empirical study, immediacy of other consumers will be experimentally manipulated, while the strength will be measured.

#### **Multidimensional Presence of Other Consumers in Service Encounters**

A notion embedded in Social Facilitation (Zajonc, 1965) and Social Impact Theory (Latane, 1981) is that attributes associated with the presence of others in a social situation affect the amount of impact others have on a target person's subjective feelings and emotions. Service encounters, like other social encounters, are also likely to subject to these rules of social impact.

Service encounter is defined as "a period of time in which a customer interacts with a service" (Shostack, 1984; p. 134). Although in some cases service encounters may only involve consumers interacting with technology (e.g., ATM machine), the majority of service encounters involve some contact with human elements such as service providers and other consumers. The focus of this research is on face-to-face service encounters.

Service encounters arguably comprise three basic dimensions: temporal duration, spatial proximity, and emotional content (Price, Anould & Deibler, 1995; Seihl, Bowen & Pearson, 1992). Temporal duration of a service encounter can be perceived as a continuum from "brief" to "extended". The spatial proximity can range from "intimate" to "distant", and the emotional

content of a service encounter can vary from "personal" to "impersonal" (Price, Anould & Diebler, 1995). According to Social Impact Theory (Latane, 1981), temporal duration and spatial proximity represent the social force of immediacy, while emotional content can be thought of as the social force of strength.

Based on tenets of Social Impact Theory (Latane, 1981) and the three dimensions of service encounters (Price, Anould & Deibler, 1995), it can be inferred that presence of other consumers in a service encounter is multidimensional. Specifically, presence of other consumers in a service encounter can be defined on three dimensions: temporal, spatial and emotional. In encounters where presence of other consumers is temporally extended, spatially intimate and emotionally personal, salience of other consumers in a focal consumer's consumption experiences is likely to be high. As social impact is a multiplicative function of the three social forces, impact of other consumers on a focal consumer's experience is likely to be greater in such encounters.

In sum, this dissertation proposes a multidimensional conceptualization of presence of other consumers, anchoring their presence in a service encounter on temporal, spatial and emotional dimensions. In the empirical study, this concept is operationalized into *salience of other consumers in a service encounter*, measured as a multiplicative function of temporal duration, spatial proximity and emotional content of the encounter.

#### **Behaviors of Other Consumers in Service Encounters**

#### **Classification of Behaviors of Other Consumers**

Research in influence of other consumers (IOC) developed several classification schemes to categorize behaviors of other consumers. For example, the "audience" perspective of the presence of other consumers guided research on the impact of appearance and behaviors of other consumers on consumption experience (Baker, 1986; Grove & Fisk, 1997; Zhang, 2005). Using a critical incident technique, Grove and Fisk (1997) classify behaviors of other consumers in a tourist attraction setting into two broad categories: protocol and sociability. According to the authors, protocol includes physical and verbal behaviors as well as benevolent acts of other consumers, while sociability refers to friendliness manifested by other consumers and ambiance resulting from their presence. This study also finds that consumers are sensitive to others' violations of tacitly held rules of conduct, yet may have their experience enhanced if others are gregarious.

In research on consumer-to-consumer interactions, Jones (1995) classifies the interactions into two categories: primary and secondary. Martin (1996) suggests that consumers are most pleased when other consumers demonstrate "gregarious" behaviors, but are generally displeased with "violent" or "grungy" behaviors. He also points out that consumers' tolerance for public behaviors is situation-specific and individual-specific.

As shown above, research in behaviors of other consumers in service settings appears to be sporadic. However, findings seem to converge on the proposition that behaviors of other consumers in service settings are often judged against some tacitly held rules of conduct and such rules are found to be context-specific (e.g., Grove & Fisk, 1997; Martin, 1996). To address

the drawbacks of context-specific classifications in earlier studies, this dissertation offers a script theoretical approach to categorization of behaviors of other consumers. In the next section, relevant literature on Script Theory (Schank & Abelson, 1977) is reviewed.

## **Script Theory**

Situational Scripts

Many service encounters, such as dining in a restaurant, are repeated frequently throughout a person's life, resulting in standardized and well-rehearsed scripts (Schank & Abelson, 1977). Scripts refer to a "predetermined, stereotyped sequence of actions that define a well-known situation" (Schank & Abelson, 1977). When service encounters have well-established scripts, consumers are likely to share expectations about the events that will occur and the order of occurrence (Bitner, Booms & Mohr, 1994; Shoemaker, 1996).

The on-line interpretation of observed behaviors is one of the most fundamental social-cognitive tasks people face in everyday life (Heider, 1958; Kelly, 1955). Scripts are important because they help people understand others' behaviors (Gioia & Manz, 1985; Shoemaker, 1995). In service encounters, scripts are normally fixed and this fixed knowledge structure of "knowing what to expect" enables consumers to process a service encounter with little cognitive effort (Shoemaker, 1995).

One type of script is the situational script. In a situational script, a situation is specified, actors in the situation have interlocking roles to follow and they all share an understanding of what is supposed to happen (Schank & Abelson, 1977). Thus, a situational script contains activities, actions, objects and actors that a consumer encounters in an event (Shoemaker, 1995).

Situational scripts are used both to understand the actions of others and to guide one's own actions (Schank & Abelson; 1977).

A vast majority of service consumptions entail situational scripts (Bitner, Booms & Mohr, 1994). A consumer's situational script contains information about the roles and behaviors of participants in a service encounter (Solomon, Surprenant, Czepiel & Gutman, 1985; Surprenant & Solomon, 1987). In a typical face-to-face service encounter, a situational script usually includes multiple actors, such as a focal consumer, service providers and other consumers (Shoemaker, 1996). The multiple actors are bound together via an interpersonal script representing typical interaction patterns (Baldwin, 1992; Horowitz, 1989). Role Theory (Solomon et al., 1985) argues that "a cluster of social cues that guide and direct an individual's behavior in a given setting" plays a major role in how these actors behave. They further argue that the foundations of these roles are based on each actor's script for the situation.

#### Event Schemata

Situational scripts are analogous to event schemata (Shoemaker, 1995). The notion of schemata, the plural of schema, refers to "generic knowledge structures that guide the comprehender's interpretations, inferences, expectations, and attention" (Graesser & Nakamura, 1982). Event schemata are temporally organized schemata that are event-oriented and contain the set of expectations about what actions or activities will occur in a given event (Mandler, 1979; Schank, 1982). Schank and Abelson (1977) have labeled the more general event schemata "plans" and the more concrete event schemata "scripts".

A service encounter can be conceptualized as an event for which a customer has a script (Smith & Houston, 1983). Specifically, a script is a set of expectations that a customer brings to

a service encounter. Shoemaker (1995) gave an example to illustrate how service scripts work in a restaurant setting. When dining in a restaurant that forbids smoking, the expectation is that no one in the restaurant will be smoking. Similarly, in a fine dining restaurant, the expectation during a meal is that all guests will speak quietly, use the appropriate flatware for each course, and generally behave in a manner respectful to other customers.

# Script-Based Information Processing

Expectations are important components of scripts in that they help guide the processing of stimuli by helping one to know in advance how an event may unfold (Shoemaker, 1995). Such expectancy-tinged scripts (Neuberg, 1996) facilitate information processing partly because scripts enable the perceiver to identify stimuli quickly (Taylor & Crocker, 1981). Rumelhart (1980) suggests that scripts are the fundamental elements upon which all information processing depends. He further states that "one of the central functions of schemata is in the construction of an interpretation of an event, object, or situation – that is, in the process of comprehension" (Rumelhart, 1980, p.37).

Mounting literature suggests that the level of congruity between the stimulus (what we hear or see) and the schema (what we expect) will affect the type of processing and the depth of processing (e.g., Bobrow & Norman, 1975; Fiske & Pavelchak, 1986; Mandler, 1982; Meyers-Levy & Tybout, 1989; Sujan, 1985). Two modes of schemata processing are recognized in the literature: holistic processing and piecemeal processing. In holistic processing, also labeled as script-based processing (Carlston, 1980), information is processed in a configural mode and the whole system of relations determines a summary judgment. In contrast, in piecemeal processing, evaluations are elemental. Piecemeal processing model posits that the evaluative component of

each attribute is determined independently and then the isolated evaluations are combined into a summary judgment. It is generally believed that holistic processing will occur when there is a match between the stimuli and the general stimulus category. When incongruity occurs, people will switch to piecemeal processing and a greater cognitive elaboration may occur (Mandler, 1982; Meyers-Levy & Tybout, 1989). Therefore, schema-incongruent information receives more cognitive resources than schema-congruent information.

Bobrow and Norman (1975) suggest that people find it more important to process information that is least expected. They argue that people process schema-incongruent information more deeply to understand why the deviation occurred, while little information can be gained from schema-congruent stimuli. A script is activated when the situation is not new. If script-based expectations are similar to the current experience, little cognitive elaboration will occur (Shoemaker, 1995). In fact, events that occur as expected tend not to be as memorable (Brewer & Dupree, 1983; Graesser, Woll, Kowalski & Smith, 1980; Maki, 1990).

# **A Script Theoretical Perspective of Behaviors of Other Consumers**

As shown in script literature, information processing in service encounters is largely script-based. While script-incongruent stimuli activate a holistic mode of information processing, script-incongruent stimuli require a piecemeal mode of processing and get deeper cognitive elaboration. Therefore, consumers' judgments about behaviors of others in service encounters are likely to be script-based. It is proposed that, in service encounters, other consumers' behaviors can be categorized into two broad categories: script-congruent behaviors and script-incongruent behaviors. Furthermore, script-incongruent behaviors are valenced. The behavioral incongruence can be either negative or positive in valence. The script-congruence/incongruence

schema captures the context-specific aspect of rules of conduct in service encounters, yet provides an encompassing and parsimonious way to define behaviors of other consumers in service encounters.

## **Emotional Responses to Behaviors of Other Consumers**

Guided by ontologically different perspectives in presence of other consumers in service settings, research in emotional responses to behaviors of others evolve into several different streams. In this section, current research on this topic is reviewed.

# **A Physical Perspective**

One research stream takes a "physical perspective" of the presence of other consumers in service settings and investigates consumer responses to the physical aspect of the presence.

Research on consumer density (the number of consumers that are present in a service setting) and consumer perceptions of crowding represents this area of research (e.g., Bateson & Hui, 1986; Eroglu & Harrell, 1986; Hui & Bateson, 1991). Findings suggest that consumer crowding has a negative impact on atmospheric perceptions. However, a focal consumer's perceived control of the situation mediates the impact of consumer density on the pleasantness of the service experience (Hui & Bateson, 1991). In addition, perceived crowding is believed to have a threshold, as long as the crowding is below the threshold, satisfaction with the service experience is positively associated with the perceived crowding (Eroglu & Harrell, 1986).

# **A Psychological Perspective**

Emotional responses to behaviors of others are also examined from a psychological perspective. Using Festinger's (1954) theory of social comparison as a theoretical framework, several studies (Moschis, 1976; Zhou & Soman, 2003) investigated purchasing and queuing behaviors. These studies suggest that a consumer' purchasing decision can be influenced by others who he/she considers at about the same level. For queuing behaviors, Zhou and Soman (2003) suggest that consumers are in a relatively more positive affective state and the likelihood of reneging is lower as the number of people behind increases. Adopting the social facilitation paradigm (Zajonc, 1965), several studies investigated shopping behaviors in the presence of others. Sommer and Sommer (1989) found that groups in coffeehouses spent more time in service settings than lone individuals and that joined parties stayed the longest. Similarly, Sommer, Wynes and Brinkley (1992) observed that group shoppers spent more time in the stores and purchased larger loads than lone shoppers.

# **Consumer Compatibility Research**

The first systematic research on the influence of other consumers in service settings can be traced back to a series of studies introduced under the rubric of consumer compatibility (Martin & Pranter, 1989). In examining individual level differences in perceptions of incompatibility in consumer-to-consumer interactions, Raajpoot and Sharma (2006) found that mood, expectations, and perceived control over outcomes are the three most important factors influencing perception of incompatibility. Value system, control over process, and involvement affect perceived incompatibility to a lesser extent. More recently, Zhang (2005) proposes three dimensions of other consumers in service encounters that may influence consumers' emotional

and behavioral reactions: crowding, appearance and behaviors. She also includes three sets of moderating variables in the framework: 1) individual differences (e.g., sociability, emotional contagion and experience); 2) situational factors (e.g., companionship, duration, and desire for privacy); and 3) firm-related factors (e.g., firm policy and employee responses).

## A Dual-Process Model of Emotional Responses

As shown in above review of literature, research in emotional responses to behaviors of other consumers is fragmented. As observed by Zhang (2005), there is generally a lack of theory in literature that explains the process of influence of other consumers and how and why other consumers influence one's service experiences. This research is an attempt to provide a theoretical framework to systematically model consumers' emotional responses to behaviors of others in service encounters. Drawing from the dual-process conceptualization of emotional communications (Buck, 1985, 1988) and the Social Facility Theory (e.g., Zajonc, 1965), this dissertation proposes a dual-process model of emotional responses to behaviors of other consumers, including *spontaneous* emotional responses and *symbolic* emotional responses in the conceptual framework.

### **Dimensions of Emotions**

Emotions are defined as "intense, short-lived and usually have a definite cause and clear cognitive content" (Forgas, 1992, p.230). Some emotion theorists also define emotion as a valenced affective reaction to perceptions of situations (Clore, Ortony & Foss, 1987; Ortony, Clore & Collins, 1988). Russell (1983) proposes a bipolar continuum of pleasantness-

unpleasantness. Other researchers (e.g., Abelson et al., 1982; Bradburn, 1969) suggest two largely independent unipolar dimensions corresponding to positive and negative affect.

Westbrook (1987) favors a bi-dimensional conceptualization of consumption-related affective experience because the bi-dimensional conceptualization allows for ambivalence or simultaneous experience of pleasant and unpleasant states. In addition, the bi-dimensional conceptualization also allows for an occurrence of a neutral state (neither pleasant nor unpleasant) such as surprise. This dissertation follows Westbrook's (1987) conceptualization and approach consumer's emotional responses from the positive and negative bi-dimensional structural perspective.

Besides understanding the structural dimensions of emotional experience, emotion theorists also attempt to classify the variety of subjective feelings into a small set of primary affects (e.g., Izard, 1977; Plutchik, 1980; Tomkins, 1980). These taxonomies are in substantial agreement on the basic categories of primary affects. Izard's (1977) taxonomy of affective experience suggests that positive affects include fundamental discrete affects such as interest and joy, while fundamental discrete negative affects include anger, disgust, contempt, distress, fear, shame and guilt. Izard's (1977) taxonomy also includes a neutral affect of surprise.

# **Interpersonal Causes of Emotions**

While many emotion theorists consider emotions as an individual phenomenon, others consider emotions as an interpersonal phenomenon (e.g., Averill, 1985; Parkinson, 1995). The interpersonal perspective of emotions posits that emotions are socially constituted over the course of on-line interpersonal encounters. Kemper (1978) suggests that the most important objects in anyone's environment are other people, what they say, and what they do. Many emotions are explicitly directed at other people and arise out of interactions with them.

Parkinson (1995) goes so far as to argue that other people supply the most important class of emotion-inducing events. Anger, for example, does not usually make sense without someone else whom to be angry at.

One way behaviors of others may influence emotional responses is via appraisal (Parkinson, 1995). Emotions are thought to arise as a function of an individual's evaluation of the meaning, causes, consequences, and/or personal implications of a particular stimulus (Arnold, 1960; Lazarus, Kanner & Folkman, 1980; Weiner, Russel & Lerman, 1979). Considering the various negatively valenced fundamental emotions proposed by Izard (1977), anger, disgust, and contempt reflect an underlying attribution of causal agency to other people, guilt and shame to individual him- or herself, and fear and sadness to the situation (Westbrook, 1987). In this dissertation, only those emotions involving attribution of causal agents to other consumers are of interest and their impact on encounter satisfaction is explored.

Unlike negative emotions, previous research indicates that positive emotions are invariably outcome-dependent, that is, linked directly to an eliciting stimulus with no further attributional search (Weiner, Russell & Lerman, 1979). Hence, positive emotions such as delight and happiness, if elicited by behaviors of other consumers, are necessarily affective responses directed at other consumers.

# **Script-Based Emotional Responses**

A social setting is a dynamic and effective emotional stimulus (Buck et al., 1992).

People respond to others, at least in part, at an affective level (Heise, 1979; Heise & Mckinnon, 1987; Smith-Lovin, 1987a, 1987b). For example, a consumer may experience feelings of disapproval when he or she perceives other consumers' behaviors as violating situational scripts.

In situations where a focal consumer's service experience is jeopardized, angerlike emotions are elicited when disapproval of the action is combined with being displeased with the outcome of that event (Clore & Ortony, 2000).

Affect is arguably the most fundamental dimension of interpersonal behaviors (Forgas, 2000; Zajonc, 1980). Persons, events, or objects typically elicit emotions that then become the object at which the emotions are directed (e.g., Schimmack, Oishi, Diener & Suh, 2000). One basic mode of emotion elicitation is comparison with a standard (Hoffman, 1986). In service encounters, situational scripts are likely to serve as tacit standards. When one compares an instance of behavior to a standard: whether the behavior fits the standard, exceeds it, misses it, or violates it, an emotional response is elicited (Hoffman, 1986; Oliver, 1989). Oliver (2000) labels such emotional responses to behavioral discrepancy as discrete "affect markers". These affect markers can be either positive (e.g., "delight" and "pleasure") or negative (e.g., "annoyance" and "anger").

Script is a set of expectations a consumer brings to the transaction (Shoemaker, 1995). Deviations from an expected script can affect a consumer's emotional state (Smith & Houston, 1983). Specifically, when an activity in the current situation does not conform to script-based expectations, this unexpected activity, referred to as an atypical event, can produce a positive, negative, or neutral reaction (Graesser et al., 1979; Graesser et al., 1980; Maki, 1990). In fact, emotions are even considered as a function of script congruence (Mandler, 1982).

The script-based information processing literature suggests that, in service settings, when other consumers behave in accordance with the scripts, a holistic information processing mode shall prevail and minimal cognitive elaboration occurs. In contrast, when behaviors of other consumers are script-incongruent, a piecemeal information processing mode operates and results

in greater cognitive elaboration. The script-incongruent behaviors are considered as unexpected activities and can produce valenced emotional responses. Therefore, it is proposed:

**Hypothesis 1**: The valence of other consumers' script-incongruent behaviors is positively related to the valence of a focal consumer's spontaneous emotional responses.

# Script-Triggered Emotional Responses and Outcome Dependency

According to Fiske and Pavelchak (1986), script-triggered information processing is associated with outcome dependency. When the perceiver's outcomes depend on the target person, affective responses to the target person are more likely to be triggered by piecemeal information processing. Erber and Fiske (1984) reason that outcome dependency increases cognitive elaboration on script-incongruent information. The outcome-dependent perceiver is more likely to be motivated to think hard than the perceiver who is not outcome-dependent. This, in turn, should encourage piecemeal processing.

The notion of outcome dependency is parallel to the concept of salience of other consumers in a service encounter proposed by this work. Clearly, when salience of other consumers in a service encounter is high, the outcome of a focal consumer's service experience is more dependent on other consumers. Encountered with script-incongruent behaviors from other consumers, based on Fiske and Pavelchak (1986)'s outcome-dependency prediction, the focal consumer is more likely to be motivated to engage in piecemeal information processing. With greater cognitive elaboration and greater outcome-dependency, heightened emotional responses are expected. Hence, it is proposed:

**Hypothesis 2**: Salience of other consumers moderates the effect of other consumers' scriptincongruent behaviors on a focal consumer's spontaneous emotional responses, such that the effect is more pronounced in the high (than low) salience condition.

# **Distinction between Experienced and Expressed Emotions**

As argued by emotional regulation theorists, it is important to distinguish between experienced and expressed emotions because expressed emotions do not always match experienced emotions (Rafaeli & Sutton, 1989). Buck (1985, 1988) proposes a dual-process model of emotional communication: a spontaneous stream that is biologically based and a symbolic stream that is learned and culturally patterned. He argues that when the subject is alone, the spontaneous response to emotional stimulus is the dominant communication mode, but in a social setting the emotional response is complicated both by "display rules and by the social situation being a dynamic and effective emotional stimulus in its own right" (Buck, Losow, Murphy & Costanzo, 1992, p.962). In essence, spontaneous responses represent *felt emotions* while the symbolic response reflects the learned pattern of *emotional expressions* (Fridlund, 1991). According to Hochschild (1983), there is an internal essence to emotions that remains spontaneous and untouched by the contingent interpersonal world. Symbolic emotional responses, that is, emotional expressions, are governed by display rules and overlaid on the spontaneous emotional system (Ekman, 1972).

# **Behavioral Scripts as Emotional Display Rules**

The concept of display rules (Ekman, 1972) holds that "the expression of one's internal feeling state may be controlled and modified in a variety of ways, by presenting an expression

that minimizes, exaggerates, or masks the feeling state to suit the particular demands of the social situation" (Friedman & Miller-Herringer, 1991, p.766). Display rules are thought to depend upon shared beliefs about appropriateness of expressions (Ekman, 1973). In a service consumption context, behavioral scripts largely define the social appropriateness of emotional displays.

In consumer literature, display rules are investigated mainly in consumer-provider interactions (e.g., Rafaeli & Sutton, 1989, 1990; Sutton, 1991). Hochschild (1983) suggests that consumers and service providers share a set of expectations in emotional displays in a service encounter. The expectations are a function of societal norms, occupational norms and organizational norms (Rafaeli & Sutton, 1989). In a similar vein, it can be inferred that among consumers a set of expectations about emotional displays are likely to be situational scripts for a particular service encounter. Extant literature is scant on emotional displays in consumer-to-consumer interactions at service encounters. To this end, this dissertation explores emotional expressions toward behaviors of other consumers at service encounters and its impact on encounter satisfaction.

## **Social Facilitation/Inhibition of Emotional Displays**

It is widely agreed that emotional displays evolved to serve social functions and such emotional displays are particularly susceptible to social influences (Buck et al., 1992). Presence of others complicates emotional displays especially when others function as eliciting stimuli themselves (Buck, 1990). In fact, displayed emotions are a form of communication (Mattila & Enz, 2002; Rafaeli & Sutton, 1990). Interpersonal view of emotions (Parkinson, 1995) suggests that consumers' emotional states are communicated through emotional displays to other

consumers who function as eliciting stimuli. Emotional displays convey important information about how the consumer will ultimately assess a service encounter.

Empirical evidence shows both the social facilitation and inhibition effects of the presence of other consumers on emotional expressions. In a study on facial expressions in the presence of others, Fridlund and his colleagues (1990) found that when asked to imagine a pleasant experience, subjects demonstrated greater levels of facial expressions (social facilitation) in "with others" condition than "alone" condition. Similarly, Dale, Hudak and Wasikowski (1991) found greater levels of expressiveness to humorous (positive emotional stimuli) videotapes in women who were informed that they were being videotaped than in women who viewed the videotapes alone. In contrast, Kraut (1982) found that persons presented with unpleasant smells (negative emotional stimuli) were less expressive (social inhibition) in the presence of others. Yarczower and Daruns (1982) suggest that children were more expressive when they viewed a series of affective slides alone than when an experimenter was present.

In an effort to reconcile these two seemingly contradictory sets of findings, Buck et al. (1992) conclude that social facilitation effect manifests in situations involving pleasant emotional stimuli and that others present often have a personal relationship with the subject, while social inhibition effects occur in situations involving negative emotions or the others present are strangers. Social facilitation researchers generally agree that the presence of strangers would have inhibitory effects relative to the presence of friends, whereas the effects of the presence of friends would depend on the type of emotional stimuli: Positive stimuli would produce social facilitation and negative stimuli social inhibition.

### **Inhibition of Undesirable Behaviors**

The motivational view (Berger et al., 1981; Blank, 1980) suggests that people suppress the expression of socially undesirable behaviors to avoid social disapproval. Geen (1985) offers an anxiety and passive avoidance explanation to the social presence-induced inhibition of undesirable behaviors. He explains that, in situations that have potential for causing a person embarrassment, the motivational effect is manifested in the person's desire to protect self image by engaging in behaviors that make the person look good, or, perhaps even more important, allow him or her to avoid looking bad. Or sometimes, a deference decision may be based merely on the intention of trying to avoid an uncomfortable social scene (Neuberg, 1996). Evidence of inhibition of socially undesirable emotional expressions was reported by Kraut (1982), who found that persons presented with unpleasant smells (negative emotional stimuli) were less expressive (social inhibition) in the presence of others.

The degree of inhibition of emotional expressions depends on the social consequences of the expressions (Friedman & Miller-Herringer, 1991). Other consumers' negative behaviors mirror a situation where responses to such behaviors have potential for causing a person embarrassment or loss of esteem of others. In this case, inhibition of undesirable behaviors is likely to occur. In essence, the proposition is that the very presence of other consumers changes the way a focal consumer responds to the behaviors demonstrated by other consumers, especially when such behaviors are negative. Inhibition of emotional expressions is likely to cause a mismatch between the felt emotions and expressed emotions, an emotional state labeled as *emotive dissonance* (Kruml & Geddes, 2000). Hence, it is proposed:

**Hypothesis 3**: Greater emotive dissonance is experienced in consumers' symbolic emotional responses to negatively-valenced (than positively-valenced) script-incongruent behaviors of other consumers in service encounters.

In consumption situations where salience of other consumers is high, presence of other consumers becomes an integral part of the consumption experience. Consequently, the social consequences of expressions of socially undesirable emotions, such as anger towards other consumers, are more severe. Based on Geen's (1985) anxiety and passive avoidance explanation to the social presence-induced inhibition of undesirable behaviors, it can be inferred that, when salience of other consumers is high, consumers may suppress expressions of socially undesirable negative emotions, causing greater emotive dissonance between felt emotions and expressed emotions. In contrast, expressions of positive emotions, such as delight and happiness, are generally socially desirable. Therefore, consumers are unlikely to experience less emotive dissonance in response to other consumers' positive behaviors. The hypothesis is summarized as follows:

**Hypothesis 4**: Salience of other consumers moderates the effect of other consumers' scriptincongruent behaviors on emotive dissonance, such that the effect is more pronounced in a high than low salience condition when behaviors are negatively valenced; there is no difference in emotive dissonance when the behaviors are positively valenced.

# **Coping Responses**

When other consumers demonstrate negative behaviors in a shared service environment, the service encounter can be a stressful event which requires a certain degree of coping (Folkman, Lazarus, Dunkel-Schetter, DeLongis & Gruen, 1986). Coping is assessed as a response to the psychological and environmental demands of stressful encounters (Folkman et al., 1986). It is defined as a person's constantly changing cognitive and behavioral efforts to manage specific external and/or internal demands that are appraised as taxing or exceeding the person's resources (Lazarus & Folkman, 1984).

Coping theorists (e.g., Lazarus & Folkman, 1984; Folkman et al., 1986) generally view coping as contextual. The emphasis on context suggests that situational variables play an important role in shaping coping efforts. Coping involves multiple strategies which fall into two general types of coping: *problem-focused coping* and *emotion-focused coping*. Problem-focused coping is aimed at doing something to alter the troubled person-environment relation causing the distress, and emotion-focused coping is oriented toward regulating negative emotions (Carver, Scheier & Weintraub, 1989; Folkman et al., 1986).

According to COPE inventory (Carver et al., 1989), in each of the two broad categories of coping, there are specific coping activities. For example, in the category of problem-focused coping, specific activities include active coping planning, suppression of competing activities, restraint coping, seeking social support for instrumental reasons and seeking social support for emotional reasons. In the category of emotion-focused coping, specific activities include positive reinterpretation and growth, acceptance, turning to religion, venting of emotions, denial, behavioral disengagement, mental disengagement and alcohol-drug disengagement.

The pattern of coping responses is complex and is determined by many variables (Carver et al., 1989). However, it is generally believed that problem-focused coping tends to predominate when people are in encounters that are considered as changeable, whereas emotion-focused coping tends to predominate in encounters that are thought to be unchangeable (Folkman & Lazarus, 1980). In addition, variability in coping is also partially a function of people's judgments about what is at stake in specific stressful encounters and what they view as the options for coping (Folkman et al., 1986). In stressful encounters in which minimal psychological and social stakes are involved, people use significantly less confrontational problem-focused coping and are more likely to engage in escape-avoidance emotion-focused coping (Folkman et al., 1986). Hence,

**Hypothesis 5**: Consumers are more likely to use problem-focused strategies (emotion-focused strategies) in coping with other-consumer-elicited negative emotions when the salience of other consumers is high (low).

### **Encounter Satisfaction**

Consumer service encounter response has been defined predominantly in terms of encounter satisfaction (Fisk, Brown & Bitner, 1993). Encounter satisfaction is typically assumed to vary along a continuum from unfavorable (dissatisfied) to favorable (satisfied) (Price et al., 1995). Satisfaction judgments are believed to represent a higher-order cumulative or global evaluation of the service encounter (Anderson & Fornell, 2000). In this dissertation, satisfaction refers to transaction specific satisfaction. The transaction-based conceptualization views

satisfaction as a post-purchase evaluative judgment for a specific purchase occasion (Anderson & Fornell, 1994).

# **Impact of Behaviors of Other Consumers on Encounter Satisfaction**

Previous studies in consumer satisfaction suggest that the human interaction component of serivce delievery is essential to the determination of consumer satisfaction/dissatisfaction (e.g., Bitner, Booms & Tetreault, 1990). For example, using the Critical Incident Technique (CIT), Bitner, Booms and Tetreault (1990) identified four categories of unfavorable incidents that contribute to consumer dissatisfaction, one of which is disruptive others. Using a similar technique, Grove and Fisk (1997) find that half of the subjects in their study reported that other consumers sharing the service environment with them had significantly affected, positively or negatively, their satisfaction with a tourist attraction. Similarly, Zhang's (2005) study in the restaurant and airline service contexts suggest that appearance (similarity and displayed emotions) and displayed behaviors of other consumers influence the focal consumer's service experience (e.g., comfort and desire to leave). Harris and Baron (2004) studied conversations between strangers during rail travel. Using a market-oriented ethnography method, they found that conversations between strangers have a stabilizing impact on consumer expectations and service perceptions, which results in a reduction in dissatisfaction. The authors propose three components of the stabilizing effect: consumer risk/anxiety reduction, enactment of the partial employee role, and supply of social interactions. They further suggest that the stabilizing effect is more evident when consumers are in close proximity for prolonged periods and regularly express dissatisfaction with service provision.

Taken together, prior research suggests that behaviors of other consumers affect encounter satisfaction. In addition, other consumers' impact on encounter satisfaction is also influenced by situational factors, such as duration and spatial proximity of the encounters. To incorporate these findings into a script theoretical perspective and a multidimensional conceptualization of presence of other consumers, it is proposed:

**Hypothesis 6**: The valence of other consumers' script-incongruent behaviors is positively related to the valence of a focal consumer's encounter satisfaction.

**Hypothesis 7**: Salience of other consumers moderates the effect of other consumers' scriptincongruent behaviors on a focal consumer's encounter satisfaction, such that the effect is more pronounced in the high salience condition.

# **Impact of Spontaneous Emotional Responses on Encounter Satisfaction**

Research suggests that individuals frequently use their affective state as a source of information in evaluative judgments (e.g., Clore, Schwarz, & Conway, 1994; Schwarz, 1990). "How do I feel about it?" serves as a heuristic in this process (Schwarz & Clore, 1988). Informative functions of affective states are based on the assumption that affective states inform individuals about the nature of the situation in which they are experienced. Individuals' affective states have been shown to influence evaluative judgments such as satisfaction with consumer goods (Isen, Shalker, Clark & Karp, 1978).

So under what conditions are individuals likely to use the "How do I feel about it?" heuristic to make evaluative judgments? Literature (e.g., Schwarz & Clore, 1988) suggests that

two of these conditions are: 1) when the judgment at hand is affective in nature; and 2) when the judgment is overly complex. Encounter satisfaction as an evaluative judgment meets these conditions. First, a satisfaction judgment is believed to have an affective component (Oliver, 1993). Second, a satisfaction judgment can be complex given that a service experience often involves both tangible and intangible elements. In some situations, a satisfaction judgment can not be adequately made even after a consumption is completed. Consumer research shows that emotions play a significant role in the satisfaction response (e.g., Oliver, 1993, 1997; Westbrook & Oliver, 1991). Westbrook (1987) argues that affective responses elicited during the consumption experience are necessarily incorporated into satisfaction response. In addition, affective responses to the service encounter can positively or negatively influence a consumer's satisfaction response (Johnson & Zinkhan, 1991).

Service literature offers several mechanisms as to how affective responses are incorporated into the satisfaction response. The "affective markers" perspective (Cohen & Areni, 1991) suggests that an affective-processing mechanism is the underlying process of the incorporation of consumption emotions to satisfaction judgment. The affective-processing mechanism involves a process in which emotions elicited during consumption experiences are believed to leave strong affective traces or "markers" in memory. These memory elements are highly accessible and are retrieved and integrated into the satisfaction judgment. Oliver (2000) suggests that these affective markers, evoked by the states of expectancy disconfirmation, become "a tandem input to the satisfaction response" (p.250). Another explanation offered in consumer literature is the "emotion as amplifier" perspective which posits emotion functions as an amplifier of consumption experiences (Johnson & Zinkhan, 1991; Tomkins, 1980).

According to Schwarz (1990), when individuals use their affective states as a source of

information for evaluative judgments, the impact of feelings on judgments depends on an affective state's perceived informational value. If individuals perceive their affective states as not relevant to the evaluation of an experience, the informational value of their affective states for evaluating that experience will be discredited. In addition, the feelings-as-information hypothesis also predicts that the more relevant the emotion-eliciting stimulus is to the judgment, the more pronounced the effect of the affective state on evaluative judgment will be. Both the content of the affective response and the affective response itself contribute to an increased accessibility of affective information in memory. Hence, it is proposed:

**Hypothesis 8:** Other-consumer-elicited spontaneous emotional responses are positively related to encounter satisfaction.

# Impact of Symbolic Emotional Responses on Encounter Satisfaction

A large body of literature exists to support the notion that the manner in which an individual displays feelings has a strong impact on satisfaction (e.g., Grandey, Tam & Brauberger, 2002; Kleinke, Peterson & Rutledge, 1998; Mattila & Enz, 2002; Rafaeli & Sutton, 1987, 1989, 1990). It is generally agreed that emotion regulation only modifies its mode of expression but usually leaves the underlying emotional responses untouched. However, even superficial changes in emotional displays can lead to deeper emotional consequences over the course of an encounter, such as encounter satisfaction (Parkinson, 1995).

Compelling evidence suggests that inhibition of emotional expressions, either through lack of facial expressiveness or intentional efforts to hide true feelings, is arousing and stressful (for a review, see Pennebaker, 1985). Not surprisingly, inhibition of emotional expressions has

affective consequences (Polivy, 1990). According to Izard (1990), regulation of emotional expressions contributes to the subjective experience of emotions. Empirical evidence (e.g., Cupchik & Leventhal, 1974; Leventhal & Mace, 1970) supports the notion that feedback from self-managed expressive behaviors influences the subjective experience of emotions. Hence, one might expect that individuals who suppress their emotional responses and inhibit emotionally appropriate behaviors will feel worse than those who behave in accordance with their feelings. In the context of this dissertation, affective consequences of inhibition of emotional expressions are expected to reflect on encounter satisfaction, the global evaluative judgment of a service encounter. Therefore, emotive dissonance, an indicator of inhibition of emotional expressions, is expected to negatively affect encounter satisfaction. The hypothesis is summarized as follows:

**Hypothesis 9:** Other-consumer-elicited emotive dissonance is negatively related to encounter satisfaction.

# **Individual Differences in Consumers' Emotional Responses**

As with all behavioral relationships, the strength and direction of the relation between variables is moderated by individual and situational factors (Bitner, 1992). Individuals differ markedly in the extent to which they regulate their behaviors in social settings (Friedman & Miller-Herringer, 1991). At least two individual differences (public self-consciousness and self-monitoring) are believed to explain part of the variances in consumers' emotional responses to behaviors of other consumers in service encounters (Lambert, Payne, Jocoby, Shaffer & Chasteen, 2003; Rafaeli & Sutton, 1989). As individual differences in consumer responses are

not the main focus of this dissertation, they are not included in the proposed conceptual framework. However, to account for individual differences in consumers' emotional responses to behaviors of other consumers in service encounters, public self-consciousness and self-monitoring are included as covariates in statistical analyses.

### **Public Self-Consciousness**

Public self-consciousness is defined as "a general awareness of the self as a social object that has an effect on others" (Fenigstein, Scheier & Buss, 1975, p.523). Lambert et al. (2003) suggests that public settings might make people self-conscious, this heightened self-consciousness in public settings will in turn increase the accessibility of people's own attitudes. Increased accessibility of people's own attitudes will then increase people's likelihood to use their own value systems to make judgments of others in social settings. In addition, Turner and Peterson (1977) report the moderating effect of public self-consciousness on self-reported emotional expressiveness. Therefore, public self-consciousness is included as a control variable in statistical analyses on the effects of script-incongruent behaviors of other consumers on consumer's symbolic emotional responses.

## **Self-Monitoring**

Snyder (1974, 1987) suggests that individuals differ in their ability to monitor and control their emotional displays to present themselves in a socially approved manner. He describes self-monitoring as an individual difference with a motivation linked to concerns for social appropriateness within a specific and immediate context. Synder (1987) speculates that some individuals may have learned that their affective experiences and expressions are somehow

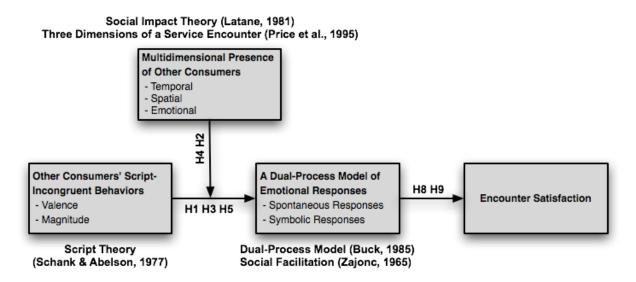
socially inappropriate. To compensate, these individuals will monitor and attempt to control their own self-presentation and expressive behaviors. Therefore, some researchers suggest that self-monitoring as an individual difference may be useful in predicting variation in emotional displays (Rafaeli & Sutton, 1989). Snyder and Gangestad (1986, p.125) argue that "it is as if high self-monitoring individuals chronically strive to appear to be the type of person called for by each situation in which they find themselves, and it is as if low self-monitoring individuals strive to display their own personal dispositions and attitudes in each situation in which they find themselves." In this dissertation, self-monitoring is included as a control variable in consumers' symbolic emotional responses to behavior of other consumers in service encounters.

## **Summary**

The literature that pertains to consumer responses to behaviors of other consumers in service settings was reviewed. Based on the literature in consumer research and social psychology research, this dissertation proposes that expectations for behaviors of other consumers in service settings are largely script-based. It is further proposed that script-incongruent behaviors of other consumers are likely to elicit valenced emotional responses from consumers. However, the presence of other consumers is likely to influence how consumers express such emotions. This dissertation proposes that emotional responses and emotional expressions jointly affect encounter satisfaction. The hypothesized relationships presented in the preceding discussions are visualized in Figure 2.1.

Figure 2.1

A Dual-Process Model of Consumers' Emotional Responses to Behaviors of Others



The hypotheses proposed in this dissertation are summarized as below:

**Hypothesis 1**: The valence of other consumers' script-incongruent behaviors is positively related to the valence of a focal consumer's spontaneous emotional responses.

**Hypothesis 2**: Salience of other consumers moderates the effect of other consumers' scriptincongruent behaviors on a focal consumer's spontaneous emotional responses, such that the effect is more pronounced in the high (than low) salience condition.

**Hypothesis 3**: Greater emotive dissonance is experienced in consumers' symbolic emotional responses to negatively-valenced (than positively-valenced) script-incongruent behaviors of other consumers in service encounters.

**Hypothesis 4**: Salience of other consumers moderates the effect of other consumers' scriptincongruent behaviors on emotive dissonance, such that the effect is more pronounced in a high than low salience condition when behaviors are negatively valenced; there is no difference in emotive dissonance when the behaviors are positively valenced.

**Hypothesis 5**: Consumers are more likely to use problem-focused strategies (emotion-focused strategies) in coping with other-consumer-elicited negative emotions when the salience of other consumers is high (low).

**Hypothesis 6**: The valence of other consumers' script-incongruent behaviors is positively related to the valence of a focal consumer's encounter satisfaction.

**Hypothesis 7**: Salience of other consumers moderates the effect of other consumers' scriptincongruent behaviors on a focal consumer's encounter satisfaction, such that the effect is more pronounced in the high salience condition.

**Hypothesis 8:** Other-consumer-elicited spontaneous emotional responses are positively related to encounter satisfaction.

**Hypothesis 9:** Other-consumer-elicited emotive dissonance is negatively related to encounter satisfaction.

In the following chapter, research methodology to empirically test these hypotheses is proposed.

### **CHAPTER III**

## METHODOLOGY AND RESULTS OF PILOT STUDIES

## Overview of Method and Design

This dissertation examined the effects of other consumers' behaviors on a focal consumer's emotional experience and subsequent encounter satisfaction. This research included three pilot studies and one main study. This chapter reports the methodology and results of the three pilot studies. Pilot Study 1 was a manipulation check for the salience of other consumers. Pilot Study 2 pre-tested the efficacy of the script-incongruent behavior manipulations. Pilot Study 3 was conducted to fine-tune the two manipulations.

# Pilot Study 1

### Overview

The primary purpose of the Pilot Study 1 was to check the efficacy of the manipulation of salience of other consumers in a service encounter. Based on the Social Impact Theory (Latane, 1981), this dissertation proposes that salience of other consumers is a function of the three dimensions of a service encounter: temporal duration, spatial proximity and emotional content.

Two service contexts were chosen for this study: restaurant and airline service. The rationale for the selection of these two service contexts is as follows: 1) Consumption of these two services entails face-to-face encounters with other consumers, thus making the presence of other consumers an inherent part of the service encounter; 2) Within each of these two service

contexts, there are service categories that naturally vary along the three dimensions of the service encounter, making the manipulations realistic. For example, compared to fine dining, encounters with other consumers in a fast food outlet are typically brief, distant and impersonal. Likewise, compared to a long distance flight, encounters with passengers on a short distance flight are usually brief and impersonal; 3) These two service contexts differ on the hedonic/utilitarian dimension. Typically, dining is perceived as more hedonic-driven while a flight experience is more utilitarian in nature. Testing the hypotheses in both contexts would allow this study to explore differential responses (if any) manifested in hedonic and utilitarian service consumptions; and 4) Both of these two service contexts are under the broad umbrella of hospitality services, thus providing important managerial implications for industry practitioners.

To manipulate salience of other consumers, in the restaurant context, fast food service was used to represent low salience condition while fine dining was used to represent high salience condition. Similarly, in the airline service context, a short-distance flight was chosen to represent low salience condition while a long-distance flight was used to represent high salience condition.

# **Participants**

Participants of Pilot Study 1 were recruited from the same population as the main study. Seventy three undergraduate students in hospitality management at the Pennsylvania State University were recruited through class announcement. Table 3.1 reports the number of valid observations per cell for the four service encounters chosen. Thirty two percent of the participants (32%) were male (n=23) while 68% were female (n=50). The average age of the participants was 21 years old (range from 19 to 46).

Table 3.1

Number of Valid Observations per Cell
for the Four Service Encounters

Service Encounter	Cell Size (n)	
Restaurant Context	·	
Fast Food	15	
Fine Dining	18	
Airline Service Context		
Short-Distance Flight	21	
Long-Distance Flight	19	
Total	73	

# **Procedures**

Participants were randomly assigned to one of the four service encounters. They responded to a series of questions assessing the three dimensions of the service encounter. Two open-ended questions were also included to solicit experimental stimuli for script-incongruent behaviors of other consumers, which would be pretested in Pilot Study 2.

# Measures

The three dimensions of the service encounter were measured on a seven-point scale: temporal duration (1 = brief and 7 = extended), spatial proximity (1 = intimate and 7 = distant), and emotional content (1 = impersonal and 7 = personal).

To solicit experimental stimuli for script-incongruent behaviors, the two open-ended questions were included ("Can you think of situations where the behaviors of other customers were unacceptable? Please describe these behaviors." and, "Can you think of situations where the behaviors of other customers surprised you in a pleasant way? Please describe these behaviors"). A sample questionnaire is presented in Appendix A.

### **Results**

The Three Dimensions of Service Encounters

In each service context, a series of independent sample t-tests were performed between the two salience conditions on measures of temporal duration, spatial proximity and emotional content. Table 3.2 provides the means and standard errors of the ratings.

Table 3.2

Means and Standard Errors of the Ratings on the Three Dimensions of the Service Encounter

Dependent measures	Resta	urant	Airline service	
	Fast food	Fast food Fine dining		Long-
			distance	distance
Temporal duration	2.46	3.05	2.47*	3.84*
	(.36)	(.45)	(.26)	(.32)
Spatial proximity	3.33	3.44	4.52	4.66
	(.30)	(.24)	(.28)	(.29)
Emotional content	2.00	2.50	2.66	3.36
	(.21)	(.27)	(.24)	(.38)

Notes: \*Statistically significant at p < 0.01.

As suggested by Social Impact Theory (Latane, 1981), social impact is a multiplicative function of the three dimensions of the service encounter. Therefore, a salience index was formed by multiplying the scores on the three dimensions for each observation. Results of independent t-tests on the salience index are presented in Table 3.3.

Table 3.3

Means and Standard Errors of the Salience Index

Dependent measures	Resta	urant	Airline service		
	Fast food	Fine dining	Short- distance	Long- distance	
Salience Index	19.93 (4.64)	29.72 (7.27)	33.04* (5.37)	68.63* (16.43)	

Notes: \*Statistically significant at p < 0.05.

As shown in Table 3.3, in the restaurant context, salience of other consumers was higher in the fine dining condition. However, the difference failed to reach conventional levels of significance (p = 0.28). In the airline context, as expected, salience of other consumers was significantly higher in the long-distance flight condition (t(38) = -2.14, p < 0.05).

# Responses to Open-Ended Questions

The qualitative data obtained from responses to the two open-ended questions were coded using typical content analysis procedures (Spradley, 1979; Strauss and Corbin, 1998; Yin, 1994). The purpose of the data analysis was to let categories emerge from the data rather than impose them a priori. Accordingly, open coding procedures were used to code the raw data first and then similar responses were iteratively grouped to arrive at a coding scheme (Strauss and Corbin, 1998). Then, axial coding and selective coding were used to integrate the categories (Strauss and Corbin, 1998). Table 3.4 presents the results of the qualitative data on unacceptable and pleasant behaviors of other consumers in service encounters.

Table 3.4

# Behaviors of Other Consumers in Service Encounters

### "Behavior out of norm"

"Any behavior out of norm is unacceptable"

**Categories of Negative Behaviors** 

### "Rowdy kids"

- "Customers letting their children run around the restaurant or bringing in a baby that will not stop crying"
- "Guests with young children and them not behaving in a nice place; make it less relaxing, take away the experience."

### "Loud"

- "when at a restaurant, the customers next to me continuously made a scene, being loud..."
- "When guests become verbal about their frustrations, it interrupts my experience..."
- "Just being aloud anyway they can without concerning others around"

### "Rude and Obnoxious"

- "Other customers were rude and obnoxious and they were screaming"
- "When customers are rude and disrespectful to the waitress..."

## "Drunk"

- "Drunk customers, customers that use profane language and do not respect others around them."
- "Drunk students late at night can be annoying"

# <u>Intrusion</u>

- "The guy was sitting next to me on my flight, took over the arm-rest the whole trip and did not move!"
- "People taking up too much space..."
- "I get annoyed when people talk to me when I am clearly busy...."

## Other

- "Passengers was sick and coughed the whole trip"
- "Chewing with mouth open"

# **Categories of Positive Behaviors**

### Polite

- "Talk to you in a polite way"
- "Seeing other people still remember to use simple please/thank you to servers..."

### Benevolent behavior

- "It is nice to see customers helping out servers..."
- "My friend and I had seats away from each other and a passenger switched with me."
- "Letting us sit before them when we had elderly party members."

### Friendly

- "Starting up conversation; showing interest in talking"
- "Very friendly people"
- "Passengers being friendly, making polite and light conversation"

### Respectful

"Having a general respect for other passengers"

## Other

"Flight from South Carolina to Scranton, PA, the whole plane was filled with college kids and it was just a good time"

# **Discussion**

Overall, the results suggest that the manipulations of salience of other consumers were successful. The insignificant difference in salience observed in the restaurant context is likely due to small cell sizes (n=15, 18). A larger sample size would have likely brought the difference to the significance level. On the other hand, a subtle manipulation will provide a stringent test of the hypotheses.

In Pilot Study 2, manipulations for script-incongruent behaviors were tested. The qualitative data collected in Pilot Study 1 were used to develop the experimental stimuli. Pilot Study 2 is presented in the following section.

# Pilot Study 2

### Overview

The objective of Pilot Study 2 was to develop experimental stimuli for script-incongruent behaviors of other consumers and to check the efficacy of the manipulations. The Pilot Study 2 used a 2 (Script-incongruent behaviors: negative vs. positive) x 2 (Salience of other consumers: low vs. high) between-subjects factorial design. The 2 x 2 factorial design was replicated in two service contexts: restaurant and airline service. A control group was included in each context to provide baseline measures for meaningful comparisons of dependent variable measures across experimental conditions.

# **Experimental Stimuli**

To develop experimental stimuli for script-incongruent behaviors of other consumers, two-step procedures were followed. First, findings in prior studies were consulted.

According to Grove and Fisk (1997), there are two broad categories of behaviors: protocol and sociability. Protocol includes physical and verbal behaviors as well as benevolent acts of other consumers, while sociability refers to the friendliness manifested by other consumers. Next, exemplar behaviors falling into the two behavioral categories were identified from the qualitative data obtained in the Pilot Study 1. To manipulate negatively-valenced script-incongruent behaviors, "loud children" was chosen to represent a behavior that violates protocol in service encounters, since 60% of the responses in the qualitative data cited "rowdy kids" and some forms of "loud" behaviors (e.g., "yelling", "screaming", "shouting" "cell phone talking", and "children crying"). For the lack of sociability, the behavior of "sticking out tongue at you" was selected as 43% of the responses made reference to "rude and obnoxious" behaviors. To make the behavioral manipulations stronger, parents' behaviors were also manipulated. The negatively-valenced script-incongruent behaviors were described as "oblivious to the otherwise tranquil ambience in the restaurant (on the flight), the parents do nothing to keep the children under control."

Manipulations of positively-valenced script-incongruent behaviors were just the opposite of the negative ones. The stimuli were "courteous children" (protocol), "friendly smile" (sociability) and "parents make sure that the children are on their best behavior".

# **Participants**

The participants of Pilot Study 2 were recruited from the same population as the main study. Two hundred and sixty two undergraduate students in hospitality management at the Pennsylvania State University were recruited through class announcements. Of these, 60% were

female. The participants were between the ages of 18 and 30 (M = 19.81). Table 3.5 presents the number of observations per cell.

Table 3.5

Number of Observations per Cell

Service					
Context	xt Script-Incongruence			ence	
			Negative	Positive	Control
Restaurant	Salience of other consumers	Low	26	28	
		High	25	27	
		Control			25
	Salience of other consumers	Low	26	25	
		High	26	28	
		Control			26

# **Procedures**

Participants were randomly assigned to one of the ten experimental conditions.

Participants first read a scenario describing a service encounter embedded with salience and behavioral manipulations. Participants were then asked to respond to measures assessing cognitive responses, believability of the scenario, and encounter satisfaction. A thought listing protocol was also included to solicit qualitative feedback on the experimental stimuli.

### Measures

Cognitive Responses to Script-Incongruent Behaviors

A standard cognitive response measure was used as a manipulation check for script-incongruent behaviors (Cacioppo & Petty, 1981; Williams & Drolet, 2005). Participants were asked to rate the behaviors described in the scenario on four semantic differentials ranging from -3 to +3 and anchored at very negative/very positive, very unfavorable/very favorable, and very unpleasant /very pleasant, where higher scores mean more favorable cognitive responses.

# Believability of the Scenario

Two items were included to serve as manipulation checks for the believability of the scenario. The two items were "How <u>realistic</u> is the service encounter scenario described at the beginning of this questionnaire?" (1 = very unrealistic, 4 = neutral, and 7 = very realistic) and "How <u>easy</u> is it for you to image yourself in this scenario?" (1 = very difficult, 4 = neutral, and 7 = very easy).

# Encounter Satisfaction

Encounter satisfaction was measured using a six-item satisfaction scale (Oliver & Swan, 1989). The 7-point semantic differential scale included items such as "pleased me/displeased me", "contented with/disgusted with", "very satisfied with/very dissatisfied with", "did a good job for me/did a poor job for me", "wise choice/poor choice" and "happy with/ unhappy with".

# **Results**

Manipulation Checks for Script-Incongruent Behaviors

A cognitive response index was formed by averaging the ratings on the three cognitive response items ( $\alpha$ =.99). To test whether the valence and magnitude of the script-incongruent behaviors were manipulated as intended across the experimental conditions, an ANOVA test on cognitive response index was performed using script-incongruence, salience of other consumers and service context as between-subjects factors. The ANOVA results are presented in Table 3.6.

Table 3.6

ANOVA Results of Cognitive Response to Script-Incongruent Behaviors

	т ш		<u>-</u>	<u> </u>	
	Type III		3.5		
	Sum of		Mean		
Source	Squares	df	Square	F	Sig.
Corrected Model	776.014(a)	7	110.859	112.715	.000
Intercept	38.512	1	38.512	39.157	.000
Script-Incongruence	770.785	1	770.785	783.687	.000
Salience	.125	1	.125	.127	.721
Service Context	.398	1	.398	.405	.525
Incongruence * Salience	2.319	1	2.319	2.358	.126
Incongruence * Context	.034	1	.034	.034	.853
Salience * Context	1.478	1	1.478	1.502	.222
Incongruence * Salience * Context	.001	1	.001	.001	.977
Error	198.674	202	.984		
Total	1020.111	210			
Corrected Total	974.688	209			

a R Squared = .796 (Adjusted R Squared = .789)

The ANOVA analysis revealed a significant main effect of script-incongruent behaviors (F(1,202) = 783.68, p < 0.001). As expected, behaviors in positively-valenced script-incongruent conditions were rated more positive than those in negatively-valenced script-incongruent conditions (M's = 2.37 vs. -1.52; t(206) = -29.92, p < 0.001), and both were significantly different from the midpoint (t(106) = 30.03 and t(101) = -13.87, p's < 0.001).

As intended, the main effects of salience of other consumers (F(1, 202) = 1.27, p > 0.72) and service context (F(1, 202) = .40, p > 0.52) were insignificant. Furthermore, all the two-way and higher order interactions were insignificant (F's(1, 202) < 2.35, p's > 0.12). The ANOVA results suggest that the manipulation of the valence of the script-incongruent behaviors was as intended. Except for the intended manipulation, no systematic differences in cognitive responses to the script-incongruent behaviors were observed across the experimental conditions.

While the valence of the script-incongruent behaviors was successfully manipulated, it was also important to keep the magnitude of the behaviors equivocal across the experimental conditions for meaningful comparisons on dependent measures. To test for the equality of the magnitude, absolute values of the cognitive response scores were compared between negative and positive conditions. The scores in the two conditions were significantly different from each other (t(101) = 7.47, p < 0.001). As shown in Table 3.7, unexpectedly, the positive-valenced script-incongruent behaviors were perceived more positive than negative-valenced script-incongruent behaviors were perceived as negative, even though the behaviors in these two conditions were manipulated as the direct opposites of the other.

Table 3.7

Means and Standard Errors of Cognitive Response Index across Experimental Conditions

Service context	Negative script incongruence		Positive script incongruence	
	Low	High	Low	High
	salience	salience	salience	salience
Restaurant	-1.38	-1.48	2.21	2.54
	(.19)	(.19)	(.19)	(.19)
Airline service	-1.33	-1.75	2.32	2.31
	(.19)	(.19)	(.19)	(.18)

# Manipulation Checks for Believability of the Scenario

Overall, participants indicated that the scenarios were realistic (M = 4.62 on a 7-point scale) and were easy to imagine (M = 5.22 on a 7-point scale).

# Encounter Satisfaction

As part of the pretest for the main study, encounter satisfaction was subjected to an ANOVA test with script-incongruent behaviors, salience of other consumers and service context as between-subject factors. The results would provide a "sneak preview" of the patterns of the hypothesized relationships and offer invaluable insights to the design of the main study.

As expected, the main effect of script-incongruent behaviors was significant (F(1, 201) = 178.69, p < 0.001). Participants in positive behavior conditions reported greater encounter satisfaction than their counterparts in negative behavior conditions (M's = 6.01 vs. 3.68). However, the main effect of salience of other consumers and the interaction term between

salience of other consumers and script-incongruent behaviors failed to achieve conventional levels of statistical significance (p's > 0.12).

## **Discussion**

The objective of the Pilot Study 2 was to check the efficacy of the script-incongruent behavior manipulation. The results suggest that, overall, the manipulations were received as intended. The valence of the script-incongruent behaviors was successfully manipulated, but the unequivocal magnitude of script-incongruent behavior manipulation need to be further addressed. Reponses to the thought listing protocol provided insights into the possible causes of the unequivocal manipulations across the experimental conditions. For example, participants expressed a certain level of tolerance for children's negative behaviors (e.g., "Kids will always be kids."; "It's not the kids' fault, parents are the ones to blame"; and "You expect this kind of behavior from young children"). Therefore, it is likely that lenience towards children might have attenuated the negativity of the behaviors in negative conditions, resulting in the unequivocal behavioral manipulations between the negative and positive conditions.

The unequivocal manipulations could also be due to the fact that other aspects of the service encounter were described as somewhat positive (e.g., "Other than this episode, everything else goes as expected. The food is good and the service satisfactory/the flight lands on time and the checked-in luggage arrive promptly"). This unintentional positive intonation may have introduced certain positivity to all conditions, making the positively-valenced script-incongruent behaviors appear more positive and the negatively-valenced script-incongruent behaviors less negative. As a result, unequivocal manipulations occurred. Pilot Study 3 was conducted to correct the unequivocal manipulations and to test the modified manipulations.

## **Pilot Study 3**

# **Experimental Stimuli**

Manipulation of Script-Incongruent Behaviors

As revealed in Pilot Study 2, participants in the negatively-valenced script-incongruent conditions perceived the behaviors less negative than what was intended. To address this deficiency, two modifications were made to the experimental stimuli. First, the unintended positivity in describing other aspects of the service encounter was removed and made somewhat neutral. Other aspects of the service encounter were simply described as "as expected". Second, to compensate for participants' tolerance for children's negative behaviors, parents' negative behaviors were made more salient in the manipulations. Table 3.8 presents the details of the modifications.

Table 3.8

Modifications to the Manipulations of Script-Incongruent Behaviors

Manipulations	Experimental conditions	Original stimuli	Modified stimuli	Reason for modification
Control for other aspects of the service encounter	Restaurant conditions	"Everything else goes as expected. The food is good and the service is satisfactory."	"Everything else goes as expected."	Remove positive intonation in the experimental stimuli
	Airline service conditions	"Everything else on the flight goes as expected. The flight lands on time and the checked-in luggage arrives promptly."	"Everything else goes as expected"	
Parents' negative script- incongruent behaviors	All negative script-incongruent conditions	"The parents do nothing to keep the children under control"	"What's more, the parents pay no attention to the kids' all-too-apparent misbehavior in a public space. The parents are just busy chatting with each other the whole time and do not bother to make any attempt to keep the kids under control."	Make parents' behaviors more salient to compensate for participants' tendency to be more forgiving toward children's negative behaviors in service encounters.

Manipulation of Salience of Other Consumers in a Service Encounter

Manipulation of salience of other consumers proved to be subtle in Pilot Study 1.

Although a subtle manipulation may provide a stringent test of hypotheses, the null effect in encounter satisfaction observed in Pilot Study 2 suggests that the manipulation might be too weak to reveal nuance differences in consumer responses between the two salience conditions. Therefore, the manipulation of salience of other consumers was modified and pretested in Pilot Study 3.

To provide stronger manipulations for the salience of other consumers, temporal duration and spatial proximity of the service encounter were experimentally manipulated. Specifically, short duration and distant proximity were used to induce low salience condition, while extended duration and intimate proximity were used to represent high salience condition. Emotional content, the third dimension of the service encounter, was not manipulated but measured. Details of the modifications are presented in Table 3.9.

#### **Participants**

Participants of Pilot Study 3 were recruited from the same population as the main study. Fifty two undergraduate students in hospitality management at the Pennsylvania State University were recruited through class announcements. Of these, 57% were female. The average age of the participants was 22 (range from 20 to 37).

#### **Experimental Design**

For parsimony purposes, modified manipulations were only tested in the restaurant context. In addition, between the two levels of behavioral manipulations, only the negative condition was tested in Pilot Study 3. The salience of other consumers was manipulated at two levels (high vs. low).

Table 3.9

Modifications to the Manipulation of Salience of Other Consumers in Service Encounter

7.6 1 1	T 1	0::1:::1:	3.6.100.111	D 0
Manipulations	Experimental	Original stimuli	Modified stimuli	Reason for
	conditions			modification
Temporal	Low salience	No mention of	"For the <u>15</u>	Make the temporal
duration of	conditions in	temporal	minutes you spend	duration of the
the service	the restaurant	duration in the	in the fast food	service encounter
encounter	context	scenario	restaurant"	salient
	High salience	No mention of	"For the entire	
	conditions in	temporal	evening you spend	
	the restaurant	duration in the	in the fine dining	
	context	scenario	restaurant"	
	Low salience	"You are on a	"You are on a	
	conditions in	two-hour	short-distance	
	the airline	flight."	flight. The flight	
	service context	C	takes about 50	
			minutes."	
	High salience	"You are on a	"You are on a	
	conditions in	six-hour	long-distance	
	the flight	flight."	flight from coast to	
	context	S	coast. The flight	
			takes about 6	
			hours."	
Spatial	Low salience	"the party	"the party	Make the spatial
proximity of	conditions in	sitting at the	sitting at the table	proximity of the
the service	the restaurant	table next to	far from you"	service encounter
encounter	context	you"	<u> </u>	salient
	High salience	"the party	"the party sitting	
	conditions in	sitting at the	at the table <u>right</u>	
	the airline	table next to	next to you"	
	service context	you"	·	
	Low salience	"the party	"the two seats	
	conditions in	sitting next to	next to you are	
	the airline	you"	empty, and on the	
	service context	-	other side of the	
			aisle is	
	High salience	"the party	"the party sitting	
	conditions in	sitting next to	right next to	
	the airline	you"	<u>you</u> "	
	service context	-	<del></del>	

#### **Procedures**

Similar to the procedures used in Pilot Study 2, participants were randomly assigned to one of the two salience conditions. Participants first read a scenario describing a service encounter and then responded to measures related to cognitive responses, three dimensions of the service encounter, believability of the scenario and encounter satisfaction.

#### **Results**

Manipulation Checks for Script-Incongruent Behaviors

A cognitive response index was formed by averaging the ratings on the three cognitive response items ( $\alpha$ =.86). To test whether the modified behavioral manipulation was able to correct the unequivocal manipulations between the negative and positive conditions, cognitive response scores were compared. <sup>1</sup>

An ANOVA test on cognitive response index was performed using script-incongruent behaviors and salience of other consumers as between-subjects factors. The ANOVA results are presented in Table 3.10. The means and standard errors are presented in Table 3.11.

<sup>&</sup>lt;sup>1</sup> The cognitive response scores in the positive condition were the data from Pilot Study 2.

Table 3.10

ANOVA Results of Cognitive Response to Script-Incongruent Behaviors

	Type III		<u>.</u>		
	Sum of		Mean		
Source	Squares	df	Square	F	Sig.
Corrected Model	551.982(a)	3	183.994	315.438	.000
Intercept	.846	1	.846	1.451	.231
Script-Incongruence	547.595	1	1.855	938.792	.000
Salience	1.855	1	547.595	3.181	.078
Incongruence * Salience	.118	1	.118	.202	.654
Error	58.913	101	.583		
Total	613.333	105			
Corrected Total	610.895	104			

a R Squared = .904 (Adjusted R Squared = .901)

Table 3.11

Means and Standard Errors of Cognitive Response Index

Service context	Negative incongru		Positive incongru	-
	Low salience	High salience	Low salience	High salience
Restaurant	-2.29 (.14)	-2.09 (.15)	2.21 (.14)	2.54 (.14)

As expected, the results from an ANOVA table revealed a significant main effect of script-incongruent behavior (F(1,101) = 938.79, p < 0.001). The main effect of salience of other consumers and the interaction term were insignificant (p's > 0.07). Table 3.11 shows that the absolute values of the mean scores across the four conditions were all within the range of 2.00 to 2.50. These results suggest that the valence of the script-incongruent behaviors was manipulated as intended and that the magnitude of the script-incongruent behavior manipulation was nearly

equivocal across the four experimental conditions. In sum, the modified manipulation of the script-incongruent behaviors successfully addressed the drawbacks of the original manipulation.

Manipulation Checks for Salience of Other Consumers in a Service Encounter

A series of independent sample t-tests on temporal duration, spatial proximity and emotional content were performed between the two salience conditions. Table 3.12 provides the means and standard errors of the measures.

Table 3.12

Means and Standard Errors of the Ratings
on the Three Dimensions of the Service Encounter

Dependent measures	Restaurant context		
	Low	High	
	salience	salience	
Temporal duration	3.37***	4.83***	
	(.25)	(.27)	
Spatial proximity	4.07**	5.12**	
	(.31)	(.26)	
Emotional content	2.62***	3.60***	
	(.29)	(.31)	

Notes: \*Statistically significant at p < 0.05.

As shown in Table 3.12, as expected, temporal duration was perceived more extended in the high salience condition (t(49) = -3.94, p < 0.001). Similarly, spatial proximity was considered more intimate in the high salience condition (t(50) = -2.53, p < 0.01). For emotional content, although not experimentally manipulated, it was perceived more personal in the high salience condition (t(50) = -2.27, p < 0.01). Not surprisingly, the salience index, as a

<sup>\*\*</sup>Statistically significant at p < 0.01.

<sup>\*\*\*</sup>Statistically significant at p < 0.001.

multiplicative function of the three, was significantly higher in the high than low salience condition (M's = 84.20 vs. 41.37; t(49) = -3.33, p < 0.001). Taken together, the modified manipulation of the salience of other consumers proved to be successful.

Manipulation Checks for Believability of the Scenario

Overall, participants indicated that the scenarios were realistic (M = 5.31 on a 7-point scale) and were easy to imagine (M = 5.69 on a 7-point scale).

#### **Encounter Satisfaction**

To test whether the two modified manipulations were effective in capturing the nuances, an independent sample t-test on encounter satisfaction ( $\alpha$  = .90) was performed between the two salience conditions.

The results showed that the difference between the two salience conditions was marginally significant (t(47) = 1.90, p < 0.06). As expected, participants in the high salience condition reported lower encounter satisfaction than their counterparts in the low salience condition (M's = 2.88 vs. 3.43)<sup>2</sup>.

#### **Discussion**

Pilot Study 3 tested the efficacy of the modified manipulations of negatively-valenced script-incongruent behaviors and salience of other consumers. The results suggest that the unequivocal manipulation of script-incongruent behaviors between negative and positive conditions was successfully addressed by the modifications made to the original manipulation.

<sup>&</sup>lt;sup>2</sup> In Pilot Study 3, only the negatively-valenced script-incongruent behavior conditions were included.

Evident in the salience scores and the marginal significance of salience effect on encounter satisfaction, the stronger manipulation of salience of other consumers was more effective in capturing nuance differences in consumer responses between the two salience conditions.

In the following chapter, the methodology of the main study is presented.

#### **CHAPTER IV**

#### METHODOLOGY OF THE MAIN STUDY

Chapter 4 covers the methodology of the main study. The main study was designed for hypothesis testing. In this chapter, the experimental design of the main study is presented. Manipulations of the independent variables and measurements of the dependent variables are explained in detail.

## **Overview of Method and Design**

The objective of the main study was to empirically test the proposed dual-process framework and the hypothesized relationships between other consumers' script-incongruent behaviors and consumer responses. Hypotheses were tested in two service contexts: restaurant and airline service. Script-incongruent behaviors and salience of other consumers were experimentally manipulated. Consumer responses, such as spontaneous emotional responses, symbolic emotional responses, coping responses and encounter satisfaction were measured.

#### Methodology of the Main Study

#### **Experimental Design**

This experiment employed a replicated 2 x 2 between-subjects full factorial design, manipulating script-incongruent behaviors (negative vs. positive) and salience of other consumers (low vs. high). The experiment was replicated across two service contexts: restaurant and airline service. Two control groups (one for each service context) were included to provide

baseline measures for the dependent variables. Participants were randomly assigned to the ten experimental conditions.

# **Participants**

Three hundred and twenty-eight students were recruited from various undergraduate courses at the Pennsylvania State University to participate in this study in exchange for extra credit. Only students who had not participated in any of the pilot studies qualified for the main study. Of these, one hundred and seventy participants were female (52%). The participants were between the ages of 18 and 45 (M = 20.6).

The number of observations per cell is presented in Table 4.1.

**Table 4.1**Number of Observations per Cell

Service					
Context			Scrip	ot-Incongru	ence
			Negative	Positive	Control
Restaurant	Salience of other consumers	Low	38	34	
		High	32	37	
		Control			23
Airline service	Salience of other consumers	Low	35	35	
232.12	5 5 2 5 5 5	High	36	31	
		Control			27

#### **Procedures**

Participants first read and signed an informed consent form to indicate their agreement to participate in the study. A copy of the informed consent form is provided in Appendix D. Next, they were instructed to read a scenario describing a service encounter involving the presence of other consumers in the service environment, manipulating script-incongruent behaviors (negative vs. positive), salience of other consumers (low vs. high) and type of service contexts (restaurant vs. airline service). In the experiment, two scenarios describing typical or "as expected" dining or airline service were also included to serve as control conditions. Participants were randomly assigned to one of the ten between-subjects conditions. An overview of the experimental stimuli is presented in Table 4.2. Ten scenarios are listed in Appendix E.

Participants were instructed to imagine themselves in the service encounter described in the scenario. The scenario was followed by a set of dependent variable measures and manipulations checks. The study ended with a debriefing statement and it took approximately 20 minutes to complete.

## **Independent Variables**

Manipulation of the Salience of Other Consumers in the Service Encounter

As pretested in Pilot Study 1 and Pilot Study 3, salience of other consumers was manipulated by the two dimensions of the service encounter: temporal duration and spatial proximity. The third dimension, emotional content, was measured. In the restaurant context, low salience condition was induced by a brief (e.g., 15 minutes) and distant (e.g., the other side of the restaurant) encounter with other consumers. Conversely, high salience condition was represented by an extended (e.g., the entire evening) and intimate (e.g., the table right next to you)

encounter with other consumers. Similarly, in the airline service context, low salience condition was manipulated by a brief (e.g., a 50-minute flight) and distant (e.g., the other side of the aisle) encounter with other passengers, while high salience condition was induced by an extended (e.g., a 6-hour flight) and intimate (e.g., right next to you) encounter with other passengers.

**Table 4.2**Overview of the Experimental Stimuli (Main Study)

Salience of other	G	.1.1	
consumers		ruent behaviors	G 1
	Negative	Positive	Control
Restaurant			
Low	Duration: 15 mins Proximity: the other side of the restaurant Behaviors: kids disruptive parents inattentive	Duration: 15 mins Proximity: the other side of the restaurant Behaviors: kids courteous parents attentive	
High	Duration: Entire night Proximity: right next to you Behaviors: kids disruptive parents inattentive	Duration: Entire night Proximity: right next to you Behaviors: kids courteous parents attentive	
Control			Typical
Airline service			
Low	Duration: 50 mins Proximity: the other side of the aisle Behaviors: kids disruptive parents inattentive	Duration: 50 mins Proximity: the other side of the aisle Behaviors: kids courteous parents attentive	
High	Duration: 6 hours Proximity: right next to you Behaviors: kids disruptive parents inattentive	Duration: 6 hours Proximity: right next to you Behaviors: kids courteous parents attentive	
Control			Typical

## Manipulation of Script-Incongruent Behaviors

Based on the results of the three pilot studies, script-incongruent behaviors (negative vs. positive) were manipulated by describing other consumers' specific behaviors in the service encounter scenarios. Participants read either a positively framed or a negatively framed scenario. In the positive behavior condition, children in the service encounter are courteous and their parents make sure that the children are on their best behavior. Conversely, in the negative behavior condition, children are disruptive and their parents make no effort to keep the children under control.

## **Dependent Variables**

This dissertation models consumers' emotional responses to behaviors of others as a dual-mode process (Buck, 1985, 1988): A *spontaneous* stream that is biologically based and a *symbolic* stream that is learned and culturally patterned. Spontaneous responses represent *felt emotions* while the symbolic response reflects the learned pattern of *emotional expressions* (Fridlund, 1991). In the main study, both spontaneous and symbolic emotional responses were measured. Coping responses and encounter satisfaction were also assessed.

#### Spontaneous Emotional Responses

As with other consumption-elicited emotions studies (e.g., Holbrook & Batra, 1987; Westbrook & Oliver, 1991), other-consumer-elicited spontaneous emotional responses were assessed with self-reports. Despite their acknowledged limitations, self-reports provide an effective and efficient method of assessment (Westbrook & Oliver, 1991). The same authors argue that "this is especially pertinent with consumption-elicited reactions, as opposed to

experimentally induced emotional states where physiological or face measures may be more suitable" (p.456).

To assess spontaneous emotional responses, participants completed an alphabetized seven-item emotion scale, based largely on Richins's (1997) work, with relevant items added from Sedikides and Gaertner (2001) and Oliver (2000). These items consisted of emotional terms such as "pleased", "delighted", "happy", "annoyed", "angry", "frustrated" and "irritated". In this dissertation, only discrete emotions involving attribution of causal agents to other people are of interest. Since anger, annoyance, irritation and frustration have causes of dislike or disapproval of actions of others (Izard, 1977), these four negative discrete emotions were included in the spontaneous emotional response measure. For positive discrete emotions, prior research suggests that positive emotions are invariably outcome-dependent, that is, linked directly to an eliciting stimulus with no further attributional search (Weiner, Russell & Lerman, 1979). Hence, positive emotions such as delight, happiness and pleasantness, if elicited by other consumers, are emotional responses directed at other consumers. These three items were included in the spontaneous emotional response measure.

Participants were asked to indicate the extent to which each item reflects how they feel when they imagine themselves in the service encounter described in the scenario. All responses were on a seven-point scale anchored at 1=not at all, and 7=very much. The seven-item spontaneous emotional response scale was later used to derive an index for positive and negative emotions (three positive items,  $\alpha = 0.96$ , four negative items,  $\alpha = 0.97$ ).

## Symbolic Emotional Responses

Symbolic emotional responses were operationalized as emotive dissonance. *Emotive dissonance* was defined as the mismatch between felt emotions and expressed emotions and was measured via a two-item scale (Kruml & Geddes, 2000). The two items measured on a seven-point scale were "If I were in the situation described in the scenario, I would show the same feelings that I feel inside" and "If I were in the situation described in the scenario, the emotions I show would match what I truly feel".

#### Coping Responses

When other consumers demonstrate negatively-valenced script-incongruent behaviors in a shared service environment, the service encounter can be a stressful event which requires certain degree of coping (Folkman et al., 1986). Coping is defined as a response to the psychological and environmental demands of stressful encounters (Folkman et al., 1986).

Nine coping items relevant to this research were chosen from the COPE inventory (Carver, Scheier, & Weintraub, 1989). The COPE inventory contains items measuring specific coping strategies in two broad categories of coping strategies: problem-focused coping and emotion-focused coping. In the category of problem-focused coping, specific strategies include active coping planning, suppression of competing activities, restraint coping, seeking social support for instrumental reasons and seeking social support for emotional reasons. In the category of emotion-focused coping, specific strategies include positive reinterpretation and growth, acceptance, turning to religion, focus on venting of emotions, denial, behavioral disengagement, mental disengagement and alcohol-drug disengagement. For the purpose of this study, items with the highest loading in each sub-category were chosen. Items with no apparent

relevance to this study were not included (Items such as "I seek God's help", "I turn to work or other substitute activities to take my mind off things", and "I drink alcohol or take drugs, in order to think about it less").

Consistent with the original COPE inventory (Carver, Scheier, & Weintraub, 1989), the shortened nine-item measure was assessed on a 4-point likert scale (1 = "I wouldn't do this at all; 2 = "I would do this a little bit"; 3 = "I would do this a medium amount"; 4 = "I would do this a lot"). The scale included six items representing problem-focused coping (e.g., "I would take action to try to get rid of the problem" and "I concentrate my efforts on doing something about it") and four items reflecting emotion-focused coping (e.g., "I would look for something good in what is happening" and "I learn to live with it").

## **Encounter Satisfaction**

Encounter satisfaction was measured using a six-item satisfaction scale (Oliver & Swan, 1989). According to Wirtz and Lee (2003), the six-item semantic differential scale is "the best performing measure... It loaded most highly on satisfaction, had the highest item reliability, and had by far the lowest error variance..." (p.353). The scale includes items such as "pleased me to displeased me", "contented with to disgusted with", "very satisfied with to very dissatisfied with", "did a good job for me to did a poor job for me", "wise choice to poor choice" and "happy with to unhappy with".

For the purpose of this study, an anchor point of zero was added to the 7-point scale to capture a neutral state of satisfaction. In fact, the inclusion of a zero point in the measurement for a bi-polar construct is psychometrically preferable. According to Nunnally and Bernstein (1994), "if possible, replace the bipolar continuum with two separate continuum..... The 'neither'

possibility is not a problem since it is represented by the zero point(s)" (p.327). Following this recommendation, this study used two separate continuua to capture the bipolar nature of the satisfaction construct, with zero point capturing a neutral state. Specifically, the satisfaction scale was anchored at -7 = very dissatisfied, 0 = neither, and 7 = very satisfied. The finely grained rating to satisfaction also increased the measurement's sensitivity to detect nuance differences in satisfaction ratings across the experimental conditions, which can be otherwise masked in a between-subjects design. The Cronbach's Alpha for the satisfaction measure was 0.98.

#### **Control Variables**

Two individual difference variables, *public self-consciousness* and *self-monitoring* were included as control variables for the statistical analyses. *Product category involvement* was also included as a control variable.

## Public Self-Consciousness

Public self-consciousness was measured using a seven-item scale (Fenigstein, Scheier & Buss, 1975) with anchor points of 1= extremely uncharacteristic of me and 7=extremely characteristic of me. The seven items included statements such as "I'm concerned about what others think of me" and "I'm usually aware of my appearance". The Cronbach's Alpha for the public self-consciousness measure was 0.81.

## Self-Monitoring

*Self-monitoring* was measured using the 18-item version of self-monitoring scale (Snyder & Gangestad, 1986). The scale included items such as "I find it hard to imitate the behavior of other people", "At parties and social gatherings, I do not attempt to do or say things that others will like", and "I can only argue for ideas which I already believe". The Cronbach's Alpha for the self-monitoring measure was 0.71.

#### Product Category Involvement

Product category involvement was measured using a three-item scale (Zaichkowsky, 1985). The three items were "I use long-distance flight [short distance flight/fast food/fine dining] a great deal", "Long-distance flight [short distance flight/fast food/fine dining] means a lot to me" and "Compared to most products/services I buy, long-distance flight [short distance flight/fast food/fine dining] is really an important purchase to me". The Cronbach's Alpha for product category involvement measure was 0.80.

#### Hedonic/Utilitarian Dimensions of Service Products

To provide a measure for the hedonic/utilitarian dimension of the two service product categories chosen in this study, as an ostensibly unrelated task, participants in the two control conditions responded to a hedonic/utilitarian measure. The ten semantic differentials (Voss, Spangenberg & Grohmann, 2003) were measured on a 7-point scale (e.g., effective/ineffective, helpful/unhelpful, functional/not functional, necessary/unnecessary, practical/impractical, not fun/fun, dull/exciting, not delightful/delightful, not thrilling/thrilling, enjoyable/unenjoyble).

Finally, participants' demographic information including gender and age were measured.

# **Summary**

In this chapter, the methodology of the main study was presented. Experimental design, experimental stimuli and dependent variable measures were described in detail. Chapter 5 reports the results of the statistical analyses.

#### **CHAPTER V**

## RESULTS OF THE MAIN STUDY

#### Overview

In this chapter, the results of the statistical analyses are presented. First, this chapter presents the hypothesis testing results in the two service contexts separately. Then the chapter proceeds to provide a comparison of the results between the two contexts. Finally, this chapter reports the regression analyses between emotional responses and encounter satisfaction.

## **Manipulation Checks**

Manipulation Checks for Script-Incongruent Behaviors

To check the efficacy of the script-incongruent behavior manipulation, an independent sample t-test on the cognitive response measure ( $\alpha$ =0.95) was performed between the positive and negative conditions.

As expected, participants in the negative behavior conditions rated the behaviors more negatively than participants in the positive behavior conditions ( $M_{negative} = -1.76$  vs.  $M_{positive} = 2.35$ ; t(276) = -30.92, p < 0.001) and both were significantly different from the midpoint (t(139) = -20.18 and t(138) = 23.38, p's < 0.001).

To guard against systematic differences in the manipulations across the different salience conditions in the two contexts, an ANOVA test on cognitive response measure was performed with script-incongruent behaviors, salience of other consumers and service context as between-

subjects factors. The main effect of salience of other consumers was insignificant (F(1, 270) = 1.65, p > 0.20). The main effect of service context was also insignificant (F(1, 270) = .69, p > 0.40). Furthermore, the two-way interaction between salience of other consumers and service context was insignificant (F(1,270) = .48, p > 0.48). The three-way interaction among the three between-subjects factors was also insignificant (F(1,270) = .75, p > 0.38).

The ANOVA results suggest that the manipulation of the script-incongruent behaviors was successful. There were no systematic differences in manipulations across the different conditions by service context, salience of other consumers or the interaction between the two.

Manipulation Checks for Salience of Other Consumers in a Service Encounter

A series of independent sample t-tests were performed on the three dimension measures between the two salience conditions. As expected, participants in the high salience conditions perceived the duration of the encounter much longer than their counterparts in the low salience conditions ( $M_{high} = 5.14$  vs.  $M_{low} = 2.79$ ; t (276) = -14.46, p < 0.001). Similarly, participants in the high salience conditions perceived the spatial proximity of the encounter more intimate than their counterparts in the low salience conditions ( $M_{high} = 5.62$  vs.  $M_{low} = 3.88$ ; t (275) = -10.55, p < 0.001). Participants also perceived the encounter to be more personal in high than low salience conditions ( $M_{high} = 3.34$  vs.  $M_{low} = 2.49$ ; t (275) = -5.08, p < 0.001). Not surprisingly, the salience index, a multiplicative function of the three, was significantly higher in the high than low salience conditions ( $M_{high} = 29.60$  vs.  $M_{low} = 98.14$ ; t (275) = -12.15, p < 0.001).

Taken together, the results suggest that the manipulation of salience of other consumers was successful.

Manipulation Checks for the Believability of the Scenario

Overall, participants indicated that the scenarios were realistic (M = 5.12 on a 7-point scale) and were easy to imagine (M = 5.86 on a 7-point scale).

## **Results of Hypothesis Testing in the Restaurant Context**

In the main study of this dissertation, the 2 (Script-incongruent behaviors: negative vs. positive) x 2 (Salience of other consumers: low vs. high) between-subjects factorial was replicated in two service contexts. Accordingly, in the following sections, the results of the hypothesis testing in these two contexts are reported separately, followed by a comparison between the two. A series of ANOVA tests were performed on each of the dependent variables. To test for possible variations in response measures due to demographic differences, one demographic variable, gender, was included in all ANOVA tests. For the parsimony of the presentation, only significant gender effect is reported in the results. Table 5.1 presents the means and standard errors of the dependent measures in the restaurant context.

Table 5.1

Adjusted Means and Standard Errors of Dependent Measures (Dining)

Dependent measures	Negative-	script	Positive-script incongruence		Control
	incongru	ongruence			
	Low salience	High salience	Low salience	High salience	
Spontaneous emotional	-2.21**	-3.96**	3.71	3.71	4.60
responses	(.30)	(.33)	(.32)	(.31)	(.37)
Symbolic emotional	3.85*	3.89*	3.32*	3.74*	2.84
responses	(.22)	(.23)	(.23)	(.22)	(.28)
Coping responses	72	.19	` ′	` ,	, ,
	(.19)	(.20)			
Encounter satisfaction	-1.15**	-3.40**	4.84	5.26	4.12
37	(.27)	(.30)	(.30)	(.28)	(.41)

Notes: \*Significantly different from the control group at p < 0.05 \*\*Significant at p < 0.001

## **Spontaneous Emotional Responses**

The seven-item spontaneous emotional response scale was used to derive an index for positive and negative emotional responses (three positive items,  $\alpha = 0.96$ , four negative items,  $\alpha = 0.97$ ). A positivity index was constructed by averaging the positive and negative emotional responses separately and then subtracting the average of negative emotional responses from the average of the positive emotional responses for each participant (Labroo & Ramanathan, 2007).

To investigate consumers' spontaneous emotional responses to other consumers' scriptincongruent behaviors, a 2x2 between-subjects ANOVA test on positivity index was performed, with the script-incongruent behaviors and salience of other consumers as the between-subjects factors. To first check the homogeneity assumption associated with ANOVA test, Levene's test of equality of error variances was performed. The results were highly insignificant (F(3,137) = .35, p > 0.78), suggesting that equality of error variances across different experimental conditions can be assumed. The residual plots are presented in Appendix F. Table 5.2 presents the ANOVA results.

Table 5.2

ANOVA Results of Spontaneous Emotional Responses (Restaurant)

	Type III		<del>-</del>		
	Sum of		Mean		
Source	Squares	df	Square	F	Sig.
Corrected Model	1649.645(a)	3	549.882	154.346	.000
Intercept	13.476	1	13.476	3.783	.054
Salience	26.813	1	26.813	7.526	.007
Script-Incongruence	1624.871	1	1624.871	456.084	.000
Salience * Incongruence	26.720	1	26.720	7.500	.007
Error	488.084	137	3.563		
Total	2157.153	141			
Corrected Total	2137.729	140			

a R Squared = .772 (Adjusted R Squared = .767)

As shown in Table 5.2, as predicted, the main effect of script-incongruent behaviors was significant such that positive-valenced incongruent behaviors caused more positive emotional responses ( $M_{positive} = 3.71$  vs.  $M_{negative} = -3.09$ , F(1, 137) = 456.08, p < 0.001). Hence, Hypothesis 1 was supported. The ANOVA results also showed that this significant main effect was qualified by a significant interaction between script-incongruent behaviors and salience of other consumers (F(1, 137) = 7.50, p < 0.01). Table 5.3 presents the cell means and standard errors. This interaction is visualized in Figure 5.1

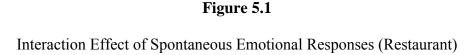
As shown in Table 5.3 and Figure 5.1, there was a significant difference in spontaneous emotional responses between the low and high salience conditions when other consumers' scriptincongruent behaviors were negative (t(68) = 4.00, p < 0.001). As predicted, the negative emotional responses in the high salience group (M = -3.96) were significantly greater than that in the low salience group (M = -2.21). However, the significant difference in spontaneous emotional responses between the low and high salience group was not observed when other consumers' script-incongruent behaviors were positive. The spontaneous emotional responses induced by other consumers' positive script-incongruent behaviors in the two salience groups were statistically equivalent (t(69) = 0.003, p > 0.99).

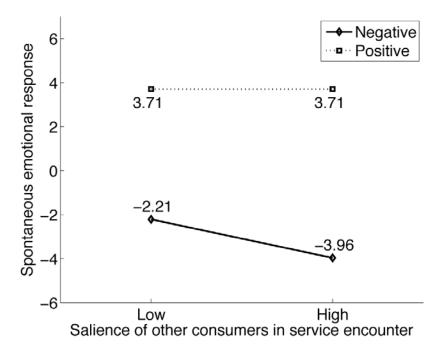
Table 5.3

Adjusted Means and Standard Errors of Spontaneous Emotional Responses (Restaurant)

Salience of other consumers in service encounter	Script-incongruent behaviors		Control group
	Negative	Positive	
Low	-2.21*	3.71	
	(.30)	(.32)	
High	-3.96*	3.71	
	(.33)	(.31)	
Control			4.60
			(.37)

Notes: \*Mean differences were statistically significant (p < 0.01).





Taken together, the moderating effect of salience on spontaneous emotional responses predicted by Hypothesis 2 was partially supported. Specifically, the moderating effect of salience was supported in the negatively-valenced script-incongruent behavior condition, but not in the positively-valence behavior condition.

#### **Symbolic Emotional Responses**

Symbolic emotional responses were operationalized as emotive dissonance. The Pearson correlation between the two emotive dissonance items was 0.73. Scores were recoded so that greater scores represent greater levels of emotive dissonance. The two dissonance ratings were averaged to form a symbolic emotional response index.

To examine consumers' symbolic emotional responses to other consumers' scriptincongruent behaviors, a 2x2 between-subjects ANOVA test was performed, with the scriptincongruent behaviors and salience of other consumers as predictor variables. Since two individual differences, public self-consciousness (Fenigstein, Scheier & Buss, 1975) and self-monitoring (Snyder, 1974; 1987), might influence symbolic emotional responses (Lambert et al., 2003; Rafaeli & Sutton, 1989; Turner & Peterson, 1977), these two measures were included as covariates in the ANOVA analysis.

To first check the homogeneity assumption associated with an ANCOVA test, Levene's test of equality of error variances was performed. The results were highly insignificant (F(3,133) = .60, p = 0.61), suggesting that equality of error variances across different experimental conditions can be assumed. The residual plots are presented in Appendix F. Table 5.4 presents the ANCOVA results.

As shown in Table 5.4, the results revealed that, except for self-monitoring (F(1, 127) = 4.91, p < 0.05) and gender (F(1, 127) = 4.91, p < 0.05), all other factors were statistically insignificant (F's < 2.00, p's > 0.15). Consequently, Hypothesis 3 which proposes a difference in symbolic emotional responses between the negative and positive behavior conditions was not supported. As the interaction term between salience of other consumers and script-incongruent behaviors was also insignificant, Hypothesis 4 which proposes the moderating effect of salience of other consumers on symbolic emotional responses, was also not supported. Table 5.5 displays the means and standard errors of the symbolic emotional responses.

Table 5.4

ANCOVA Results of Symbolic Emotional Responses (Restaurant)

	Type III Sum of		Mean		
Source	Squares	df	Square	F	Sig.
Corrected Model	25.093(a)	9	2.788	1.572	.130
Intercept	57.692	1	57.692	32.525	.000
Public self- consciousness	.143	1	.143	.080	.777
Self-monitoring	8.719	1	8.719	4.915	.028
Salience	2.263	1	2.263	1.276	.261
Script-incongruence	3.557	1	3.557	2.005	.159
Gender	10.811	1	10.811	6.095	.015
Salience * Incongruence	1.592	1	1.592	.898	.345
Salience * Gender	.175	1	.175	.099	.754
Incongruence * Gender	.975	1	.975	.550	.460
Salience *					
Incongruence *	.137	1	.137	.077	.781
Gender					
Error	225.268	127	1.774		
Total	2137.750	137			
Corrected Total	250.361	136			

a R Squared = .100 (Adjusted R Squared = .036)

Table 5.5

Adjusted Means and Standard Errors of Symbolic Emotional Responses (Restaurant)

Salience of other consumers in service encounter	Script-incongruent behaviors		Control group
	Negative	Positive	
Low	3.85*	3.32*	
	(.22)	(.23)	
High	3.89*	3.74*	
	(.23)	(.22)	
Control			2.84
			(.28)

<sup>\*</sup>Significantly different from the control group at p < 0.05.

## **Coping Responses**

The coping items were first factor analyzed using a principal factor analysis with varimax rotation. Two factors were comprised of items that cohered empirically and conceptually. The extracted factors mapped onto the predicted two categories of coping strategies: problem-focused coping (eigenvalue = 4.07) and emotion-focused coping (eigenvalue = 2.32). The Cronbach's Alpha of the five problem-focused coping items was 0.82 and the Cronbach's Alpha of the four emotion-focused coping items was 0.80.

A coping index was formed by first averaging the problem-focused coping ratings and emotion-focused coping ratings separately and then subtracting the average emotion-focused coping from the average problem-focused coping, so that a greater score represents a greater tendency to engage in problem-focused coping.

As coping is believed to only take place in stressful encounters (e.g., Folkman et al., 1986), coping strategies were only examined in the negative behavior conditions. The results of an independent sample t-test between high and low salience conditions showed that participants in the high salience condition (M = .19) were more likely to engage in problem-focused coping as compared to those in the low salience condition (M = -.72, t(68) = -3.22, p < 0.01). Hence, Hypothesis 5 was supported.

#### **Encounter Satisfaction**

Encounter satisfaction ( $\alpha$  = .97) was measured using two separate continuua with zero point capturing a neutral state (Nunnally & Bernstein, 1994). A negative score represents encounter dissatisfaction, while a positive score represents encounter satisfaction.

To examine the effect of other consumers' script-incongruent behaviors on encounter satisfaction, an ANCOVA test was performed with script-incongruent behaviors and salience of other consumers as predictor variables. Product category involvement was included as a covariate. To check the equal variance assumption required for an ANCOVA test, Levene's test of equality of error variance was performed. The result was highly insignificant (F (3, 136) = .53, p > .65), suggesting that the homogeneity assumption was met. Residual plots are presented in Appendix F. The ANCOVA results are presented in Table 5.6.

Table 5.6

ANCOVA Results of Encounter Satisfaction (Restaurant)

	Type III	<del>-</del>		<del>.</del>	
	Sum of		Mean		
Source	Squares	df	Square	F	Sig.
Corrected Model	1943.961(a)	4	485.990	168.460	.000
Intercept	82.538	1	82.538	28.610	.000
Involvement	7.016	1	7.016	2.432	.121
Salience	25.265	1	25.265	8.758	.004
Script-Incongruence	1872.169	1	1872.169	648.953	.000
Salience * Incongruence	61.398	1	61.398	21.282	.000
Error	389.462	135	2.885		
Total	2624.880	140			
Corrected Total	2333.423	139			

a R Squared = .833 (Adjusted R Squared = .828)

As shown in Table 5.6, the main effects of salience of other consumers (F(1, 135) = 8.75, p < 0.01) and script-incongruence behaviors (F(1, 135) = 648.95, p < 0.001) on encounter satisfaction were significant. Furthermore, the interaction effect between the two factors was also significant (F(1, 135) = 21.28, p < 0.001). Planned contrasts were performed to further investigate the nature of the interaction. Table 5.7 shows the means and standard errors of the

encounter satisfaction as a function of salience and script-incongruent behaviors of other consumers. Figure 5.2 illustrates the interaction effect.

Table 5.7

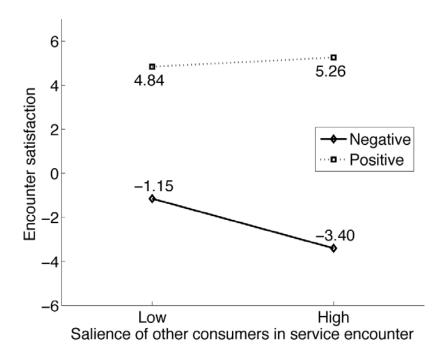
Means and Standard Errors of Encounter Satisfaction (Restaurant)

Salience of other consumers in service encounter	Script-incongruent behaviors		Control group
	Negative	Positive	
Low	-1.15*	4.84	
	(.27)	(.30)	
High	-3.40*	5.26	
	(.30)	(.28)	
Control			4.12
			(3.26)

Notes: \*Mean differences were statistically significant (p < 0.01).

Figure 5.2

Interaction Effect of Encounter Satisfaction (Restaurant)



As shown in Table 5.7, when the script-incongruent behaviors of other consumers were negative (positive), participants reported encounter dissatisfaction (satisfaction). The results suggest that the valence of incongruent behaviors was positively related to the valence of encounter satisfaction. Hence, Hypothesis 6 was supported. In addition, the planned contrasts revealed that in the negative behavior condition, participants in the high salience group (M = -3.40) reported significantly greater encounter dissatisfaction than their counterparts in the low salience group (M = -1.15, t(68) = 5.87, p < 0.001). However, the level of encounter satisfaction between high and low salience groups showed no statistical difference when the incongruent behaviors were positive ( $M_{high} = 5.26$  vs.  $M_{low} = 4.84$ , t(68) = -.44, p = .66). Therefore, the moderating effect of salience specified in Hypothesis 7 was partially supported.

## **Results of Hypothesis Testing in the Airline Service Context**

This section presents the hypothesis testing results in the airline service context. The experiment in the airline service context replicated the design used in the restaurant context. It is of theoretical interest to test whether the patterns observed in the restaurant context can be replicated in the airline service context. Replication of the results would demonstrate the robustness of the findings. On the other hand, any differences in the results motivate further inquiries.

Table 5.8 presents the means and standard errors of the dependent measures in the airline service context.

Table 5.8

Adjusted Means and Standard Errors of Dependent Measures (Airline Service)

Dependent measures	Negative-script incongruence		Positive-script incongruence		Control group
	Low salience	High salience	Low salience	High salience	
Spontaneous emotional responses	-3.63** (.26)	-4.61** (.26)	4.57** (.26)	4.64**	2.52 (.28)
Symbolic emotional responses	4.71* (.23)	3.75 (.23)	3.33 (.23)	3.04* (.25)	4.09 (.27)
Coping	52 (.19)	.78 (.19)			
Encounter satisfaction	-1.25** (.29)	-4.05** (.29)	5.25** (.29)	5.33** (.31)	2.80 (.41)

Notes: \*Significantly different from the control group (p < 0.10)

# **Spontaneous Emotional Responses**

A positivity index was constructed by averaging the positive and negative emotional responses separately and then subtracting the average of negative emotional responses ( $\alpha$  = .98) from the average of the positive emotional responses ( $\alpha$  = .96) for each participant (Labroo & Ramanathan, 2007).

To examine consumers' emotional responses to other consumers' script-incongruent behaviors, a 2x2 between-subjects ANOVA test was performed, with the script-incongruent behaviors and salience of other consumers as predictor variables. To check the homogeneity assumption associated with an ANOVA test, Levene's test of equality of error variances was performed. The results were highly insignificant (F(3, 133) = .19, p = 0.90), suggesting that equality of error variances across different experimental conditions can be assumed. The residual plots are presented in Appendix F. Table 5.9 presents the ANOVA results.

<sup>\*\*</sup>Significantly different from the control group (p < 0.001)

Table 5.9

ANOVA Results of Spontaneous Emotional Responses (Airline Service)

	Type III	-		-	
	Sum of		Mean		
Source	Squares	df	Square	F	Sig.
Corrected Model	2625.569(a)	3	875.190	360.581	.000
Intercept	7.934	1	7.934	3.269	.073
Salience	7.034	1	7.034	2.898	.091
Script-Incongruence	2602.857	1	2602.857	1072.386	.000
Salience * Incongruence	9.396	1	9.396	3.871	.051
Error	322.813	133	2.427		
Total	2951.229	137			
Corrected Total	2948.382	136			

a R Squared = .891 (Adjusted R Squared = .888)

As shown in Table 5.9, as predicted, the main effect of other consumers' scriptincongruent behaviors was significant such that positive-incongruent behaviors caused more positive emotional responses ( $M_{positive} = 4.60 \text{ vs. } M_{negative} = -4.12, F(1, 133) = 1072.38, p < 0.001$ ). The highly significant main effect of script-incongruent behaviors supported Hypothesis 1's prediction that the valence of a focal consumer's emotional responses was positively related to the valence of other consumers' script-incongruent behaviors.

The ANOVA results also showed that the significant main effect of script-incongruent behaviors was qualified by a significant interaction with salience of other consumers (F(1, 133)) = 3.87, p < 0.05). Planned contrasts were performed to further investigate the nature of the interaction effect. Table 5.10 presents the cell means and standard errors of the spontaneous emotional response scores. The interaction is visualized in Figure 5.3.

Table 5.10

Adjusted Means and Standard Errors of Spontaneous Emotional Responses

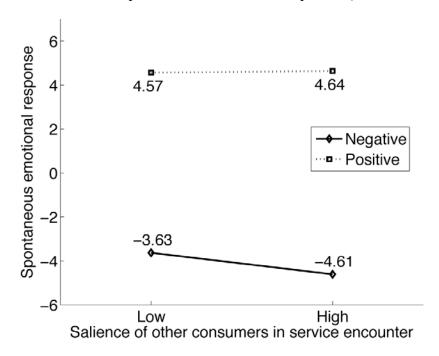
(Airline Service)

Salience of other consumers in service encounter	Script-incongruent behaviors		Control group
	Negative	Positive	
Low	-3.63*	4.57	
	(.26)	(.26)	
High	-4.61*	4.64	
	(.26)	(.28)	
Control			2.52
			(.28)

Notes: \*Mean differences were statistically significant (p < 0.05)

Figure 5.3

Interaction Effect of Spontaneous Emotional Responses (Airline Service)



As shown in Table 5.10 and Figure 5.3, when the incongruent behaviors were negative, there was a significant difference in spontaneous emotional responses between the two salience groups (t(68) = 2.35, p < 0.05). As predicted, the high salience group reported greater negative emotional responses (M = -4.61) compared to the low salience group (M = -3.63). However, the difference in spontaneous emotional responses was not significant between the two groups when the incongruent behaviors were positive (t(65) = -21, p > 0.83). Therefore, Hypothesis 2 predicting the moderating effect of salience on spontaneous emotional responses was partially supported.

## **Symbolic Emotional Responses**

Symbolic emotional responses were operationalized as emotive dissonance. The Pearson correlation between the two emotive dissonance items was 0.80. Scores were recoded so that greater scores represent greater levels of emotive dissonance. The two dissonance ratings were averaged to form a symbolic emotional response index.

To examine consumers' symbolic emotional responses to other consumers' scriptincongruent behaviors, a 2x2 between-subjects ANOVA test was performed, with the scriptincongruent behaviors and salience of other consumers as predictor variables. Since two individual differences, public self-consciousness (Fenigstein, Scheier & Buss, 1975) and self-monitoring (Snyder, 1974, 1987), might influence symbolic emotional responses (Lambert et al., 2003; Rafaeli & Sutton, 1989; Turner & Peterson, 1977), these two measures were included as covariates in the ANOVA analysis. Table 5.11 presents the ANCOVA results.

Table 5.11

ANCOVA Results of Symbolic Emotional Responses (Airline Service)

	Type III				
	Sum of		Mean		
Source	Squares	df	Square	F	Sig.
Corrected Model	77.471(a)	9	8.608	4.564	.000
Intercept	29.720	1	29.720	15.757	.000
Public self- consciousness	3.732	1	3.732	1.979	.162
Self-monitoring	6.287	1	6.287	3.333	.070
Salience	18.056	1	18.056	9.573	.002
Incongruence	34.717	1	34.717	18.407	.000
Gender	9.316	1	9.316	4.939	.028
Salience * Incongruence	4.300	1	4.300	2.280	.134
Salience * Gender	6.069	1	6.069	3.218	.075
Incongruence * Gender	2.104	1	2.104	1.115	.293
Salience *					
Incongruence *	2.126	1	2.126	1.127	.290
Gender					
Error	239.537	127	1.886		
Total	2223.000	137			
Corrected Total	317.007	136			

a R Squared = .244 (Adjusted R Squared = .191)

As shown in Table 5.11, the ANCOVA results revealed a significant main effect of script-incongruent behaviors on symbolic emotional responses (F(1, 127) = 18.40, p < 0.001). Marginal means revealed that participants exposed to negatively-valenced script-incongruent behaviors reported significantly greater emotive dissonance (M = 4.21) than participants exposed to positively-valenced script-incongruent behaviors (M = 3.21). As a result, Hypothesis 3 was supported. The main effect of salience of other consumers was also significant (F(1, 127) = 9.57, p < 0.001). The marginal means revealed that participants in the low salience condition reported significantly greater emotive dissonance (M = 4.03) than their counterparts in the high salience

condition (M = 3.39). However, the interaction effect between the two factors failed to reach conventional levels of significance (F(1, 127) = 2.28, p = 0.13). Therefore, Hypothesis 4 was not supported. The main effect of gender was significant (F(1, 127) = 4.93, p < 0.05). Males (M = 4.03) reported greater emotive dissonance than females (M = 3.47).

# **Coping Responses**

The coping items were first factor analyzed using a principal factor analysis with varimax rotation. The extracted factors mapped onto the predicted categories of coping strategies: problem-focused coping (eigenvalue = 2.85) and emotion-focused coping (eigenvalue = 2.51). The Cronbach's Alpha of the five problem-focused coping items was 0.80 and the Cronbach's Alpha of the four emotion-focused coping items was 0.84.

As coping is believed to only take place in stressful encounters (e.g., Folkman et al., 1986), analysis on coping responses was limited to the negatively-valenced script-incongruent behavior conditions. An independent sample t-test between the two salience conditions showed that participants in the high salience condition (M = .78) were more likely to engage in problem-focused coping as compared to those in the low salience condition (M = .52, t(67) = -4.74, p < 0.001). Hence, Hypothesis 5 was supported.

#### **Encounter Satisfaction**

Encounter satisfaction ( $\alpha$  = .97) was measured using two separate continuua with a zero point representing a neutral point (Nunnally & Bernstein, 1994). A negative score represents encounter dissatisfaction, while a positive score reflects encounter satisfaction.

To examine the effect of other consumers' script-incongruent behaviors on a focal consumer's encounter satisfaction, an ANCOVA test was performed with script-incongruent

behaviors and salience of other consumers as between-subjects factors. Product category involvement was included as a covariate when performing the ANOVA test. To check the equal variance assumption required for an ANCOVA test, Levene's test of equality of error variance was performed. The result was insignificant (F(3, 133) = 2.01, p = .11), suggesting that the homogeneity assumption was met. The residual plots are presented in Appendix F. The ANCOVA results are presented in Table 5.12.

Table 5.12

ANCOVA Results of Encounter Satisfaction (Airline Service)

	Type III	<u> </u>		<u>-</u>	
	Sum of		Mean		
Source	Squares	df	Square	F	Sig.
Corrected Model	2329.855(a)	4	582.464	186.758	.000
Intercept	98.650	1	98.650	31.631	.000
Involvement	15.096	1	15.096	4.840	.030
Salience	62.177	1	62.177	19.936	.000
Script-Incongruence	2157.501	1	2157.501	691.769	.000
Salience * Incongruence	70.365	1	70.365	22.562	.000
Error	411.684	132	3.119		
Total	2949.520	137			
Corrected Total	2741.539	136			

a R Squared = .850 (Adjusted R Squared = .845)

As shown in Table 5.12, the main effects of salience of other consumers (F(1, 132) = 19,93, p < 0.001) and script-incongruence behaviors (F(1, 132) = 691.76, p < 0.001) on encounter satisfaction were significant. Furthermore, the interaction effect between the two factors was also significant (F(1, 132) = 22.56, p < 0.001). Planned contrasts were performed to further investigate the nature of the interaction. Table 5.13 shows that means and standard errors

of the encounter satisfaction as a function of salience and script-incongruent behaviors of other consumers. Figure 5.4 visualizes the interaction effect.

Table 5.13

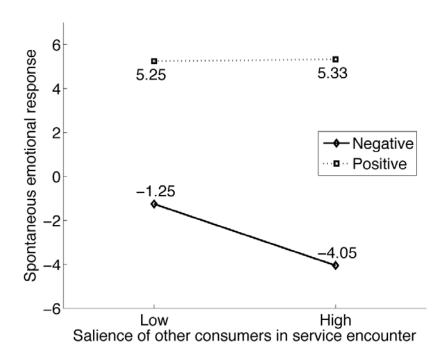
Means and Standard Errors of Encounter Satisfaction (Airline Service)

Salience of other consumers in service encounter	Script-incongruent behaviors		Control group
	Negative	Positive	
Low	-1.25*	5.25	
	(.29)	(.29)	
High	-4.05*	5.33	
	(.29)	(.31)	
Control			2.80
			(.41)

Notes: \*Mean differences were statistically significant (p < 0.01).

Figure 5.4

Interaction Effect of Encounter Satisfaction (Airline Service)



The planned contrasts revealed that when the incongruent behaviors were negative (positive), participants reported encounter dissatisfaction (satisfaction). In addition, in the negative behavior conditions, participants in the high salience group (M = -4.08) reported greater encounter dissatisfaction than their counterparts in the low salience group (M = -1.25, t(68) = 6.69, p < 0.001). However, encounter satisfaction between the two salience conditions showed no statistical difference when other consumers' script-incongruent behaviors were positive ( $M_{high} = 5.26$  vs.  $M_{low} = 5.33$ , t(65) = .16, p = 0.86). Therefore, Hypothesis 7 predicting the moderating effect of salience on encounter satisfaction was partially supported.

# **Comparisons between the Restaurant and Airline Service Context**

# **Spontaneous Emotional Responses**

To explore whether spontaneous emotional responses differ in the two service contexts, a three-way ANOVA test was performed, with salience of other consumers, script-incongruent behaviors and service context as between-subjects factors. As the purpose of this analysis was to identify potential differences between the two contexts, only the main effect and interaction effects involving service context were of interest. The effects of script-incongruent behaviors and salience of other consumers were reported in the earlier sections of this chapter.

To check the assumption of homogeneity of variance associated with an ANOVA test, Levene's test was first performed. The results of Levene's test were highly insignificant (F(7, 270) = .99, p = 0.43), suggesting that the assumption of equal variances across the experimental conditions was met. The residual plots are presented in Appendix F. The ANOVA results are presented in Table 5.14.

Table 5.14

ANOVA Results of Spontaneous Emotional Responses across the Two Service Contexts

	Type III	•	-		
	Sum of		Mean		
Source	Squares	df	Square	F	Sig.
Corrected Model	4278.794(a)	7	611.256	203.527	.000
Intercept	21.007	1	21.007	6.995	.009
Type of Service	.328	1	.328	.109	.741
Context Salience	30.519	1	30.519	10.162	.002
Script-Incongruence	4176.912	1	4176.912	1390.764	.000
Type * Salience	3.056	1	3.056	1.017	.314
Type * Incongruence	64.244	1	64.244	21.391	.000
Salience * Incongruence	33.782	1	33.782	11.248	.001
Type * Salience * Incongruence	2.096	1	2.096	.698	.404
Error	810.897	270	3.003		
Total	5108.382	278			
Corrected Total	5089.691	277			

a R Squared = .841 (Adjusted R Squared = .837)

As shown in Table 5.14, the main effect of service context was insignificant (F(1, 270)) = .10, p = 0.74). However, the two-way interaction between service context and scriptincongruent behaviors was highly significant (F(1, 270) = 21.39, p < 0.001). The planned contrasts revealed that when the incongruent behaviors were negative, participants in the airline context (M = -4.12) reported greater negative emotional responses than their counterparts in the restaurant context (M = -3.01; t(138) = 3.44, p < 0.001). Similarly, when the incongruent behaviors were positive, participants in the airline context (M = 4.60) reported greater positive emotional responses than their counterparts in the restaurant context (M = 3.71; t(136) = -3.13, p < 0.01). The means and standard errors of spontaneous emotional responses are presented in Table 5.15. The interaction effect is visualized in Figure 5.5.

Table 5.15

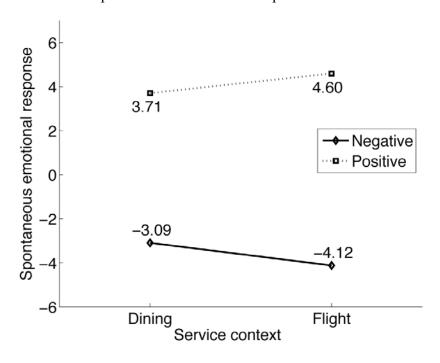
Adjusted Means and Standard Errors of Spontaneous Emotional Responses across the Two Service Contexts

Type of Service	Script-incongruent				
- 1	-	_			
Context	behaviors				
	Negative	Positive			
Restaurant	-3.09**	3.71*			
	(.20)	(.20)			
Airline Service	-4.12**	4.60*			
	(.20)	(.21)			

Notes: \* Mean differences were statistically significant (p < 0.01). \*\* Mean differences were statistically significant (p < 0.001).

Figure 5.5

Interaction Effect of Spontaneous Emotional Responses across the Two Service Contexts



# **Symbolic Emotional Responses**

A three-way ANOVA test was performed to test the differences in symbolic emotional responses across the two service contexts, using service context, script-incongruent behaviors, and salience of other consumers as between-subjects factors. To check the assumption of homogeneity of variance associated with an ANOVA test, Levene's test was first performed. The results of Levene's test were highly insignificant (F(7, 270) = 1.14, p = 0.33), suggesting that the assumption of equal variances across the experimental conditions was met. The residual plots are presented in Appendix F. The ANOVA results are presented in Table 5.16.

Table 5.16

ANOVA Results of Symbolic Emotional Responses across the Two Service Contexts

	Type III Sum of		Mean		
Source	Squares	df	Square	F	Sig.
Corrected Model	59.203(a)	7	8.458	4.328	.000
Intercept	3835.924	1	3835.924	1963.106	.000
Type	.023	1	.023	.012	.914
Salience	4.923	1	4.923	2.519	.114
Incongruence	33.479	1	33.479	17.134	.000
Type * Salience	8.690	1	8.690	4.447	.036
Type * Incongruence	8.446	1	8.446	4.322	.039
Salience * Incongruence	4.036	1	4.036	2.065	.152
Type * Salience * Incongruence	.620	1	.620	.317	.574
Error	527.582	270	1.954		
Total	4458.750	278			
Corrected Total	586.785	277			

a R Squared = .101 (Adjusted R Squared = .078)

As shown in Table 5.16, the main effect of service context was insignificant (F(1, 270) = .01, p = 0.91). However, the two-way interaction effect between service context and salience of other consumers was significant (F(1, 270) = 4.44, p < 0.05). The two-way interaction effect

between service context and script-incongruent behaviors was also significant (F(1, 270) = 4.32, p < 0.05). The planned contrasts were performed to further explore the nature of the interaction effects.

The planned contrasts revealed that in the restaurant context, there was no significant difference in symbolic emotional responses between the two salience conditions (t(139) = 1.47, p = 0.14), whereas in the airline context, symbolic emotional responses in the two salience groups were significantly different (t(135) = 2.29, p < 0.05). Specifically, participants in the low salience conditions reported significantly greater emotive dissonance than their counterparts in the high salience conditions ( $M_{low} = 4.21$  vs.  $M_{high} = 3.23$ ; t(135) = 2.29, p < 0.05). The means and standard errors of the emotive dissonance scores by script-incongruent behaviors are presented in Table 5.17. This interaction effect is visualized in Figure 5.6.

The planned contrasts revealed that in the restaurant context, there was no significant difference in symbolic emotional responses between the negative and positive behavior conditions (t(139) = 147, p = 0.14). However, this difference was statistically significant in the airline context (t(135) = 4.19, p < 0.001). Specifically, participants in the negative behavior condition reported greater levels of emotive dissonance than their counterparts in the positive behavior condition ( $M_{negative} = 4.03$  vs.  $M_{positive} = 3.41$ ; t(135) = 4.19, p < 0.001). The means and standard errors of the emotive dissonance scores by salience of other consumers are presented in Table 5.18. This interaction effect is visualized in Figure 5.7.

Table 5.17

Adjusted Means and Standard Errors of Symbolic Emotional Responses by ScriptIncongruent Behaviors across the Two Service Contexts

Type of Service	Script-incongruent			
Context	beha	viors		
	Negative Positiv			
Restaurant	3.87	3.51		
	(.16) $(.16)$			
Airline Service	4.21* 3.23*			
	(.16)	(.16)		

Notes: \*Mean differences were statistically significant (p < 0.01).

Figure 5.6

Interaction Effect of Symbolic Emotional Responses by Script-Incongruent Behaviors across the Two Service Contexts

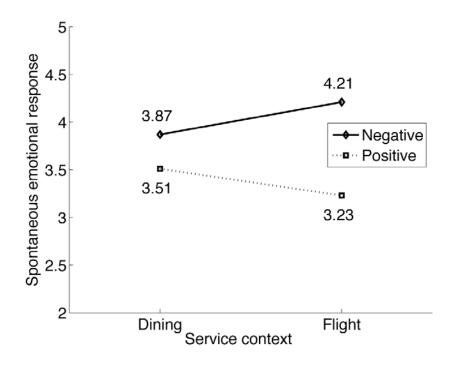


Table 5.18

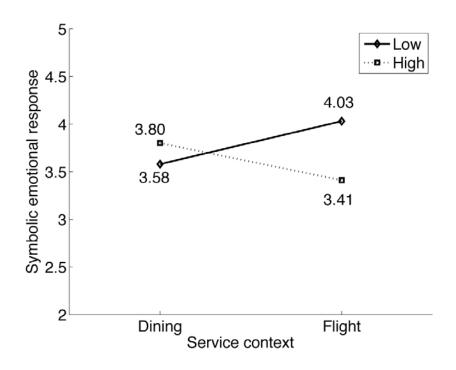
Adjusted Means and Standard Errors of Symbolic Emotional Response by Salience of
Other Consumers in the Two Service Contexts

Type of Service	Salience of Other			
Context	Consumers			
	Low Hig			
Restaurant	3.58	3.80		
	(.16) $(.16)$			
Airline Service	4.03* 3.4			
	(.16) (.17			

Notes: \*Mean differences were statistically significant (p < 0.05).

Figure 5.7

Interaction Effect of Symbolic Emotional Responses by Salience of Other Consumers across the Two Service Contexts



# **Coping Responses**

A three-way ANOVA test was performed to test differences in coping between the two service contexts, using service context, script-incongruent behaviors and salience of other consumers as between-subjects factors. To check the assumption of homogeneity of variance associated with an ANOVA test, Levene's test was first performed. The results of Levene's test were insignificant (F(3, 135) = 1.71, p = 0.16), suggesting that the assumption of equal variances across the experimental conditions was met. Residual plots are presented in Appendix F. The ANOVA results are presented in Table 5.19.

Table 5.19

ANOVA Results of Coping Responses across the Two Service Contexts

	Type III Sum of		Mean	<u> </u>	
Source	Squares	df	Square	F	Sig.
Corrected Model	50.022(a)	3	16.674	12.398	.000
Intercept	.635	1	.635	.472	.493
Type	5.426	1	5.426	4.034	.047
Salience	42.456	1	42.456	31.567	.000
Type * Salience	1.328	1	1.328	.987	.322
Error	181.568	135	1.345		
Total	232.806	139			
Corrected Total	231.590	138			

a R Squared = .216 (Adjusted R Squared = .199)

The ANOVA results showed that the main effect of service context was significant (F(1, 135) = 4.03, p < 0.05). The marginal means revealed that when exposed to other consumers' negatively-valenced script-incongruent behaviors, participants in the airline context had greater

tendency to use problem-focused coping (M = 0.13) than their counterparts in the restaurant context (M = -0.26).

#### **Encounter Satisfaction**

The effect of other consumers' script-incongruent behaviors on encounter satisfaction across the two service contexts was investigated by a three-way ANOVA, with service context, script-incongruent behaviors, and salience of other consumers as between-subjects factors. Product category involvement was included as a covariate. To check the homogeneity of variances across the experimental conditions, Levene's test of equality of error variances was performed. The results were insignificant (F(7, 269) = 1.16, p = 0.32), suggesting that the equal error variances across the experimental conditions can be assumed. The residual plots are presented in Appendix F. The ANCOVA results are presented in Table 5.20.

Table 5.20

ANCOVA Results of Encounter Satisfaction across the Two Service Contexts

	T. III.C				
	Type III Sum				
Source	of Squares	df	Mean Square	F	Sig.
Corrected Model	4275.990(a)	8	534.499	178.600	.000
Intercept	180.549	1	180.549	60.330	.000
involvement	21.211	1	21.211	7.088	.008
Type	.701	1	.701	.234	.629
Salience	81.362	1	81.362	27.187	.000
Incongruence	4026.283	1	4026.283	1345.363	.000
Type * Salience	4.287	1	4.287	1.432	.232
Type * Incongruence	6.677	1	6.677	2.231	.136
Salience * Incongruence	131.835	1	131.835	44.052	.000
Type * Salience * Incongruence	.111	1	.111	.037	.848
Error	802.047	268	2.993		
Total	5574.400	277			
Corrected Total	5078.037	276			

a R Squared = .842 (Adjusted R Squared = .837)

As shown in Table 5.20, the main effect of service context and its two-way and three-way interactions with other two factors were insignificant (F's < 2.23, p's > 0.13). The insignificant results suggest that the effect of script-incongruent behaviors on encounter satisfaction did not differ across the two service contexts.

To further explore the effects of other-consumer-elicited emotional responses on encounter satisfaction, multiple regression procedures were performed. The results of the multiple regression analyses are reported next.

# Regression Analyses on Emotional Responses and Encounter Satisfaction

The preceding sections of this chapter report the effects of script-incongruent behaviors of other consumers on four consumer responses, namely, spontaneous emotional responses, symbolic emotional responses, coping responses and encounter satisfaction. The moderating effect of salience of other consumers on the relationships between incongruent behaviors and the four consumer responses was also explored.

In the ANOVA analyses, the four consumer response variables were all modeled as dependent variables, with other consumers' script-incongruent behaviors and salience of other consumers as independent variables. However, it is likely that emotional responses also influence encounter satisfaction. Literature suggests that consumers' emotional responses are moment-to-moment responses and such moment-to-moment responses can be integrated to overall judgment such as encounter satisfaction (Baumgartner, Sujan & Padgett, 1997). Therefore, it is of theoretical interest to explore the impact of other-consumer-elicited moment-to-moment responses on encounter satisfaction. Statistically, a test to investigate such effects

calls for a multiple regression procedure that models the emotional response variables as independent variables and encounter satisfaction as dependent variable.

For the multiple regression procedures to reveal true relationships between emotional responses and encounter satisfaction, the "treatment effects" of experimentally manipulated incongruent behaviors and salience of other consumers on all the variables have to be removed first. Statistically, it means that multiple regression procedures should be applied using the residuals of these scores produced by the ANOVA procedures, instead of the original values of these variables. Residuals represent the variances that are not explained by the two experimentally manipulated factors: script-incongruent behaviors and salience of other consumers.

Multiple regression procedures were subsequently performed, regressing the residuals of encounter satisfaction on residuals of spontaneous emotional responses, emotive dissonance and coping responses. Table 5.21 presents the results of regression analyses. Since the three independent variables were theoretically correlated to each other, multicollinearity diagnosis statistics was first examined. The diagnosis showed that the VIF values for the independent variables were all smaller than 1.40, well below the widely accepted cutoff value of 10. Thus, the multicollinearity among the independent variables was unlikely to have materialized effects on the multiple regression results.

Table 5.21

Results of Ordinary Least Squares Regression Analysis: Spontaneous Emotional Responses,

Emotive Dissonance, Coping Responses and Encounter Satisfaction

	Model 1		Model 2	2
Independent Variable	Encount	er satisfaction	Encoun	ter satisfaction
	b	Std. Error	b	Std. Error
Spontaneous emotional	.35*	.08	.35*	.08
responses				
Emotive dissonance	04			
Coping responses	55*	.12	53*	.11
$R^2$	.33*		.33*	
Adjusted $R^2$	.31		.32	
df (regression, residual)	(3, 135)		(2, 136)	

Notes: Residuals of ANOVA tests were used to perform the regression analyses \*p < 0.001

As shown in Table 5.21, Model 1 included three independent variables: spontaneous emotional responses, emotive dissonance and coping. The three independent variables altogether explained 33% of the variance in encounter satisfaction unexplained by the script-incongruent behaviors of other consumers and salience of other consumers (F(3, 135) = 22.5, p < 0.001). As predicted in Hypothesis 8, spontaneous emotional responses were significantly and positively related to encounter satisfaction (b = .35, p < 0.001), indicating that those who reported more positive spontaneous emotional response were more likely to report greater levels of encounter satisfaction. Coping was found to be negatively related to encounter satisfaction (b = -.55, p < 0.001). As the coping index was formed in such a way that greater scores represent a greater tendency to use problem-focused coping, the results suggest that when consumers use problem-focused strategies to cope with other-consumer-elicited negative emotions, encounter satisfaction failed to

achieve conventional levels of statistical significance, although the sign of the regression coefficient was as predicted. Therefore, Hypothesis 9 was not supported.

As the regression model with the three independent variables revealed that emotive dissonance was not a significant predictor of encounter satisfaction, a more parsimonious regression model (Model 2) with only the two significant independent variables was fit to get more accurate estimates of regression coefficients and smaller standard errors. The results are also presented in Table 5.21.

#### **Summary**

In this chapter, the results of the statistical analyses for the main study were presented. The hypothesis testing results in the restaurant and airline context were reported first. The results observed in the two contexts were then compared and contrasted. Finally, the results of regression analyses on consumers' emotional responses and encounter satisfaction were presented. In Chapter 6, discussion of the results is presented.

#### **CHAPTER VI**

#### DISCUSSION OF THE RESULTS

This chapter offers a general discussion of the results. An overview of the empirical study is first provided, followed by a discussion of the results.

### **Overview of the Empirical Study**

The objectives of the empirical inquiry were: 1) to investigate how behaviors of other consumers in a service encounter influence a focal consumer's emotional experiences at both a spontaneous and symbolic level; 2) to examine how behaviors of other consumers affect encounter satisfaction; 3) to test whether the salience of other consumers moderates the relationships between behaviors of other consumers and consumer responses; and 4) to explore relationships among emotional responses and encounter satisfaction.

The empirical investigation of this dissertation included three pilot studies and one main study. The three pilot studies were conducted to develop experimental stimuli for the main study. The main study was conducted for hypothesis testing. In the main study, other consumers' script-incongruent behaviors and salience of other consumers were experimentally manipulated through service encounter scenarios. Consumers' spontaneous emotional responses, symbolic emotional responses, coping responses and encounter satisfaction were measured. Hypotheses were tested in two service contexts: restaurant and airline service.

#### **Discussion**

# **Spontaneous Emotional Responses**

The results support the hypothesis that the valence of other consumers' scriptincongruent behaviors is positively related to the valence of a focal consumer's spontaneous
emotional responses. This finding was replicated across the restaurant and airline context. As
shown in the baseline spontaneous emotional responses in the control groups, when other
consumers demonstrate script-congruent behaviors, spontaneous emotional responses are in a
somewhat neutral state. However, when other consumers' behaviors deviate from situational
scripts, a focal consumer shows strongly valenced spontaneous emotional responses, in the same
direction of other consumers' incongruent behaviors. This finding demonstrates that other
consumers play an important role in a focal consumer's emotional experiences in a service
encounter. Their behaviors can be emotion-eliciting when such behaviors are not perceived as
script-incongruent.

The results suggest that salience of other consumers moderates the effect of scriptincongruent behaviors on a focal consumer's spontaneous emotional responses. Specifically, the
moderating effect is limited to situations where the incongruent behaviors are negative.

Spontaneous emotional responses are not affected by the salience of other consumers when the
incongruent behaviors are positive. These findings are robust across the two service contexts.

The results provide empirical evidence for the "salience effect" on consumer responses to
behavior of others in service encounters. Consistent with the framework of Social Impact
Theory (Latane, 1981), impact of other consumers appears to be a multiplicative function of
temporal duration, spatial proximity and emotional content of a service encounter. This finding
demonstrates that other consumers' behaviors, together with their presence in a service encounter

on temporal, spatial and emotional dimensions, jointly affect consumers' spontaneous emotional responses.

The results also suggest that, regardless of the valence of other consumers' scriptincongruent behaviors, spontaneous emotional responses tend to be stronger in the airline context as compared to the restaurant context. One plausible explanation for the heightened spontaneous emotional responses in the airline context could simply be that the temporal duration of service encounters in airline services is generally longer than that in dining services, making the presence of other consumers more salient in airline services. To statistically test this possibility, an independent sample t-test on the temporal duration was performed between the two contexts. The results showed that the duration means between the two contexts were almost identical (M airline = 3.95 vs. M restaurant = 3.92; t(276) = -.15, p > 0.87). Since the perceived duration does not differ across the two contexts, it is unlikely that duration alone could explain the observed pattern of spontaneous emotional responses in the two service contexts.

Another alternative explanation is that restaurant and airline services, as two different product categories, may differ on the hedonic/utilitarian dimension. Data from the main study<sup>3</sup> confirmed that participants did perceive dining as a service category with predominantly hedonic outcomes ( $M_{hedonic} = 5.19 \text{ vs. } M_{utilitarian} = 4.11 \text{ on a 7-point scale}$ ) while airline service was purchased primarily for its utilitarian outcomes ( $M_{utilitarian} = 5.20 \text{ vs. } M_{hedonic} = 3.89 \text{ on a 7-point scale}$ ). There is a growing recognition that consumption involves experiential as well as instrumental outcomes (Babin, Darden & Griffin, 1994). Specifically, consumption activities occur for two basic reasons: (1) hedonic gratification, and (2) instrumental and utilitarian reasons (Batra & Ahtola, 1990). The two-dimensional conceptualization of consumption (Voss,

<sup>&</sup>lt;sup>3</sup> The utilitarian/hedonic measure was included in the two control groups as an ostensibly unrelated task.

Spangenberg & Grohmann, 2003) suggests that "the first dimension is a *hedonic* dimension resulting from *sensations* derived from the experience of using products, and the second is a *utilitarian* dimension derived from *functions* performed by products" (p.310). Products prevailed on hedonic dimension are generally considered *experiential* consumptions while products predominantly utilitarian are believed to be *functional* consumptions (Mano & Oliver, 1993; Park, Jaworski & MacInnis, 1986).

The finding that spontaneous emotional responses to other consumers' script-incongruent behaviors are generally stronger in the airline context can be explained by the difference on the hedonic/utilitarian dimension between restaurant and airline service. In hedonic consumptions such as dining, consumption experiences are multisensory and more emotionally involving (Hirschman & Holbrook, 1982). Consequently, in such an emotion "saturated" consumption experience, the threshold for other consumers to serve as an additional source of emotional stimuli is naturally to be higher, as compared to a utilitarian consumption experience such as traveling by plane. As a result, exposed to identical emotional stimuli from other consumers, consumers in dining services respond less strongly.

#### **Symbolic Emotional Responses**

The results reveal that there is no relationship between other consumers' script-incongruent behaviors and a focal consumer's symbolic emotional responses in the restaurant context. Regardless of the valence of behavioral incongruence, consumers in the restaurant context do not deliberately inhibit their emotional expressions. In contrast, the results suggest that there is a significant relationship between other consumers' script-incongruent behaviors and a focal consumer's symbolic emotional responses in the airline context. Specifically, consumers

experience greater emotive dissonance when the behavioral incongruence is negative in valence. Furthermore, salience of other consumers has a significant effect on symbolic emotional responses in the airline context. Consumers experience greater emotive dissonance when the salience of other consumers is low.

The null effects observed in the restaurant context are unexpected. Prior studies suggest that people are more likely to suppress their emotional expressions in social settings, particularly when the emotions are negative and socially undesirable, such as anger toward others (Berger et al., 1981; Geen, 1985). However, this study finds that consumers are somehow ambivalent about their emotional expressions in the restaurant context<sup>4</sup>. One plausible explanation for the null effects observed could be that dining is a consumption activity with predominantly hedonic outcomes. Since hedonic-driven consumption is usually an emotion-laden event (Mano & Oliver, 1993), consumers may be preconditioned to express their emotions spontaneously in such service encounters, even when such emotions are negative and socially undesirable. On the other hand, consumers are invariantly constrained by emotional display rules in service encounters. As a result, ambivalence towards emotional expressions occurs. From a methodological perspective, the null effects could also be due to cognitive difficulties associated with self-reports on emotional expression measures, in particular when the study is scenario-based.

Unlike the null effects observed in the restaurant context, effects of other consumers' script-incongruent behaviors and salience of other consumers on emotive dissonance were significant in the airline context. As expected, participants reported greater emotive dissonance in response to other consumers' negatively-valenced script-incongruent behaviors. This finding is consistent with prior research which suggests that people are more likely to inhibit their

<sup>&</sup>lt;sup>4</sup> Emotive dissonance mean scores were all centered about the midpoint on a 7-point scale.

emotional expressions when the underlying emotions are negative (Berger et al., 1981; Geen, 1985). However, as for the moderating effect of salience of other consumers, contrary to the direction predicted in the hypothesis, participants in the high salience conditions actually reported less emotive dissonance than their counterparts in the low salience conditions. One speculation for this unexpected result is that less inhibition of emotion expressions in high salience conditions is a result of outcome dependency. Prior studies suggest that emotional expressions are affected by outcome dependency (Fiske & Pavelchak, 1986). In service encounters where the salience of other consumers is high, the outcome dependency on other consumers also tends to be high. With more at stake, consumers may feel compelled to be emotionally expressive in order to protect the threatened outcomes of the consumption. Although considerations for the social consequences of socially undesirable emotional expressions have a tendency to suppress emotional expressiveness (Friedman & Miller-Herrigner, 1991), high levels of outcome dependency on other consumers may override concerns about social and psychological costs associated with emotional expressions when the salience of other consumers is high in the service encounter.

# **Coping Responses**

The results demonstrate that, in coping with other-consumer-elicited negative emotions, consumers are more likely to use problem-focused strategies (emotion-focused strategies) when the salience of other consumers is high (low). This finding is robust across the two service contexts. It is consistent with prior research suggesting that variability in coping strategies is at least partially a function of consumers' evaluation about what is at stake in stressful service

encounters (e.g., Carver, Scheier & Weintraub, 1989; Folkman et al., 1986; Lazarus & Folk, 1984).

In coping with other-consumer-elicited negative emotions, respondents in the restaurant context reported a greater propensity to use emotion-focused strategies compared with their counterparts in the airline context. These differential coping patterns also fit into the hedonic/utilitarian framework. Dining, as a hedonic-driven consumption, is a multisensory experience. Therefore, other consumers are only one of the emotional stimuli sources in a dining experience. In situations where other consumers are a source of negative emotional stimuli, other multisensory stimuli in a dining experience may produce a "cushion effect" on coping responses. Hence, consumers have a less tendency to use confrontational problem-focused coping in dealing with other-consumer-elicited negative emotions.

## **Encounter Satisfaction**

The results suggest that the valence of other consumers' script-incongruent behaviors is positively related to the valence of encounter satisfaction. This finding provides empirical evidence that other consumers are an essential component of service delivery to the determination of consumer satisfaction (dissatisfaction) (Bitner, Booms & Tetreault, 1990). This study also demonstrates that salience of other consumers moderates the effect of incongruent behaviors on encounter satisfaction. When the behavioral incongruence is negative in valence, the effect is more pronounced in situations where the salience of other consumers is high. When the behavioral incongruence is positive in valence, salience has no significant effect on the relationship between incongruent behaviors and encounter satisfaction. The main effect of

script-incongruent behaviors and interaction effect of salience of other consumers on encounter satisfaction were replicated across the two service contexts.

The salience effect on encounter satisfaction provides further empirical support for the multidimensional conceptualization of presence of other consumers in service encounters.

Consistent with the Social Impact Theory (Latane, 1981), variability in consumers' presence on temporal, spatial and emotional dimensions affects the impact of their behaviors on encounter satisfaction. Notably, the effects of salience of other consumers on encounter satisfaction are not symmetrical in the two behavioral incongruence situations. High salience of other consumers has more detrimental impact on encounter satisfaction when the incongruent behaviors are negative. Positive incongruent behaviors of others do not necessarily boost the encounter satisfaction<sup>5</sup>. One speculation for this pattern is that the psychological (cognitive and emotional) costs associated with encounters with other consumers can not necessarily be compensated even when others' behaviors are positive.

Another interesting finding is that, although spontaneous emotional responses are stronger in the airline service context, encounter satisfaction does not differ between the two service contexts. This finding can also be explained from a hedonic/utilitarian perspective. In services with hedonic outcomes, perceived enjoyment itself is an important "hedonic benefit" provided through consumption activities and hedonic benefits result more from fun than from task completion (Bloch & Bruce, 1984; Holbrook & Hirschman, 1982). Hence, for consumption activities with hedonic outcomes, "the seeking of experience is often far more significant than the mere acquisition of products" (Sherry, 1990, p.27). As a result, in services with hedonic outcomes, even if consumers respond to emotional stimuli from other consumers less strongly,

<sup>&</sup>lt;sup>5</sup> As compared to the baseline encounter satisfaction in the control groups.

the impact of other consumers' behaviors on encounter satisfaction is greater because the consumption experience itself is ultimately affected by such behaviors. In contrast, utilitarian outcomes are acquired if the consumption is completed successfully (Babin, Darden & Griffin, 1994). Even if consumers respond to other consumers more strongly in utilitarian services, encounter satisfaction, the overall evaluation of the service encounter, is primarily determined by the acquisition of utilitarian outcomes. Therefore, the impact of other consumers' scriptincongruent behaviors on encounter satisfaction in services with utilitarian outcomes may not be as great as that in services with hedonic outcomes.

### Other-Consumer-Elicited Emotional Responses and Encounter Satisfaction

In exploring relationships between other-consumer-elicited emotional responses and encounter satisfaction, this study finds that after controlling for other consumers' script-incongruent behaviors and salience of other consumers in a service encounter, there is a strong and positive relationship between other-consumer-elicited spontaneous emotional responses and encounter satisfaction. The regression analysis results also suggest that there is a significant and negative relationship between problem-focused coping and encounter satisfaction. However, there is no significant relationship between emotive dissonance and encounter satisfaction when spontaneous emotional responses and coping are controlled for.

The results support the proposition that other-consumer-elicited moment-to-moment spontaneous emotional responses are integrated into encounter satisfaction, or the overall evaluation of the service encounter. Other-consumer-elicited spontaneous emotional responses explain a considerable portion of the variance in encounter satisfaction. Surprisingly, although emotive dissonance is emotionally costly (Pennebaker, 1985; Polivy, 1990), this study finds no

significant effect of emotive dissonance on encounter satisfaction. This null effect could be due to the moderately high correlation between emotive dissonance and coping (r = -.40, p < 0.001). The significant effect of coping on encounter satisfaction may have attenuated the effect of emotive dissonance on encounter satisfaction.

Another notable finding from the regression analyses is that problem-focused coping has a negative effect on encounter satisfaction. Coping literature suggests that problem-focused coping are generally more effective than emotion-focused coping in stressful encounters (e.g., Carver, Scheier & Weintraub, 1989; Folkman et al., 1986; Lazarus & Folkman, 1984).

Interestingly, this study finds that in coping with other-consumer-elicited negative emotions, as reflected in the reduced level of encounter satisfaction, problem-focused coping appears to be more taxing than emotion-focused coping. This finding may be another piece of empirical evidence for the psychological costs associated with encounters with other consumers in service settings. Problem-focused coping, as an "oppositional approach" to stressful service encounters (Ringberg, Odekerken-Schroder & Christensen, 2007), compromises encounter satisfaction.

These results highlight the importance of isolating other-consumer-elicited emotions from other emotion-eliciting sources in a service environment (e.g., atmospheric factors and service providers) and of examining the unique underlying psychological processes associated with other-consumer-elicited emotions.

#### **CHAPTER VII**

#### THEORETICAL CONTRIBUTIONS AND MANAGERIAL IMPLICATIONS

This chapter includes four sections. In the first section, theoretical contributions of this research are presented. In the second section, managerial implications of the findings are discussed. Next, limitations of the research are delineated. This chapter concludes with suggestions for future research.

#### **Theoretical Contributions**

#### Overview

Drawing from Script Theory (Schank & Abelson, 1977), Social Impact Theory (Latane, 1981) and Social Facilitation Theory (Zajonc, 1965), this research provides a theoretical framework of consumer responses to behaviors of other consumers in service encounters. Specifically, this research (1) offers a script theoretical perspective of other consumers' behaviors in service encounters; (2) proposes a multidimensional conceptualization of presence of other consumers in service encounters and provides empirical evidence for its moderating effect on consumers' emotional responses and encounter satisfaction; and (3) theorizes a dual-process model of emotional responses to other consumers in service encounters. Together, the results of this research suggest several important theoretical implications. In the sections that follow, such implications are discussed in detail.

# A Script Theoretical Perspective of Consumer-to-Consumer Interactions

One important contribution to service literature is the script theoretical perspective of consumer-to-consumer interactions offered in this dissertation. The theoretical significance of a script approach lies in its recognition of the social nature of consumer-to-consumer interactions. Unlike most of consumer-provider relationships that are largely commercial (Price & Arnould, 1999), consumer-to-consumer relationships at service encounters are first and foremost social encounters (McCallum & Harrison, 1985). Like other social encounters, consumers at service encounters usually come into contact with other consumers with preconceived situational scripts. The script approach offered in this dissertation casts behaviors of other consumers in a social and interpersonal backdrop. On the other hand, it is proposed that a focal consumer's responses to such behaviors are also script-tinged, as emotional displays at social settings are equally bounded by situational scripts. Therefore, a script perspective portrays consumer-to-consumer interactions at service encounters as a dynamic two-way interpersonal process, as they rightfully are.

At a more operational level, the script-congruence concept provides an encompassing yet parsimonious taxonomy to categorize behaviors of other consumers in service encounters. The script-congruence/incongruence conceptualization allows behaviors of other consumers to be detached from their specific contexts and makes the classification somewhat universal. The script-congruence scheme addressed the drawbacks of context-specific categorizations in earlier studies. For example, in classifying other consumers' behaviors in tourism destination settings, Grove and Fisk (1997) suggest two broad behavioral categories: protocol and sociability. Similarly, in defining other consumers' behaviors in restaurant and sports settings, Martin (1996)

demonstrate that consumers are most pleased when other consumers display "gregarious" behaviors, but are generally displeased with "violent" or "grungy" behaviors.

#### **Multidimensional Presence of Other Consumers in Service Encounters**

This dissertation proposes a multidimensional conceptualization of presence of other consumers in service encounters. Drawing on Social Impact Theory (Latane, 1981) and literature on the three dimensions of service encounters (Price et al., 1995), this research anchors presence of other consumers in service encounters on three dimensions: temporal, spatial and emotional. Although situational salience of other consumers is long recognized in service literature (Jone, 1995), this is the first research that offers a conceptual framework that systematically defines the presence of other consumers in service encounters. This multidimensional framework provides a building block for future studies in influence of other consumers (IOC) research.

Operationalizing the multidimensional presence into salience of other consumers in the empirical investigation, this research demonstrates its moderating effect on consumer responses to behaviors of other consumers. The moderating effect of salience of other consumers is robust in a variety of consumer responses (e.g., spontaneous emotional responses, symbolic emotional responses, coping responses and encounter satisfaction) and across two service contexts (restaurant and airline service). The strong empirical evidence for the salience effect provides further support for the multidimensional framework, which implies that other consumers' influence, depending on their temporal, spatial and emotional presence in a service encounter, can vary within and across service product categories. This notion suggests that future IOC

research need to account for the effect of contextual salience in examining consumer responses to other consumers in service encounters.

# A Dual-Process Model of Emotional Responses to Behaviors of Other Consumers

Our understanding of consumer responses in service encounters is amplified with the demonstration of a dual-process model of emotional responses to behaviors of other consumers. Following Buck's (1985, 1988) conceptualization, this research proposes two modes of emotional responses: biologically-based *spontaneous* emotional responses and socially-shaped *symbolic* emotional responses. The inclusion of symbolic emotional responses in the framework is an important one. It captures the social nature of consumer-to-consumer interactions in service encounters. The empirical evidence of symbolic emotional responses revealed in this study sheds light on the psychological implications of the presence of other consumers in service encounters. This attempt on psychological implications extends the IOC research beyond its traditional focus on other consumers' physical and behavioral impact in consumption experiences.

The social inhibition effect on emotional expressions emerged in this study further demonstrates that the human triad in service encounters (a focal consumer-service provider-other consumers) weaves a complex psychological landscape in which consumptions take place. It points to the importance of examining the dyadic relationships in the human triad separately (e.g., consumer-to-consumer and consumer-to-provider), as the nature of the two dyadic relationships is different (McCallum & Harrison, 1985; Price & Arnould, 1999). On the other hand, it also highlights the need to integrate our understanding of the dyadic relationships and to take a holistic perspective of human interactions in service encounters.

# **Impact of Other Consumers on Encounter Satisfaction**

This research demonstrates that other consumers affect encounter satisfaction on multiple levels. The impact can be behavioral, situational, emotional, psychological and contextual. Behavioral impact of other consumers is demonstrated by the significant relationship between script-incongruent behaviors and encounter satisfaction. This study shows that both the valence and magnitude of behaviors of others have significant effects on encounter satisfaction.

Situational impact of other consumers is reflected in variability in encounter satisfaction as a multiplicative function of temporal, spatial and emotional presence of other consumers in a service encounter. Emotional impact of other consumers is illustrated by the integration of other-consumer-elicited moment-to-moment emotional responses to encounter satisfaction. Psychological impact of other consumers is partially revealed in reduced levels of encounter satisfaction possibly due to the psychological costs associated with expression inhibition and coping. Finally, contextual impact of other consumers is speculated in services with predominantly hedonic or utilitarian outcomes.

The multi-level impact of other consumers on encounter satisfaction reveals the complexity of the phenomenon in question. This research represents one of the early studies to systematically model the impact of other consumers on encounter satisfaction. The findings of this research provide important building blocks for future research in this area.

# **Summary**

This research contributes to an emerging stream of consumer research that investigates the influence of other consumers in service encounters. This research addresses several knowledge gaps by providing a script theoretical perspective of behaviors of other consumers, by

proposing a multidimensional conceptualization of presence of other consumers, and by empirically testing a dual-process model of emotional responses to behaviors of other consumers in service encounters.

#### **Managerial Implications**

This research also provides several important managerial implications for service practitioners. Such implications are discussed next.

# Significance of Consumer-to-Consumer Interactions in Service Encounters

This research brings to the attention of service practitioners the significance of other consumers in influencing a focal consumer's consumption experiences. Traditionally, service firms have mainly focused on consumer-provider interactions. This focus is understandable given that consumer-provider interactions are to some extent within the control of service firms. As such, service firms can properly manage the consumer-provider interactions through managerial interventions such as staff training and execution of service scripts. In contrast, service firms have no direct control over consumer-to-consumer interactions in service delivery. As a result, consumer-to-consumer interactions often unfold themselves without deliberate management by service providers. This research demonstrates that other consumers can significantly influence a focal consumer's consumption experiences and encounter satisfaction. As consumers' consumption experience and encounter satisfaction are related to intent to repurchase (e.g., Liljander & Mattsson, 2002), the results of this study suggest that service firms

need to place an emphasis on the management of an important social element in service delivery: consumer-to-consumer interactions.

# Script Theoretical Perspective of Behaviors of Other Consumers in Service Encounters

The script theoretical perspective allows service practitioners a way to understand consumer responses to behaviors of other consumers at service encounters. This research shows that in situations where behaviors of other consumers are congruent with situational scripts, such behaviors are not salient in a focal consumer's attention repertoire and therefore will only, if at all, invoke minimal emotional responses. In contrast, in situations where behaviors of other consumers are incongruent with situational scripts, valenced emotional responses are elicited.

On an operational level, a straightforward application of the script theoretical perspective is that service firms can use explicit behavioral scripts to guide consumer-to-consumer interactions at service encounters. Although service firms do not have much leverage in directly managing behaviors of their consumers, they can indirectly motivate script-congruent or positively-valenced incongruent behaviors through managing behavioral scripts. Due to the implicit nature of behavioral scripts, consumers may sometimes hold very different behavioral scripts for a same service encounter, or consumers may even have no preconceived scripts for certain service encounters (e.g., going to an ethnic restaurant and not knowing how to order a dish or to properly handle a dish). By explicitly establishing behavioral scripts for consumers, service firms can take a proactive approach to discourage undesirable behaviors. For example, dress code for high-end restaurants or "turn off your cell phone" announcements before a movie show are acts of establishing behavioral scripts for consumers. Explicit behavioral scripts for consumer-to-consumer interactions at service encounters can reduce the ambiguity of tacit social

norms at work and promote script-congruent behaviors of all consumers who share a service environment with one another.

# **A Dual-Process Model of Emotional Responses**

The dual-process model of emotional responses provides service managers a framework to understand consumers' responses to emotional stimuli from other consumers. One important tenet of this framework is that consumers respond not only spontaneously, but also symbolically to behaviors of other consumers. Service literature has long recognized the importance of symbolic emotional responses of service providers and this concept has been extensively discussed under the rubric of "emotional labor" (e.g., Grandey, Tam & Brauberger, 2002; Rafaeli & Sutton, 1987, 1989, 1990). However, symbolic emotional responses on the part of consumers are not widely recognized. This research suggests that service managers need to be aware that consumers might also engage in "emotional labor" to deal with other-consumer-elicited negative emotions. Similar to the negative effect of emotional labor on job satisfaction, consumers' symbolic emotional responses are also found to be taxing, as reflected in reduced level of encounter satisfaction. Hence, managers first need to establish explicit behavioral scripts to reduce the occurrence of consumers' script-congruent behaviors. Second, service providers need to be vigilant about potential undesirable behaviors and take actions to reduce the chance for consumers to respond to such behaviors emotionally. Third, service firms should provide a channel for consumers to vent their negative emotions so as to reduce the need for emotional suppression and thus reduce its detrimental effect on encounter satisfaction.

#### Multidimensional Presence of Other Consumers in Service Encounters

This research provides practitioners with an understanding that presence of other consumers in service encounters are multidimensional. Temporal, spatial and emotional presence of other consumers may differ in service encounters within and across service categories. Furthermore, consumers' emotional responses to behaviors of other consumers are not monolithic and homogenous across all service encounters. As shown in this study, in situations where salience of other consumers in the service encounter is high, script-incongruent behaviors of other consumers are likely to trigger stronger responses from the focal consumer. Therefore, it is important for industry practitioners to develop an understanding of the multidimensional nature of the presence of other consumers in service encounters and its effect on consumer responses. In particular, for services featuring highly salient presence of other consumers in service delivery, behaviors of other consumers can either "make or break" the focal consumer' consumption experiences. Therefore, firms that provide such services should make consumer-to-consumer interactions an important part of the service management. For example, service practitioners may want to allocate necessary resources to facilitate favorable consumerto-consumer interactions as part of the service management.

The notion of salience of other consumers also has implications for service design.

Specifically, consumer-to-consumer interactions can be strategically built into service offerings to enhance the holistic value of consumption experiences. In fact, some companies are taking initiatives to make consumer-to-consumer interactions an integral part of the service offerings.

For example, Marriott Corporation recently redesigned its lobby and public areas to facilitate community-like customer-to-customer interactions (Wolf, 2008). Similarly, in the restaurant business, some trend-setting restaurants are starting to—use communal tables to serve customers

and to promote interactions among customers who are otherwise strangers to one another. Trends show that such communal restaurants are gaining increasing popularity (Finz, 2007).

## Differential Emotional Responses in Hedonic and Utilitarian Services

The results of this study offer a counterintuitive insight to practitioners that effective management of consumer-to-consumer interactions is more critical in utilitarian services than in hedonic services. Generally speaking, hedonic services are more experiential in nature and these experiential elements in a consumption experience produce a "cushion effect" on the impact of other consumers' negative behaviors on emotional responses and encounter satisfaction.

Conversely, utilitarian services lack experiential components in the consumption experience and hence, the threshold for consumers to respond emotionally to other consumers is lower, in particular when other consumers' behaviors are negative. Furthermore, the results show that consumers are more likely to experience emotive dissonance in response to other consumers' negative script-incongruent behaviors in utilitarian services. As emotive dissonance is found to be taxing, it further reduces encounter satisfaction. Therefore, it is critical for utilitarian service providers to effectively manage consumer-to-consumer interactions to reduce this "double-whammy" effect on encounter satisfaction.

#### **Coping with Other-Consumer-Elicited Emotions**

Of particular pertinence to practitioners, this study shed light on consumer coping in stressful service encounters. Three findings provide particular managerial insights to the coping patterns. First, in service encounters where the presence of other consumers is an important part of the consumption experience, consumers are more likely to use problem-focused strategies to

cope with negative emotions elicited by other consumers. Conversely, in situations where the presence of other consumers is not likely to have much impact on the consumption experience, consumers are more likely to resort to emotion-focused coping. Second, consumers using utilitarian services are more likely to use problem-focused coping than those using hedonic services. Third, problem-focused coping will negatively affect encounter satisfaction.

Taken together, the results signal to service providers the importance of being vigilant on potentially undesirable behaviors of consumers who share a service environment with one another. This conscious vigilance on the part of service providers is particularly needed in service encounters where presence of other consumers is salient on temporal, spatial and emotional dimensions. The results imply that consumers do expect service providers to intervene in response to other consumers' undesirable behaviors. If no effective actions are taken by service providers, consumers may need to initiate problem-focused strategies themselves to cope with other consumers' negative behaviors. However, the need to act on the part of the consumers will negatively affect encounter satisfaction and reduce the overall evaluation of the consumption experience.

#### **Summary**

In summary, influence of other consumers in service encounters is an emerging area of management that has been largely ignored by service practitioners. The information presented here suggests that the presence of other consumers has considerable impact on consumption experience. By illustrating how the results of this research could be used to manage the consumer-to-consumer aspect of service encounters, this dissertation hopefully will provide the

impetus for placing emphasis on this aspect of service management and offer a blueprint for an effective execution.

#### Limitations

There are several important limitations associated with this study.

First, this study may have traded away some internal validity in order to use scenarios as stimulus material. While it would have been preferable to use real consumption situations, the challenges and ethics of manipulating script-incongruent behaviors and the lack of control in field situations prevented the study from doing so. Although scenario-based methodology has limitations, this approach may have provided a more stringent assessment of emotional responses because real situations are more involving, and the likelihood to respond emotionally in such situations is likely to be higher than in response to scenarios (Argo, White & Dahl, 2006). However, in retrospect, video with footage may have provided a more vivid manipulation.

Second, the limitations of self-reported emotional response measures should also be acknowledged. Although earlier studies demonstrate that self-reports provide an effective and efficient method of assessment in measuring consumption-related emotions (Westbrook & Oliver, 1991), it would have been preferable to use some observational measures such as facial expressions and actual actions taken to assess some emotional responses, such as emotive dissonance and coping strategies. The choice of self-reports in this study was mainly due to the consideration that this study used a scenario-based methodology and thus observational measures would not have been as reliable as desired.

Third, another measurement-related concern is the lack of multiple indicators to measure symbolic emotional responses. In this study, a two-item scale of emotive dissonance was used to

measure symbolic emotional responses. It is likely that other constructs such as emotional suppression and emotional expressiveness are also indicators representing consumers' symbolic emotional responses to behaviors of others. Due to the assessment difficulties associated with such measures in a scenario-based study, a multiple-indicator symbolic emotional response measure was a logistical challenge in this study. Future studies may want to use multiple measures to assess symbolic emotional responses.

Fourth, manipulation of salience of other consumers was rather subtle. The salience of other consumers was manipulated along two dimensions of service encounters: temporal duration and spatial proximity. The third dimension, emotional content, was measured. The results of the pilot studies and the main study showed that the manipulation was weak. The weak manipulation, especially in the restaurant context, could be a possible reason for the null effect observed in symbolic emotional responses between the two salience conditions. However, the weak manipulation provides a stringent test of the hypotheses. The fact that this study did find evidence of differential effects on spontaneous emotional responses in both service contexts and symbolic emotional responses in the airline context across the two salience conditions is thus somewhat telling.

Fifth, this research offered a hedonic/utilitarian explanation for the differential effects observed in the restaurant and airline context. The obvious risk of such an approach, especially in a scenario-based paradigm, is that more than a single difference separates restaurant and airline services. Further replication would bolster generalizability of the results. Nonetheless, the pattern of the results observed in the two service contexts is consistent with this study's motivating rationale.

Sixth, as is the case for most studies, the use of student samples constitutes a serious limitation. In particular, many consumers are not as well educated as students but may have more disposable income. Even though undergraduate students are not often considered "real" consumers due to such demographic distinctions, they are in fact consumers and are familiar with the two service products chosen in this study. Hence, there is no reason to believe that the effects observed in this study are unique to the student sample. However, a more demographically diverse set of subjects would have been preferable. It would have been valuable to examine the other-consumer-elicited emotional responses across social strata, particularly age and income. It would also be possible to observe cross-cultural differences with a more demographically diverse sample.

Finally, this study was limited in the range of services employed. Only restaurant and airline services were empirically tested in this study. Using a wider range of services whose usage is more tied to particular cultural and demographic groupings might have proved fruitful. Replication of the results observed in this study using a wider range of services would also increase the generalizability of the study findings.

#### **Suggestions for Future Research**

This study offers some interesting avenues for future research.

An important task for future investigations is to explore the psychological processes underlying the differential emotional responses observed in the restaurant and airline service context. This follow-up inquiry may further deepen our understanding of social and psychological perspectives of consumer-to-consumer interactions in service encounters. In this

study, a hedonic/utilitarian framework was used to explain the differential emotional responses observed across the two contexts. However, further inquires are needed to better understand the underlying processes. One speculation is that social motives underlying the hedonic and utilitarian service consumptions may differ. Interpersonal relationship literature suggests two types of social motives: appetitive motive and aversive motive<sup>6</sup> (Derryberry & Reed, 1994; Gable, 2006). It is possible that different social motives are at work in hedonic and utilitarian services, which causes differential emotional responses observed in the two service contexts. Future research could examine the veracity of this hypothesis and identify conditions when the social motive approach could be used to explain the underlying process of consumers' emotional responses to behaviors of other consumers in service encounters.

Future research could also make a link between consumer-to-consumer research and consumer-to-provider research and provide a theoretical framework to integrate findings on consumer responses in these two areas of research. For example, the results of this study suggest that consumers who use problem-focused strategies to cope with other-consumer-elicited negative emotions are more likely to have a reduced level of encounter satisfaction compared with the consumers who use emotion-focused strategies. It may be necessary to define the boundary conditions for the relationship between problem-focused coping and encounter satisfaction in other-consumer-elicited emotional experiences. In this line of research, concepts developed in consumer-to-provider research, such as *outcome* of the problem-focused coping and *attribution* of the cause, can be borrowed to define the boundary conditions for the relationship between coping and encounter satisfaction. Research efforts to merge these two areas of research may help us better understand the relational triadic in a service encounter: a focal

<sup>&</sup>lt;sup>6</sup> Appetitive motive refers to social motives and goals focused on obtaining desired outcomes while aversive motive refers to social motives and goals focused on avoiding negative outcomes (Elliot & Sheldon, 1997).

consumer-provider-other consumers. Better understanding of the complete loop of interpersonal relationships among the three human elements in service encounters is of both theoretical and practical significance.

Future studies can also further refine the multidimensional conceptualization of presence of other consumers in service encounters. This study provides some empirical evidence of the veracity of this conceptualization. As salience of other consumers, an operationalization of the multidimensional presence of other consumers, proved to have a robust moderating effect on consumers' emotional responses and encounter satisfaction, this important situational variable merits a reliable measurement scale. Future studies may extend this work by developing such a scale.

In summary, the issues presented in this dissertation offer a sound theoretical platform for developing the linkages between conceptualizations of the presence of other consumers, emotional responses and encounter satisfaction. It remains to be seen how the theoretical perspectives brought together in this dissertation may complete and enrich each other and how these combined insights may illuminate manifestations of consumer responses in presence of other consumers at service encounters.

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# Appendix A

## **Instrument of Pilot Study 1**

Services are often consumed in the presence of other customers who share the service environment with you. This study is interested in finding out how other customers with whom you share service environment influence your experience.

Think about patroniz	zing a	fast foo	d restau	ırant an	d answe	er the following questions:
To what extent the p of your experience i					in the	service environment is an integral part
l of your experience i	n a ja 2	3 3	4	<i>anı</i> . 5	6	7
Not at all		-		-	-	To a great extent
How important are	other	custome	ers to yo	ou in yo	ur expe	erience in a fast food restaurant?
1	2	3	4	5	6	7
Not important at all						Very important
How critical are oth	er cus	tomers	to your	· experie	ence in	a fast food restaurant?
1	2	3	4	5	6	7
Not critical at all						Very critical
Typically, the durati	on yo	u encou	ınter wi	ith othe	r custon	ners in a fast food restaurant is:
1	2	3	4	5	6	7
Brief						Extended
Typically, the encou	nter y	ou have	e with o	ther cu	stomers	s in a fast food restaurant is:
1	2	3	4	5	6	7
Impersonal						Personal
Typically, the spatia	l prox	imity yo	ou have	with of	ther cus	tomers in a fast food restaurant is:
1	2	3	4	5	6	7
Intimate						Distant
_	resen	ce of ot	her cus	tomers	is part o	of the restaurant ambience in a fast
food restaurant:	2	2	4	_	(	7
I	2	3	4	5	6	7
Not at all						Very much so
The primary consum	_		-	-		d restaurant is:
1	2	3	4	5	6	7
Utilitarian						Experiential

1	urant? 2	3 4	5	6	7							
Very unlikely					Very likely							
Can you think of sa	ituations w	here the be	haviors	of othe	r customers w	ere unac	сер	tabl	e?			
Please describe the				· ·			•					
												_
												_
												_
												_
												_
Can you think of sa	ituations w	here the be	haviors	of othe	r customers s	urprised	vou	in a	ı			
pleasant way? Pleasant				oj olite		p. iseu .	,					
productive ways a second												
												_
												_
												_
												_
												_
Please rate the foll	owing beho	aviors of ot	her cus	tomers (	on a 7-points s	scale: 1=	neui	tral,				<u> </u>
Please rate the foll 7=totally unaccepto	_	aviors of ot	her cus	tomers o	on a 7-points s	scale: 1=	neui	tral,				_
7=totally unaccept	able	•	her cus	tomers (	on a 7-points s	scale: 1=						_
7=totally unacceptor Talking loudly on t	able	•	her cus	tomers (	on a 7-points s	scale: 1=	2	3	4	5	6	7
7=totally unacceptor  Talking loudly on to Cutting the line	able the cell phone	ne			on a 7-points s	scale: 1=	2 2	3 3	4 4	5	6	7
7=totally unacceptor Talking loudly on to Cutting the line The customer in from	able the cell phonon of you to	ne			on a 7-points s	1 1 1	2 2 2	3 3 3	4 4 4	5 5	6	7 7
7=totally unacceptor  Talking loudly on to Cutting the line	able the cell phonon of you to	ne			on a 7-points s	1 1 1 1 1	2 2	3 3	4 4	5	6	7
Talking loudly on to Cutting the line The customer in from Public display of at	the cell phonon of you to ffection	ne akes foreve	r to ord	er		1 1 1 1	2 2 2 2	3 3 3	4 4 4 4	5 5 5	6 6	7 7
Talking loudly on to Cutting the line The customer in from Public display of at the following the fo	the cell phonon of you to ffection	ne akes foreve	r to ord	er		1 1 1 1	2 2 2 2	3 3 3	4 4 4 4	5 5 5	6 6	7 7
Talking loudly on to Cutting the line The customer in from Public display of at	the cell phonon of you to ffection	ne akes foreve	r to ord	er		1 1 1 1	2 2 2 2	3 3 3	4 4 4 4	5 5 5	6 6	7 7
Talking loudly on to Cutting the line The customer in from Public display of at the Please rate the follopleasant	the cell phonon of you to ffection	ne akes foreve	r to ord	er		1 1 1 1	2 2 2 2 neur	3 3 3 3	4 4 4 4 7=1	5 5 5 very	6 6	7 7 7
Talking loudly on to Cutting the line The customer in from Public display of at Please rate the foll pleasant  Smiling	the cell phonon on to fection to the cell phonon to	ne akes foreve aviors of ot	r to ord	er		1 1 1 1 scale: 1=	2 2 2 2 neur	3 3 3 3 <i>tral</i> ,	4 4 4 4 7=1	5 5 5 wery	6	7 7 7
Talking loudly on to Cutting the line The customer in from Public display of at Please rate the follopleasant Smiling Initiating small talk	the cell photon of you to ffection dowing behaves just to be	ne akes foreve aviors of other	r to ord	er		1 1 1 1 scale: 1=	2 2 2 2 neur	3 3 3 3 3 <i>ttral</i> ,	4 4 4 4 7=1	5 5 5 <i>very</i> 5 5	6 6 6 6	7 7 7
7=totally unacceptor Talking loudly on to Cutting the line The customer in from Public display of at Please rate the foll pleasant Smiling	the cell photon of you to ffection dowing behaves just to be	ne akes foreve aviors of other	r to ord	er		1 1 1 1 scale: 1=	2 2 2 2 2 2 meur	3 3 3 3 3 <i>ttral</i> ,	4 4 4 7=1 4 4 4	5 5 5 <i>very</i> 5 5	6 6 6 6 6	7 7 7 7 7
Talking loudly on to Cutting the line The customer in from Public display of at Please rate the follopleasant Smiling Initiating small talk	the cell photon of you to ffection dowing behaves just to be	ne akes foreve aviors of other	r to ord	er		1 1 1 1 scale: 1=	2 2 2 2 neur	3 3 3 3 3 <i>ttral</i> ,	4 4 4 4 7=1	5 5 5 <i>very</i> 5 5	6 6 6 6	7 7 7 7 7
Talking loudly on to Cutting the line The customer in from Public display of at Please rate the follopleasant Smiling Initiating small talk Letting you go before	che cell phonont of you to ffection  Sowing behoves just to be ore them in	ne akes foreve aviors of other friendly a waiting li	r to ord	er tomers o	on a 7-points s	1 1 1 1 scale: 1=	2 2 2 2 2 2 meur	3 3 3 3 3 <i>ttral</i> ,	4 4 4 7=1 4 4 4	5 5 5 <i>very</i> 5 5	6 6 6 6 6	7 7 7 7 7
7=totally unacceptor Talking loudly on to Cutting the line The customer in from Public display of at Please rate the follopleasant Smiling Initiating small talk	che cell phonont of you to ffection  Sowing behoves just to be ore them in	ne akes foreve aviors of other	r to ord	er tomers o		1 1 1 1 scale: 1=	2 2 2 2 2 2 meur	3 3 3 3 3 <i>ttral</i> ,	4 4 4 7=1 4 4 4	5 5 5 <i>very</i> 5 5	6 6 6 6 6	7 7 7 7 7
7=totally unacceptor Talking loudly on to Cutting the line The customer in from Public display of an expense and the following pleasant Smiling Initiating small talk Letting you go before	che cell phonont of you to ffection  Sowing behoves just to be ore them in	ne akes foreve aviors of other friendly a waiting li	r to ord	er tomers o	on a 7-points s	1 1 1 1 scale: 1=	2 2 2 2 2 2 meur	3 3 3 3 3 <i>ttral</i> ,	4 4 4 7=1 4 4 4	5 5 5 <i>very</i> 5 5	6 6 6 6 6	7 7 7 7 7
Talking loudly on to Cutting the line The customer in from Public display of at Please rate the follopleasant Smiling Initiating small talk Letting you go before	che cell phonont of you to ffection  Sowing behoves just to be ore them in	ne akes foreve aviors of other friendly a waiting li	r to ord	er tomers o	on a 7-points s	1 1 1 1 scale: 1=	2 2 2 2 2 2 meur	3 3 3 3 3 <i>ttral</i> ,	4 4 4 7=1 4 4 4	5 5 5 <i>very</i> 5 5	6 6 6 6 6	7 7 7

### Appendix B

#### **Instrument of Pilot Study 2**

T1-S1-I1

#### Imagine yourself in the following scenario.....

You and your family are dining in a fast food restaurant. As you are seated, you notice that the party sitting at the table next to you is a family with three young children. The children make a lot of noise and chase after each other around the table, screaming and laughing all the while. At one point, one of the children turns around and sticks out his tongue at you. Oblivious to the otherwise tranquil ambience in the restaurant, the parents do nothing to keep the children under control. Other than this episode, everything else goes as expected. The food is good and the service is satisfactory.



Please rate the behaviors of other customers described in the above scenario on the following scales (please circle a number):

-3 very negative	-2	-1	0	1	2	3 very positive
-3 very unfavorable	-2	-1	0	1	2	3 very favorable
-3 very unpleasant	-2	-1	0	1	2	3 very pleasant

Please indicate the extent to which each of the following items reflects how your feel when you imagine yourself in the situation described in the scenario:

Angry	1 not at all	2	3	4	5	6	7 strongly
Annoyed	1 not at all	2	3	4	5	6	7
							strongly
Frustrated	1 not at all	2	3	4	5	6	7 strongly
							23
Irritated	1 not	2	3	4	5	6	7
	at all						strongly
Regretful	1 not at all	2	3	4	5	6	7
	at a11						strongly

Imagine yourself in the situation described in the scenario, please indicate the extent to which you will express the feelings you feel inside:

I will openly show the same feelings that I feel inside.	1 not at all	2	3	4	5	6	7 strongly
The emotions I show openly will match what I truly feel inside.	1 not at all	2	3	4	5	6	7 strongly

Imagine yourself in the situation described in the scenario, please indicate the extent to which you will engage in the following behaviors:

Will myself to be calm, cool and collected.	1 would probably not use	2	3	4	5	6	7 might use
Think about the situation from a different perspective.	1 would probably not use	2	3	4	5	6	7 might use

#### Overall, how satisfied are you with this dining experience?

Pleased	1	2	3	4	5	6	7	Displeased
Contented	1	2	3	4	5	6	7	Upset
Very Satisfied	1	2	3	4	5	6	7	Very Dissatisfied
Wise Choice	1	2	3	4	5	6	7	Poor Choice
Happy With	1	2	3	4	5	6	7	Unhappy With

## How <u>realistic</u> is the scenario described at the beginning of this questionnaire?

1 very	2	3	4	5	6	7 very
unrealistic			neutral			realistic

# How <u>easy</u> is it for you to imagine yourself in this scenario?

1 very	2	3	4	5	6	7 very
difficult			, 1			
			neutral			easy

Please list any thoughts you have for	the scenari	o describ	ed at the	beginnin	g of the o	questionn	aire.
In this part of the survey we are intercategory. Please indicate your level of							
I depend upon fast food a great deal.	1 strongly disagree	2	3	4	5	6	7 strongly agree
							1
Fast food means a lot to me.	strongly disagree	2	3	4	5	6	7 strongly agree
Compared to most products/services I buy, fast food is really an important purchase to me.	strongly disagree	2	3	4	5	6	7 strongly agree
What is your gender? [ ] Male	[	] Fema	ale				
How old are you?	years						

Thank You!

#### Appendix C

## **Instrument of Pilot Study 3**

2-T1-S1-I1

Imagine yourself in the following scenario.....

You are dining in a fast food restaurant. As you sit down, you notice that the party sitting at a table on the other side of the restaurant is a family with three kids. The kids are screaming and chasing each other around the table. For the 15 minutes you spend in the fast food restaurant, the kids who are at the table on the other side of the restaurant are loud and disruptive. What's more, the parents pay no attention to the kids' all-too-apparent misbehavior in a public space. The parents are just busy chatting with each other the whole time and do not bother to make any attempt to keep the kids under control. Everything else goes as expected.



Please rate the behaviors of the customers described in the above scenario on the following scales (please circle a number):

-3 very negative	-2	-1	0	1	2	very positive
-3 very unfavorable	-2	-1	0	1	2	3 very favorable

-3	-2	-1	0	1	2	3
very unpleasant						very pleasant
						preasunt

Please indicate the extent to which each of the following items reflects how you would feel in the situation described in the scenario:

Angry	not at all	2	3	4	5	6	7 strongly
Annoyed	1	2	3	4	5	6	7
	not at all						strongly
							<u>,                                      </u>
Delighted	1	2	3	4	5	6	7
	not at all						strongly
							<u> </u>
Frustrated	1	2	3	4	5	6	7
	not at all						strongly
					l		
Нарру	1	2	3	4	5	6	7
	not at all						strongly
					•		·
Irritated	1	2	3	4	5	6	7
	not at all						strongly

Pleased	1	2	3	4	5	6	7
	not at all						
							strongly

Imagine yourself in the situation described in the scenario, please indicate the extent to which you would express the feelings you feel inside:

I would openly show the same feelings that I feel inside.	not at all	2	3	4	5	6	7 strongly
The emotions I would show openly would match what I truly feel inside.	1 not at all	2	3	4	5	6	7 strongly

Imagine yourself in the situation described in the scenario, please indicate the extent to which you would engage in the following behaviors:

Distract myself with other things; try not to think about the situation.	would definitely not use	2	3	4	5	6	would definitely use
Force myself to be calm, cool and collected.	would definitely not use	2	3	4	5	6	would definitely use

Think about the situation from a different perspective.	would definitely not use	2	3	4	5	6	would definitely use
Reason about why the objective situation is not so bad.	would definitely not use	2	3	4	5	6	would definitely use

The time you spent in the fast food restaurant as described in the scenario was:

1	2	3	4	5	6	7
Short						
						Long

The spatial proximity between you and the customers described in the scenario was:

1	2	3	4	5	6	7
Close						
						Distant

The encounter you had with the customers described in the scenario was:

1	2	3	4	5	6	7
Impersonal						
						Personal

## Overall, how satisfied would you be with your dining experience at this fast food restaurant?

Displeased	1	2	3	4	5	6	7	Pleased
Upset	1	2	3	4	5	6	7	Contented
Very Dissatisfied	1	2	3	4	5	6	7	Very Satisfied
Poor Choice	1	2	3	4	5	6	7	Wise Choice
Unhappy With	1	2	3	4	5	6	7	Happy With

## How <u>realistic</u> is the scenario described at the beginning of the questionnaire?

1	2	3	4	5	6	7
very unrealistic			neutral			very
						realistic

## How <u>easy</u> is it for you to imagine yourself in the scenario?

1	2	3	4	5	6	7
very difficult			neutral			very
						easy

Please write do questions.	own any thought	you have after	reading the sce	enario and resp	onding to the ab	ove

In this part of the survey we are interested in your perception of the presence of other customers in a fast food restaurant.

To what extent the presence of other customers is an integral part of your dining experience in a fast food restaurant?

1	2	3	4	5	6	7
not at all						very much

How important are other customers to your dining experience in a fast food restaurant?

1	2	3	4	5	6	7
not at all						very important

How critical are other customers to your dining experience in a fast food restaurant?

1	2	3	4	5	6	7
not at all						
						very critical

How likely would the behaviors of other customers affect your dining experience (either positively or negatively) in a fast food restaurant?

1	2	3	4	5	6	7
very unlikely						
unlikely						
						very likely

To what extent the presence of other customers is an atmospheric element in a fast food restaurant?

1	2	3	4	5	6	7
not at all						very much

Please indicate your level of agreement/disagreement with the following statements.

strongly disagree						strongly agree
1 strongly disagree	2	3	4	5	6	7 strongly agree
1 strongly disagree	2	3	4	5	6	7 strongly agree
_	disagree  1 strongly disagree  1 strongly	disagree  1 2 strongly disagree  1 2 strongly	disagree  1	disagree  1 strongly disagree  2 3 4  strongly strongly	disagree  1 strongly disagree  2 3 4 5  strongly disagree  1 strongly  2 3 4 5	disagree  1 strongly disagree  2 3 4 5 6  strongly disagree  1 strongly  2 3 4 5 6

#### Appendix D

### **Informed Consent Form for the Main Study**

#### INFORMED CONSENT FORM FOR SOCIAL SCIENCE RESEARCH

The Pennsylvania State University

**Title of Project**: Service Encounters

**Principal Investigator:** Li Miao

School of Hospitality Management

201 Mateer Building

University Park, PA 16802

(814) 321-3776 <u>lzm121@psu.edu</u>

**Advisor:** Dr. Anna S. Mattila

School of Hospitality Management

224 Mateer Building

University Park, PA 16802

(814) 863-5757 asm6@psu.edu

- 1. **Purpose of the Study:** The purpose of this study is to investigate consumers' reactions in service encounters
- 2. **Procedures to be followed:** You will be asked to answer survey questions concerning how you will respond to the behaviors of other consumers in a shared service environment as described in the scenario at the beginning of the survey.
- 3. **Benefits:** You will be exposed to current topics of interest to researchers in hospitality study. You might also gain a better understanding of the factors that contribute to your own service experience in the presence of other consumers in a service setting.
- 4. **Duration:** It will take about 10 minutes to complete the questionnaire.
- 5. **Statement of Confidentiality:** Your responses will be kept confidential. No personally identifying information will be recorded on the questionnaires. In the event of a publication or presentation resulting from the research, no personally identifiable information will be provided.

6.	<b>Right to Ask Questions:</b> 3776 with questions.	You can ask qu	uestions about this	study.	Contac	t Li Miao at 814-3	21-
7.	Voluntary Participation: time. You may choose not		•		-	You can stop at a	any
	u must be 18 years of age of the information outlined al						udy
Yo	u will be given a copy of th	is signed and da	nted consent for you	ır record	ds.		
Pai	ticipant Signature			Da	ate		
Sig	nature of the person obtaini	ng consent		— Da	ate		

#### Appendix E

#### Ten Scenarios Used in the Main Study

10 conditions

Fast food-negative

You are dining in a fast food restaurant. As you sit down, you notice that the party sitting at a table far from you is a family with three kids. The kids are screaming and chasing each other around the table. For the 15 minutes you spend in the fast food restaurant, the kids sitting at the table far from you are loud and disruptive. What's more, the parents pay no attention to the kids' all-too-apparent misbehavior in a public space. The parents are just busy chatting with each other the whole time and do not bother to make any attempt to keep the kids under control. Everything else in the restaurant goes as expected.

Fast food-positive

You are dining in a fast food restaurant. As you sit down, you notice that the party sitting at a table far from you is a family with three kids. The kids sit quietly at the table, conversing with each other in a respectfully low voice and chuckling in a restrained manner. For the 15 minutes you spend in this fast food restaurant, the kids sitting at the table far from you are quiet and courteous. What's more, the parents seem to pay special attention to the kids' behavior in a public space. The parents always keep an eye on the kids and make an effort to ensure that the kids are on their best behavior. Everything else in the restaurant goes as expected.

Fine dining-negative

You are dining in an upscale fine dining restaurant. As you are seated, you notice that the party sitting at the table right next to you is a family with three kids. The kids are screaming and

chasing each other around the table. For the entire evening you spend in this upscale fine dining restaurant, the kids at the table right next to you are loud and disruptive. What's more, the parents pay no attention to the kids' all-too-apparent misbehavior in a public space. The parents are just busy chatting with each other the whole time and do not bother to make any attempt to keep the kids under control. Everything else in the restaurant goes as expected.

#### Fine-dining-positive

You are dining in an upscale fine dining restaurant. As you are seated, you notice that the party sitting at the table right next to you is a family with three kids. The kids sit quietly at the table, conversing with each other in a respectfully low voice and chuckling in a restrained manner. For the entire evening you spend in this upscale fine dining restaurant, the kids at the table right next to you are quiet and courteous. What's more, the parents seem to pay special attention to the kids' behavior in a public space. The parents always keep an eye on the kids and make an effort to ensure that the kids are on their best behavior. Everything else in the restaurant goes as expected.

#### Short-distance flight-negative

You are on a short-distance flight. The flight takes about 50 minutes. As you board the plane, you notice that the party sitting a few rows in front of you is a family with three kids. The kids are screaming and fighting with each other over the use of a DVD player. For the 50 minutes you spend on the flight, the kids seated a few rows in front of you are loud and disruptive. What's more, the parents pay no attention to the kids' all-too-apparent misbehavior in a public space. The parents are just busy chatting with each other the whole time and do not bother to make any attempt to keep their children under control. Everything else on the flight goes as expected.

#### Short-distance flight-positive

You are on a short-distance flight. The flight takes about 50 minutes. As you board the plane, you notice that the party sitting a few rows in front of you is a family with three kids. The children sit quietly in their seats and entertain themselves by watching a movie on a DVD player together. For the 50 minutes you spend on the flight, the kids seated a few rows in front of you are quiet and courteous. What's more, the parents seem to pay special attention to the kids' behavior in a public space. The parents always keep an eye on the kids and make an effort to ensure that the kids are on their best behavior. Everything else on the flight goes as expected.

#### Long-distance flight –negative

You are on a long-distance flight from coast to coast. The flight takes about 6 hours. As you settle in your seat, you notice that the party sitting right next to you is a family with three kids. The three kids are screaming and fighting with each other over the use of a DVD player. For the entire 6 hours you spend on the flight, the kids seated next to you are loud and disruptive. What's more, the parents pay no attention to their kids' all-too-apparent misbehavior in a public space. The parents are just busy chatting with each other the whole time and do not bother to make any attempt to keep their children under control. Everything else on the flight goes as expected.

### Long-distance flight –positive

You are on a long-distance flight from coast to coast. The flight takes about 6 hours. As you settle in your seat, you notice that the party sitting right next to you is a family with three kids. The children sit quietly in their seats and entertain themselves by watching a movie on a DVD player together. For the entire 6 hours you spend on the flight, the kids seated next to you are quiet and courteous. What's more, the parents seem to pay special attention to the kids' behavior in a public space. The parents always keep an eye on the kids and make an effort to ensure that the kids are on their best behavior. Everything else on the flight goes as expected.

Control group - "Generic" Dining

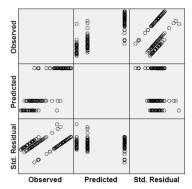
You are dining at a restaurant. There are also other customers dining at the restaurant at the same time. They all behave the way you expect in a typical dining situation. The other aspects of the restaurant experience are also as expected.

Control Group - "Generic" Flight

You take a flight to travel somewhere. There are also other passengers on the same flight. They all behave the way you expect in a typical flight experience. The other aspects of the flight experience are also as expected.

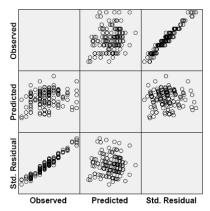
# Appendix F Residual Plots of ANOVA Tests

(1) Residual Plots of ANOVA Test on Spontaneous Emotional Responses (Dining)



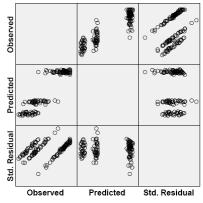
Model: Intercept + Salience + Incongruence + Salience \* Incongruence

(2) Residual Plots of ANCOVA Test on Symbolic Emotional responses (Dining)



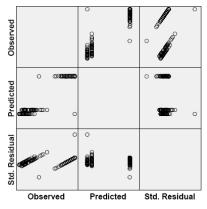
Model: Intercept + publicself + selfmonitoring + Salience + Incongruence + Salience \* Incongruence

(3) Residual Plots of ANCOVA Test on Encounter Satisfaction (Dining)



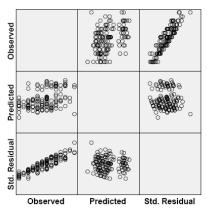
Model: Intercept + involvement + Salience + Incongruence + Salience \* Incongruence

## (4) Residual Plots of ANOVA Test on Spontaneous Emotional Response (Airline Service)



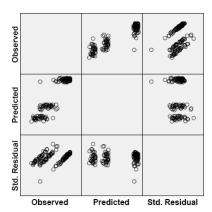
Model: Intercept + Salience + Incongruence + Salience \* Incongruence

# (5) Residual Plots of ANCOVA Test on Symbolic Emotional responses (Airline Service)



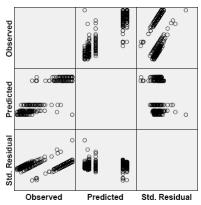
Model: Intercept + publicself + selfmonitoring + Salience + Incongruence + Salience \* Incongruence

# (6) Residual Plots of ANCOVA Test on Encounter Satisfaction (Airline Service)



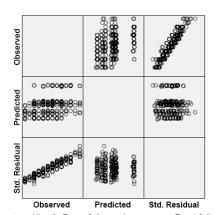
Model: Intercept + involvement + Salience + Incongruence + Salience \* Incongruence

# (7) Residual Plots of ANOVA Test on Spontaneous Emotional Response (Two Contexts)



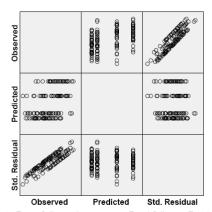
Model: Intercept + Type + Salience + Incongruence + Type \* Salience + Type \* Incongruence + Salience \* Incongruence + Type \* Salience \* Incongruence

## (8) Residual Plots of ANCOVA Test on Symbolic Emotional responses (Two Contexts)



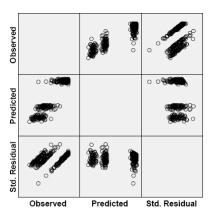
Model: Intercept + publicself + Type + Salience + Incongruence + Type \* Salience + Type \* Incongruence + Salience \* Incongruence + Type \* Salience \* Incongruence

### (9) Residual Plots of ANCOVA Test on Coping (Two Contexts)



Model: Intercept + Type + Salience + Incongruence + Type \* Salience + Type \* Incongruence + Salience \* Incongruence + Type \* Salience \* Incongruence

# (10) Residual Plots of ANCOVA Test on Encounter Satisfaction (Airline Service)



Model: Intercept + involvement + Type + Salience + Incongruence + Type \* Salience + Type \* Incongruence + Salience \* Incongruence + Type \* Salience \* Incongruence

 ${\bf Appendix} \ {\bf G}$   ${\bf ANOVA} \ {\bf Results} \ {\bf of} \ {\bf Temporal} \ {\bf Duration} \ {\bf across} \ {\bf the} \ {\bf Two} \ {\bf Service} \ {\bf Contexts}$ 

	Type III	-		-	
	Sum of		Mean		
Source	Squares	df	Square	F	Sig.
Corrected	427.454(a)	3	142.485	84.411	.000
Model	427.434(a)	5	172.703	07.711	.000
Intercept	4390.446	1	4390.446	2601.004	.000
Type	.391	1	.391	.232	.631
Salience	387.667	1	387.667	229.663	.000
Type * Salience	43.460	1	43.460	25.747	.000
Error	462.507	274	1.688		
Total	5203.000	278			
Corrected Total	889.960	277			

a R Squared = .480 (Adjusted R Squared = .475)

# Adjusted Means and Standard Errors of Temporal Duration

### in the Two Service Contexts

Type of Service	Salience of Other		
Context	Consumers		
	Low	High	
Dining	3.15	4.72	
	(.15)	(.15)	
Airline Service	2.43	5.59	
	(.15)	(.16)	

Appendix H

Regression Analysis on Emotional Responses, Coping and Encounter Satisfaction

Results of Ordinary Least Squares Regression Analysis: Spontaneous Emotional responses,

Emotive Dissonance, Coping Strategy and Encounter Satisfaction

	N	Model 1	Model 2		
Independent Variable	Encounter satisfaction		Encounter satisfaction		
	b	Std. Error	b	Std. Error	
Spontaneous emotional responses	.35*	.08	.35*	.08	
Symbolic emotional responses	04				
Coping strategy	55*	.12	53*	.11	
$R^2$	.59*		.59*		
Adjusted $R^2$	.58		.58		
df (regression, residual)	(5, 135)		(4, 136)		

Notes:

a. Script-Incongruent Behaviors and Salience of Other Consumers were coded as dummy variables.

b. \*p < 0.001

#### **VITA**

The author, Li Miao, was born in Urumqi, P. R. China. She received a Bachelor of Science degree in Tourism Management from Nankai University, Tianjin, in 1995. She worked in the hotel industry in Beijing and Dalian for five years before returning to graduate school to obtain a Master of Science degree in Hotel and Restaurant Administration from Oklahoma State University in 2002. Upon graduation, she went back to work in the hotel industry in China and Singapore for two years before returning to graduate school yet again to pursue a doctorate degree in Hospitality Management from the Pennsylvinia State University.

In Fall, 2008, Li <u>Miao</u> will start her academic career at Purdue University, where she has accepted an Assistant Professor position in the Department of Hotel and Tourism Management.