

Consumer Participation and Perceived Service Quality in Extended Service
Delivery and Consumption

by

Shruti Saxena

A Dissertation Presented in Partial Fulfillment
of the Requirements for the Degree
Doctor of Philosophy

Approved April 2010 by the
Graduate Supervisory Committee:

Michael Mokwa, Chair
Mary Jo Bitner
Ruth Bolton
G. Douglas Olsen

ARIZONA STATE UNIVERSITY

May 2010

ABSTRACT

The need to acknowledge customers as active participants is especially important today because people are more informed about product choices, their preferences and influence customer and firm outcomes. However, differences across customers become a significant challenge for firms trying to ensure that all customers have a 'delightful' consumption experience.

This dissertation studies customers as active participants in service experiences and considers three dimensions of customer participation -- in-role performance; extra-role performance-citizenship and elective behavior; and information sharing -- as its focal dependent variables. This study is grounded in services marketing, customer co-production and motivation literatures. The theoretical model proposes that customer behaviors are goal-directed and different consumers will have different reactions to the service quality because they have different assessments of progress towards their goals and (consequently) different levels of participation during the service experience. Customer role clarity and participation behavior will also influence the service experience and firm outcomes.

A multi-step process was adopted to test the conceptual model, beginning with qualitative and quantitative pretests; followed by 2 studies (one cross-sectional and other longitudinal in nature).

Results prove that customer participation behaviors are influenced by service quality directly and through the mediated path of progress towards goals. Assessment of progress towards goals directly influences customer participation

behaviors cross-sectionally. Service quality from one service interaction influences customer in-role performance and information sharing in subsequent service interactions. Information sharing influences service quality in subsequent service interactions. Role-clarity influences in-role and extra-role performance cross-sectionally and influences these behaviors longitudinally only in the early stages of the customer-firm relationship. Due to multi-collinearity, the moderating effect of customer goals on assessment of progress towards goals could not be tested.

The study findings contribute to the understanding of customer participation behaviors in service interactions for both academics and managers. It contributes to the literature by examining consumption during the service interaction; considering customers as active participants; explaining differences in customer participation; integrating a forward-looking component (assessment of progress towards goals) and a retrospective component (perceptions of service quality) to explain customer participation behaviors over time; defining and building measures for customer participation behavior.

TABLE OF CONTENTS

	Page
LIST OF TABLES.....	ix
LIST OF FIGURES.....	xi
CHAPTER	
1	INTRODUCTION..... 1
	Customer Participation-Co-production and Co-creation..... 4
	Importance of customer participation..... 5
	Purpose of the dissertation and the research questions..... 8
	Contribution to Marketing Theory..... 9
	Managerial Relevance..... 10
	Organization of the Dissertation..... 11
2	LITERATURE REVIEW..... 13
	Theoretical Background on Customer Co-production 15
	Antecedents of Customer Co-Production..... 16
	Customer Participation and Service Quality 19
	Synthesis 21
	Focal Dependent Variables..... 22
	Customer in-role and extra-role performance 22
	Customer information sharing..... 26
	Perceptions of Service Quality as an Antecedent of Customer Behavior 27
	Antecedents and Consequences of Customer Participation 29

CHAPTER	Page
Consumption goals	29
Assessment of progress towards goals.....	31
Role Clarity.....	33
Concluding Remarks.....	36
3 CONCEPTUAL MODEL DEVELOPMENT AND HYPOTHESES.....	37
Direct effect of service quality on customer participation behavior.....	37
Indirect effect of service quality on customer participation behavior.....	39
Effect of service quality on assessment of progress towards goals.....	39
Customers' assessment of progress towards goals influence their participation	41
Potential Non-linear Effects	44
Perceived Service Quality is Influenced By Consumer Participation Behavior.....	45
Role of Customer Characteristics.....	46
Role Clarity.....	46
Moderating Effect of Consumer Goals	48
Covariates.....	50
Emotions	50

CHAPTER	Page
4	METHODOLOGY AND STUDY DESIGN.....51
	Study Design and Context..... 51
	Sampling Process..... 53
	Qualitative Phase53
	Quantitative Pretest 154
	Quantitative Pretest 254
	Quantitative Study-1.....55
	Longitudinal Study 2.....57
	Survey Instrument 58
	Survey Development58
	Construct Measures61
5	RESULTS AND ANALYSIS 65
	Study 1 65
	Reliability and Validity65
	Study 2 66
	Reliability and Validity67
	Results and analyses 69
	Assessment of progress towards goals.....69
	In-role Performance.....71
	Extra-role performance—Citizenship Behavior74
	Extra role Performance-Elective Behavior.....78
	Information Sharing.....81

CHAPTER	Page
Longitudinal Variable: Perceived Service Quality (Time 2)	84
Longitudinal Variable: In-role Performance (Time 2).....	86
Longitudinal Variable: Extra-role Performance-citizenship behavior (Time 2).....	89
Longitudinal Variable: Extra-role Performance-Elective behavior (Time 2).....	91
Longitudinal Variable: Information Sharing Behavior (Time 2)	94
Mediating Effect: Assessment of progress towards goals partially mediates the effect of perceived service quality on customer participation behavior.....	101
6 Discussion, Implications and Future Research.....	107
Discussion of Results.....	107
Direct effect of service quality on customer participation behavior.....	107
Indirect effect of service quality on customer participation behavior.....	111
Perceived service quality is influenced by consumer participation behavior.....	116
Role of Customer Characteristics—Role Clarity	118
Moderating effects of Consumer Goals	120
Covariates-Customer Emotions and Trust.....	120
Research Contributions	122

CHAPTER	Page
Theoretical Contributions	122
Methodological Contributions	125
Managerial Implications	126
Limitations and Future Research	132
Limitations	132
Future Research.....	133
REFERENCES	135
APPENDIX	
A.....	145
B.....	155
C.....	171
D.....	186
E.....	200

LIST OF TABLES

Table	Page
1. List of Constructs and their Definitions	207
2a. Summary of Hypotheses, Proposed Directionalities and Results	97
2b. Summary of Mediation Effects	209
3a. Newly Created Constructs and their Measures	210
3b. Existing Constructs and their Measures	215
4. Principle Component Analysis—Pretest 1-MBA Students Data	223
5. Principle Component Analysis-Pretest 2-Undergraduate Student Data	226
6. Principle Component Analysis-Pretest 2-Undergraduate and MBA Student (Stacked) Data.....	227
7. Study 1: Principle Component Analysis	228
8. Study 2: Principle Component Analysis	231
9. Reliability Analysis for Final Scale.....	232
10. Correlation Matrix for Final Scale	233
11. Table of Means and Standard Deviations-Cross sectional Data	237
12. Table of Means and Standard Deviations-Longitudinal Data	239
13. Regression Results for Assessment of Progress towards Goals.....	70
14. Regression Results for In-role Performance	73
15. Regression Results for Extra-role Performance (Citizenship Behavior)..	77
16. Regression Results for Extra-role Performance (Elective Behavior).....	80
17. Regression Results for Information Sharing	83
18. Longitudinal Regression Results for Perceived Service Quality (t2).....	85

19.	Longitudinal Regression Results for In-role Behavior (t2).....	88
20.	Longitudinal Regression Results for Citizenship Behavior (t2)	90
21.	Longitudinal Regression Results for Elective Behavior (t2).....	93
22.	Longitudinal Regression Results for Information Sharing (t2).....	96

LIST OF FIGURES

FIGURE	Page
1. Overarching Theoretical Model.....	240
2. Customer Co-production Behaviors during Extended Service Interactions.....	241

Chapter 1

Introduction

Services are characterized by simultaneous production and consumption, thereby requiring customer-firm interaction (Parasuraman et al. 1985). Many people equate service with customer service – that is, service provided in support of the company’s core products. However, services are broadly defined as ‘deeds, processes and performances’ (cf., Berry 1980). Service industries include government, transportation, communications, finance, hospitality, education, retail, computing, and information services. Recently, marketing thought leaders have expanded the notion of services to include derived services (Vargo and Lusch 2004). In other words, the value that the customer derives from physical goods is considered to be a service provided by the good (Zeithaml et al. 2006).

Since customers interact with all the components in service creation and delivery (people, processes and technology) – customer behavior directly influences service quality and customer outcomes (e.g., service usage, repeat purchase behavior and word-of-mouth) – as well as firm outcomes (efficiency, revenues and profits). Thus, customer participation is critically important for the effective creation and delivery of employee-delivered services, as well as for technology-enabled services.

There are several reasons why customer participation is especially important in today’s environment. First, many traditional employee functions are transferred to customers to meet various firm objectives (e.g. cost savings or customization

goals through the use of technology such as self check out lanes), so there is a need to understand customer participation. By understanding customers' participation, the firm can facilitate compliance with its processes and procedures – thereby leading to successful customer and firm outcomes. Since customers and employees have different characteristics (e.g., goals, knowledge, capabilities), customer participation and behavior will be different from employee participation and behavior and must be monitored and shaped to ensure effective use of firm resources. Customer participation will also impact customer outcomes such as perceptions of quality, satisfaction, and loyalty intentions

Second, the firm cannot control for everything in a service experience and research that focuses only on the modification of the service environment (Gilmore and II 2002; PineII and Gilmore 1999; Schmitt 1999) to generate a successful consumption experience becomes somewhat inadequate. Past research has focused on the standardization of service offerings and stressed that the success of a firm will depend upon its ability to market “experiences”. Schmitt (1999) called this “experiential marketing” and defined it as “giving marketing promotions more sensory appeal by adding imagery, tactile materials, motion, scents, sounds or other sensations”. Pine and Gilmore (1999, 2002) stated that experiences are the fourth economic offering, as distinct from services as services are from goods and goods from commodities. Other researchers such as Pullman and Gross (2003), Morgan and Rao (2003) and Berry, Carbone and Haeckel (2002), also stressed that firms should consciously try to make shopping with

them an experience to remember. However, all these studies focus primarily on the firm controllable elements and research is needed to examine customer related variables in the service experience.

Third, it is imperative that firms understand what motivates customers to participate in service interactions and what makes some customers better ‘co-producers’ and ‘co-creators’ than others. An understanding of this, from the customers’ point of view, will help firms better understand their customers and the process of customer participation, an important aspect of successful service delivery on the part of the firm, perceived service quality, customer satisfaction and repeat purchase.

As these concepts gain acceptance, a growing concern emerges about how managers and firms can understand and plan for customer participation, an extremely variable and integral part of the service delivery process. The need to acknowledge customers as active participants is especially important today because -- with the proliferation of technology and the Internet -- people are more informed about available product choices and their preferences, as well as enabled to be active participants. This also implies that the firm should manage customers’ emotional and behavioral responses within a service interaction. Yet most existing firms only measure post-purchase perceived service quality, customer satisfaction and loyalty – that is, retrospective assessments of the service interaction. This does little to understand consumption experience during the service interaction.

Customer Participation-Co-production and Co-creation

Customer participation can be understood as customer behaviors during ‘customer co-production’ wherein customers participate within organization defined parameters (Bowen 1986; Lovelock and Young 1979) and ‘customer co-creation’ – when customer participation occurs through spontaneous, discretionary behaviors that uniquely customize the service experience (Prahalad and Ramaswamy 2000; Vargo and Lusch 2004).

One of the earliest mentions of customer co-production was by Lovelock and Young (1979) where they encouraged firms to "to look to customers to increase productivity". This was followed by several studies such as that by Solomon et al. (1985), which highlighted the dyadic nature of service interactions, and the extensive role played by customers in creating a satisfactory service encounter. More recently, Lusch and Vargo (2006) point out that co-creation of value encompasses the customer as “value can only be created with and determined by the user in the ‘consumption’ process and through use or what is referred to as value-in-use” (Lusch and Vargo 2006, pg.284). Lusch and Vargo also differentiate co-production as a component of co-creation, which “involves the (customer) participation in the creation of the core offering itself. It can occur through shared inventiveness, co-design, or shared production of related goods, and can occur with customers and any other partners in the value network” (Lusch and Vargo 2006, pg 284).

Thus, customer co-production implies that work is transferred from the organization to the customer. Examples include self-checkout at the grocery store or online retailer, or business customers who use FedEx software and/or hardware to begin the shipping process. In a sense, customers become “partial employees” – and can influence service quality.

Examples of co-creation, on the other hand, include the experience of visiting Disneyland or participating in Second Life, an internet based virtual world that encompasses schools, clubs, cars, houses, relationships and ‘avatars’ of different ages, cultures and countries (Smith 2007). Co-creation also occurs in situations such as education, healthcare, and other personal services. Co-creation is especially apparent in business-to-business contexts, such as solution selling of high technology services – where interactive services are jointly designed and delivered over a period of many years. When services are co-created, firms must consider customers as a ‘source of competence’ – and as potential competitors (Prahalad and Ramaswamy 2000).

Despite these calls to study the customer side of the service experience, most existing research (academic and managerial) is focused on the firm and considers customers as passive recipients of firm efforts.

Importance of customer participation

Through their participation, customers actively shape service quality by influencing how services are created, delivered and consumed. However, when

they actively participate in service settings, differences across customers become a significant challenge for most firms. In particular, customers enter the service setting possessing different goals, expectations and skill levels. Customers' participation during the service encounter, past experiences and consumption goals play a significant role in determining the customers' level of satisfaction, perceptions of service quality and future purchase behavior. This can become extremely challenging for managers trying to ensure that all their customers have a 'delightful' consumption experience. If managers understand and plan for customer participation, an extremely variable component of service, it should result in better resource utilization and improved customer experience.

Marketing academics have highlighted the importance of customer participation (Bowen 1986; Bowers et al. 1990; Lovelock and Young 1979; Vargo and Lusch 2004), but there exists limited empirical research. With the rapid expansion of the services sector in both national and international economies, and the growing importance and relevance of services marketing to traditional goods and services firms, it is imperative that academic research carefully examine and build theories of customer participation.

This dissertation examines customer participation in services that require multiple visits from the customer over time i.e. extended consumption experiences. It focuses on customer participation behaviors and defines these as customer in-role performance, extra-role performance and information sharing.

- a. Customer In-Role Performance: Customer role performance is proposed to have two dimensions – ‘in-role performance’ and ‘extra-role performance’. In-role performance is defined as including activities that the customers are expected to perform (e.g. standing in queue, making payments for the service/good purchased etc.) and that are necessary for service delivery and consumption.
- b. Customer Extra-Role Performance: Customer extra-role performance is defined as optional activities that customers can perform to enhance or improve their service experience and has two aspects—citizenship behavior and elective behavior. Citizenship behavior is defined as ‘discretionary activities (that customers perform during the service interaction) that directly enhance the effective functioning of the organization’(Organ 1988). Elective behavior is defined as ‘activities that customers perform during the service interaction with the objective of helping themselves achieve their consumption goals’.
- c. Information Sharing: Based on earlier conceptualizations in business-to-business literature, information sharing is defined, as ‘the information customers shares with the service provider to ensure that the service can be customized to their preferences for a positive outcome’(Cannon and Homburg 2001; Ennew and Binks 1999).

Purpose of the dissertation and the research questions

The purpose of this dissertation is to study customers as active participants in the co-production and co-creation of extended services (services that require multiple interactions between the customer and the firm for the service outcome to emerge - e.g. career counseling services, chiropractic services, pet training services etc.). The dissertation considers three dimensions of customer participation -- in-role performance, extra-role performance and information sharing -- as its focal dependent variables. A theoretical model is proposed that explains how and why customers participate in their consumption experience. The model incorporates hypotheses about key antecedent variables, such as customers' perceptions of service quality and assessments of their progress towards goals. It thereby explains customer participation during the service consumption rather than before or after the customer-firm interaction. The specific research questions are:

- What are the antecedents of customer participation? For example, how do customers' goals, perceptions, emotions and behavior change over time (e.g. at initiation, during and completion of the extended service) in the same service setting, and how do these variables influence the nature and extent of customer participation?
- How do customers' goals and assessment of progress towards goals influence perceived service quality and customer participation in extended service interactions?

- How does customer participation influence perceived service quality?

Contribution to Marketing Theory

This dissertation makes several contributions to the marketing literature. Firstly, the dissertation evaluates consumption during the service experience rather than before or after it. Past research has evaluated consumption primarily either as a post-purchase evaluation of the product through variables such as product satisfaction and loyalty (Mano and Oliver 1993; Westbrook 1987; Westbrook and Oliver 1991) or as pre-purchase processes such as search or price perceptions (Pham et al. 2001; Shiv and Fedorikhin 1999). Yet, many researchers acknowledge that consumption and production of services occur at the same time (Parasuraman et al. 1985), implying that customers' emotional and behavioral responses within a service interaction should be actively managed by the firm.

Secondly, current research considers customers as active participants in creation of their consumption experiences rather than as passive targets of marketer effort. Prior research has typically considered people's consumption experience as a firm-driven phenomenon with customers as passive respondents. They fail to acknowledge the role customers play in actively creating their consumption experiences. The process-based viewpoint of this dissertation provides a deeper understanding of how customers' participate in services because it acknowledges individual differences between customers and seeks to

explain differences in customer behaviors in the same experiential marketing context.

Thirdly, the research integrates a forward-looking component (assessment of progress towards goals) and a retrospective component (perceptions of service quality) to explain customer role performance and information sharing over time. Perceived service quality is one of the most widely studied constructs and current research highlights how customer actions influence, or are influenced by service quality. Recently, there has been considerable research on people's goal seeking behavior, but there is not (as yet) any research that studies goal seeking and perceived service quality together.

In summary, the dissertation proposes a theory-based model about how and why customers participate in extended service interactions.

Managerial Relevance

This research is managerially important for the following reasons. First, it helps firms identify which organizational, customer and employee factors contribute to producing a superior service experience from the customer's point of view. This in-turn helps managers plan for customer participation in different service settings and across levels of customer participation.

Second, the research helps managers actively measure and manage customers' perceptions of service quality over time using a forward-looking approach that accommodates the customers' different goals. Most prior research has focused on retrospective assessments of service quality obtained after the

service experience is complete; this research stream primarily focuses on underlying dimensions of perceived service quality, how service quality perceptions are updated based on new information, or consequences of perceived service quality (e.g., repeat purchase intentions).

Third, the research also suggests how firms can focus employee efforts so they can ensure continued participation from customers thereby ensuring better use of firm resources and increased productivity. “Working smarter” will result in increased employee efficiency and effectiveness while changing customer perceptions of service quality, satisfaction and loyalty.

Fourth, results of the dissertation will also show the different customer participation goals across service interactions; thereby assisting managers in developing marketing communication and service operations strategies to produce superior service outcomes. By knowing the various customer goals and motivations, firms can align their goals with those of customers. They can also manage the heterogeneity by rethinking organizational capabilities, training and utilization of employees and design of service settings.

Organization of the Dissertation

The dissertation is organized such that the next chapter, chapter 2 describes the literature review and the theoretical background on customer co-production, the key focal dependent variables and the antecedents-consequences of customer participation. Chapter 3 describes the conceptual model and proposed

hypotheses which bring together the constructs described in chapter 2. Chapter 4 details the methodology and the study design for the pretests and the two studies conducted. It describes the process for the survey development and the construct measures used. Chapter 5 details the results of the quantitative analyses and is organized around the two quantitative studies conducted. Chapter 6 concludes the dissertation with discussion of results, research contributions, managerial implications, limitation and directions for future research.

Chapter 2

Literature Review

This chapter describes prior conceptual work regarding consumer co-production of services. Then, it discusses the focal constructs of the dissertation. Last, it embeds the focal constructs within a nomological net that incorporates key antecedents and consequences of co-production. Figure 1 is used as an organizing conceptual framework for this chapter (See Appendix). Hence, this introduction briefly elaborates upon this framework.

Prior research has typically focused on how perceived service quality is influenced by firm related variables (e.g., servicescape, employees). It has also shown how consumers' perceptions of service quality influence firm outcomes such as satisfaction, word-of-mouth, purchase intentions and repeat purchase. In contrast, this dissertation focuses on how consumers' perceptions of service quality influence – and are influenced by their co-production behaviors. This relationship is depicted using the bi-directional arrow in Figure 1.

Consumer co-production behaviors can be considered inputs to service outcomes and (consequently) service quality. Equally importantly, customers' perceptions of service quality influence their co-production behaviors through a two-step mechanism. First, consumers enter a service interaction endowed with consumption goals and an understanding of the role they must perform (i.e., role clarity). Second, they consciously and non-consciously evaluate their progress towards their goals as they interact with the service provider. Based on individual

motivation theories, it is proposed that consumers' evaluation of progress towards goals drives their co-production behaviors. Hence, Figure 1 shows consumers' assessment of progress towards goals as a mediator between consumers' perceptions of service quality and their subsequent co-production behaviors.

This dissertation studies three co-production behaviors:

- In-role performance: Activities that the customers are expected to perform (e.g. standing in queue, making payments for the service/good purchased etc.) and that are necessary for service delivery and consumption;
- Extra-role performance: Optional activities that customers can perform to enhance or improve their service experience. It is composed of citizenship behavior-activities conducted by customers with the objective of helping the organization improve their functioning and deliver a better service outcome and elective behavior-activities that customers perform with the objective of helping themselves achieve their consumption goals; and
- Information sharing: Information customers share with the service provider to ensure that the service is customized to their preferences for a positive outcome.

These constructs are discussed in more detail later in this chapter. In addition, this chapter discusses antecedents and consequences of consumer co-production behaviors.

Theoretical Background on Customer Co-production

The presence of customers during the production of services has been established as an inherent characteristic of marketing of services (Lovelock and Young 1979; Parasuraman et al. 1985; Solomon et al. 1985; Zeithaml et al. 2006). However, the extent of the role played by customers is growing and is being acknowledged by academic literature and popular press alike (Bowen 1986; Bowers et al. 1990; Mills and Morris 1986; Prahalad and Ramaswamy 2000).

Solomon et al. (1985) stated that service interactions are a form of social exchanges, which are reciprocal rather than linear in nature, in which the customer's participative behaviors are just as important as those of the employees. Bowen (1986) focused on the challenges of co-production and on how firms can manage the service climate given that customers are 'on-site' during the service production. Bowen differentiated services by stating that 'manufacturing and service organizations (are not) brothers under the same skin - largely due to differences in the roles played by customers in each of them' (Bowen 1986, pg 373). According to Bowen, when customers are physically present during the service transaction, 'both customers and employees constitute the human resources of the service organization' (Bowen 1986, pg 371). To achieve success in such a situation, the firm must on one hand, treat the customer contact personnel as 'partial customers' since 'what employees experience on their jobs as front-line employees seems to affect the quality of the on-site experience for customer' (pg 376). On the other hand, firms must also recognize customers as

active participants and 'partial employees'. Customers could be co-producing with employees or be sole producers, and the 'strategies to manage customer behavior can be drawn from models of employee behavior' (Bowen 1986).

Mills and Morris (1986) further acknowledge that in complex services where customer performance is crucial to service production, boundaries of the service organization must be expanded to incorporate the consumers as 'temporary members or participants'. The authors state that customer involvement plays a role at each stage of service interaction and that firms must define customer roles and expected behaviors just as they do for their employees, to ensure organizational success.

Antecedents of Customer Co-Production

Two recent and noteworthy streams of research have investigated the antecedents of specific dimensions of customer participation. First, studies of consumer health behaviors have focused on the importance of consumer (patient) and family/social support system participation in ensuring successful medical treatment - both preventive and maintenance related. They have drawn upon multiple theoretical disciplines, including as psychology, sociology, nutrition, public health, health education, medicine and consumer research (for extensive review of literature see Moorman and Matulich 1993). However, despite extensive research on this topic, there are no comprehensive models that explain consumer health behaviors; most studies have (narrowly) studied a single dependent variable (Moorman and Matulich 1993). Research on patient

participation and health behaviors include: health belief models which focus on health behaviors' perceived benefits and barriers (Becker 1974; Janz and Becker 1984); health consciousness models which investigate health involvement, self monitoring and awareness (Gould 1990); and health locus of control models which consider the degree to which health outcomes result from personal efforts, chance, health care providers etc (Lau 1982). More recently, in the marketing literature, Dellande et al.(2004) studied patient compliance – a key aspect of in-role performance in the health care sector. Their results show that provider *expertise, homophily* and *role clarity* influence customers' ability to lose weight (the key service outcome variable in this context) with the service provider's help.

Second, several studies have examined customer co-production in the context of the usage of self service technology (SST). SST is defined as 'any technology interface that enables a customer to produce and consume services without any direct assistance from firm employees' (Meuter et al. 2000). Research exists on why consumers choose to co-produce using self-service technologies (Dabholkar 1996; Dabholkar and Bagozzi 2002; Meuter et al. 2005) . Meuter et al. (2005) study actual consumer behavior and introduce the concept of consumer readiness which includes *customer role clarity, motivation* and *ability*. Their study shows that in an extremely high participation service context, such as self-service technologies, consumer readiness acts as a key mediator between established adoption characteristics (innovation characteristics and individual differences) and the likelihood of trial. It also discusses how employee management practices

can lead to effective co-production by increasing role clarity, motivation, and ability of customers and how effective co-production can increase the likelihood of product or service success, customer satisfaction and can present a competitive opportunity for firms.

This stream of research also shows that customer attitudes towards using technology affect their intentions and technology based self-service behavior (Dabholkar 1996; Dabholkar and Bagozzi 2002). Curran et al. (2003) establish that intentions to use SSTs are driven by multiple, hierarchical attitudes towards specific SSTs and individual employees; and higher order global attitudes (based on experience) towards service technologies and the firm. Parasuraman (2000) looks at technology readiness (“enablers” - optimism, innovativeness - and “inhibitors”- discomfort and insecurity) as some of the factors that intrinsically motivate customers to use SSTs. At the same time, extrinsic *motivation factors* have also been examined as a means of customer motivation to use technology interfaces (Dabholkar 1996; Meuter et al. 2005; Schneider and Bowen 1995). With the widespread use and popularity of SSTs, it is clear that growing customer participation does represent the changing nature of service encounters (Bitner et al. 2000) and is must be actively acknowledged and managed by firms.

The above-mentioned studies have focused on the growing importance of customer co-production and help firms address some of its associated challenges. Next, we review research that has considered how customer co-production is related to their perceptions of service quality.

Customer Participation and Service Quality

Bowers, Martin and Luker (1990) called for treating employees as customers and customers as employees. Their research acknowledged the growing importance of the role played by customers in a service interaction and highlighted that "...if the customer somehow becomes a better customer-for example, more knowledgeable – the quality of the interaction will likewise improve" (Bowers et al. 1990, pg 55). This study is noteworthy because it emphasizes that customer participation behaviors will influence subsequent service quality. For this reason, the authors suggest that firms should use marketing and management techniques that are transferable from contact employees to customers. Moreover, they argue that the benefits will include lower firm costs and higher quality of services provided, as well as yield positive firm outcomes such as greater customer loyalty and higher levels of satisfaction among both employees and customers. Similar results were also observed by Claycomb et al. (1992) where the authors found that perceptions of service quality increase as customers become more active participants in the service delivery process.

Firat et al. (1995) viewed increased co-production as an emergence of 'post modernity' where 'the product is likely to become less and less a "finished" object and more and more a process into which the "consumer" can immerse oneself and can provide inputs" (Firat et al. 1995, Pg 50). Consistent with this notion, Kelley, Donnelly and Skinner (1990), also highlight the role played by customers in delivering service quality. They argue that organizations must

develop mechanisms like ‘organizational socialization’ to ensure that customer behaviors facilitate the service encounter and help firms manage delivered service quality. Following earlier conceptualizations of service quality (Gronroos 1982), they define customer technical quality as “what” the customer provides to the service encounter and customer functional quality as “how” the customer behaves during the service encounter (Kelley et al. 1992).

In their landmark article on services dominant logic, Vargo and Lusch (2004) identify customer co-production as an integral aspect of services and state that “the customer is always a co-creator of value”. They consider co-production as a dimension of value co-creation wherein co-production is defined as “the (customer) participation in the creation of the core offering itself. (Co-production) can occur through shared inventiveness, co-design, or shared production of related goods, and can occur with customers and any other partners in the value network” (Lusch and Vargo 2006).

An illustrative example is provided by Bettencourt et al. (2002), who show that client co-production is critical in ‘knowledge-intensive’ business services where the clients’ inputs and participation play a major role in creating the service solution. They define knowledge-intensive business service firms as ‘enterprises whose primary value-added activities consist of accumulation, creation or dissemination of knowledge for the purpose of developing a customized service or product solution to satisfy the client’s need’. Recognizing the importance of customer co-production in these services increases the likelihood of a successful

project and also helps to enhance operational efficiency that is unique, difficult for competitors to imitate and helps develop into a competitive advantage for the firm (Bettencourt et al. 2002).

Recently, Bendapudi and Leone (2003) have extended this stream of research to consider some of the psychological effects of co-production on customers' assessments of service outcomes. They report how a 'self-serving bias' among customers influences their levels of satisfaction under different co-production conditions and note that "...customer participation may have other important effects on satisfaction but the paths of this influence have not been specified clearly, and no tests of this effect have been reported"(Bendapudi and Leone 2003, pg 15).

In general, the body of research on customer participation, perceived service quality and other firm outcomes (e.g., satisfaction) provides conceptual arguments supporting a relationship between customer participation behaviors and service quality, but there is not (as yet) empirical support for this relationship.

Synthesis

This dissertation postulates that customer participation is composed of customer in-role performance, customer extra-role performance (citizenship behaviors and elective behaviors) and customer information sharing. Pioneering research on services has recognized that customer participation is influenced by firm delivered service quality and customer participation behaviors in-turn influence firm outcomes like service quality, customer satisfaction and loyalty

intentions. However, these relationships have not been explicitly studied. These key relationships are summarized in Figure 1.

Recent research has established that customer characteristics also affect the customer participation in a service experience. Specifically, there are a few studies that examined the antecedents and consequences of customer co-production behavior. Studies of antecedents of customer co-production show that customer characteristics, such as intrinsic and extrinsic motivation factors, role clarity, motivation, and ability, influence customers' participatory behaviors. In Figure 1, these customer characteristics have been reduced to two broad and important categories of antecedent variables – role clarity and consumption goals. Studies of consequences of customer co-production show that customer co-production influences customer perceptions of services, especially their perceived service quality. Thus, in Figure 1, perceived service quality has been shown as an antecedent and consequence of customer participation.

The conceptual framework summarizes and simplifies a complex set of processes underlying customer participation. In the remainder of this chapter, research concerning the focal dependent variables (customer participation and service quality) and their key antecedents (consumption goals and role clarity) is reviewed and synthesized in greater depth.

Focal Dependent Variables

Customer in-role and extra-role performance

From the perspective of role theory, a “role” can be defined as ‘a cluster of social cues that guide and direct an individual’s behavior in a given setting’ or ‘conduct associated with certain socially defined positions rather than of the particular individuals who occupy these positions’ (Rizzo et al. 1970; Solomon et al. 1985). Just like employee performance can be expanded to include both ‘in-role’ and ‘extra-role’ performance (MacKensie et al. 1998; MacKensie et al. 1993; Organ 1988); customer performance can also be evaluated in terms of ‘in-role’ and ‘extra-role’ performance.

In-role performance is defined as activities that customers are expected to perform (e.g. standing in queue, filling out a form, making payments for the service/good purchased etc.) and necessary for service delivery and consumption. Since there can be differences between what customers and firms understand as customer in-role performance, both customer in-role performances as defined by firms and their customers will be examined in this dissertation.

Customer extra-role performance is defined as optional activities that customers can perform to enhance or improve their service experience and has two aspects—citizenship behavior and elective behavior. Based on the definition offered by Organ (1988), citizenship behavior can be understood as ‘discretionary activities that directly enhance the effective functioning of the organization’. These include activities that reflect aspects such as civic virtue, helping behavior, altruism and courtesy. All these activities are conducted by customers with the objective of helping the organization improve their functioning and deliver a

better service outcome. Elective behaviors are similar activities that customers perform with the objective of helping themselves achieve their consumption goals. There can be differences between what firms and customers perceive as customer extra-role performance and to test the constructs, customer extra-role performance as defined by both firms and their customers will be examined.

The current definition of extra-role performance (citizenship behavior) though similar to Bettencourt (1997) is different in key ways. Though customer behavior in Bettencourt (1997) is also directed towards the general improvement of the firms' functioning, it is a result of past customer satisfaction, customer commitment and loyalty towards the organization. Current research examines discretionary behaviors exhibited by customers directed towards achieving their consumption goals during the service interaction. Such behaviors may or may not be a result of past interactions with the service provider. The conceptualization is thus more forward looking and influences service quality in a dynamic manner during an extended service interaction.

Service encounters are widely acknowledged as dyadic in nature, in which both employees and customers play their roles in order to make the service experience a success (Parasuraman et al. 1985; Solomon et al. 1985). However, existing literature primarily focuses on the different aspects of employee performance and relatively little research exists on customer performance (in-role or extra-role). Understanding customer performance is particularly important and timely given the rapid increase in business situations requiring customer co-

production and the wide transfer of employee roles (especially that of boundary spanning employees) to customers in order to meet various firm objectives (e.g. cost savings, technological advancements etc.).

It must be acknowledged that even though customers perform roles traditionally done by employees, customer role performance is inherently different from employee role performance. For one, in many industries, customers do not get explicit training, apprenticeship etc. In many service settings customer learning of job requirements is implicit when compared to employee learning. When faced with new situations customers either make use of ‘idealized scripts (behaviors)’ learned through socialization or make use of behavior that they would have employed in similarly related but different consumption situations (ReioJr and Callahan 2004; Solomon et al. 1985). There are also qualitative differences between customers and employees such that “the clients primary orientation is towards consumption of the output, not its production” (Mills and Morris 1986, p 728). Customers are also usually unable to offer undifferentiated time and effort towards the service production making it very difficult for firms to control customer performance and recover any costs incurred on customer socialization and training (Kelly et al. 1990; Mills and Morris 1986). However, more and more firms are recognizing these challenges associated with customer role performance and are trying to influence it through customer education, training, tools (wallet cards, magnets, toll free telephone numbers, online helps etc.) (Meuter et al. 2005).

From a theoretical perspective, there is a need for research that can provide a detailed understanding of customer role performance and ways to measure and manage customer performance. This research will allow us to advance our knowledge of the customers' side of the service interaction dyad and move towards making customer performance measurable. From a managerial perspective, research can help firms differentiate high performance customers from low performance customers, and improve firm productivity by directing resources such as employee attention and effort towards the low performance customers. Measuring customer performance will also make firms more accountable for how they support and enable customer participation, while simultaneously improving outcomes for customers.

Customer information sharing

Customers share information with the service provider to ensure that the service can be customized to their preferences for a positive outcome. Following Ennew and Binks' (1999) conceptualization, information sharing in services is defined as 'the information customers share with the service provider to ensure that the service can be customized to their preferences for a positive outcome'. Consistent with Wong et al.(2004), it is believed that "sharing" implies that the both parties (customers and service provider) are making an effort to select and provide information considered important by each party for the other party. Information sharing has generally been studied in the context of business-to-business relations, and has been defined by Cannon and Homburg (2001) as "the

extent to which the supplier openly shares information about the future that may be useful to the customer relationship”. Fisher et al. (1997), when studying communication patterns among business functions define information sharing within companies as “the extent of free exchange of information among different functions”.

Information sharing has helped partnering firms understand each other better by gaining insights into each others business functioning, ‘fostering functional conflict which leads to identifying and solving problems related to lowering costs’, anticipating future plans and influencing planning and management activities (Cannon and Homburg 2001, p32). Information sharing has also been shown to assist companies in understanding customers’ needs, wants and desires and meeting the particular needs of customers better (Ennew and Binks 1999; Wong et al. 2004). Just as information sharing is an important construct in understanding customers in the business-to-business sector, this dissertation proposes that information sharing is also critical in the business-to-consumer sector. Information sharing allows customers to customize the service interaction and actively co-create value.

Perceptions of Service Quality as an Antecedent of Customer Behavior

In a service interaction, ‘patterns of relationships’ are formed between the customer and the product/service, the physical environment of the customer-firm interaction and the firm employees (Arnould et al. 1998; Bitner 1992; Wakefield and Blodgett 1999). One way to assess these ‘relationships’ is through the study

of perceived service quality. Service quality has been one of the most widely studied and debated topics in the literature (Cronin and Taylor 1992; Dabholkar et al. 1996; Dabholkar et al. 2000; Gronroos 1982; Parasuraman et al. 1985). Given its importance in the services research and practice, it is critical to understand how it relates to customer co-production behaviors.

One of the earliest conceptualizations of service quality include that by Gronroos (1984; 1982) in which he stated that service quality has two dimensions-technical quality, which involves what the customer is actually receiving from the service and functional quality, which involves the manner in which the service delivered. He also modeled service quality as consumers' comparison between their expectations regarding service with their perceptions of the service they received. Many authors built on this conceptualization and developed a literature base dedicated to defining and measuring service quality (Boulding et al. 1993; Cronin and Taylor 1992; Lewis and Booms 1983; Parasuraman et al. 1985; Parasuraman et al. 1988). Based on such studies, perceived service quality is defined as the customer's assessment of the overall excellence or superiority of the service (Parasuraman et al. 1988).

The importance of service quality as an antecedent of satisfaction and consequently behavior – potentially including customer participation behavior – cannot be overemphasized. Several existing studies have evaluated service quality as an antecedent of customer satisfaction, customer retention/ loyalty and re-purchase behavior (e.g. Bolton 1998; Bolton and Lemon 1999). For example,

Rust et al. (1999) show that customer decisions regarding retention and loyalty are largely driven by the perceived variance in service (uncertainty that the customer has with respect to the level of service that will be received) and perceived risk in service quality in addition to variables such as customer satisfaction. Recently, Seiders et al. (2005) show that characteristics such as customer (involvement and household income), relational (relationship age and relationship program participation) and marketplace (competitive intensity and convenience of offering) moderate the effect of customer satisfaction (and thereby service quality) on repurchase behavior. It is noteworthy that, despite substantial empirical evidence linking customers' perceptions of quality to subsequent purchase behavior, there is very little research that even suggests a link from perceived service quality to customer participation behaviors.

Antecedents and Consequences of Customer Participation

The preceding discussion focused on how customer participation directly influences their subsequent behaviors of customers. The following paragraphs focus on how – in a given context (e.g., characterized by levels of perceived service quality) – customers' goals, assessment of progress towards goals and their perceptions of role clarity influence their co-production behaviors.

Consumption goals

Goals can be defined as “the internal representations of desired states, where states are broadly construed as outcomes, events or processes” (Austin and Vancouver 1996). Goals range from biological set points (body temperature) to

cognitive and affectively desired outcomes. Single goals cannot be understood in isolation from other goals and from the cognitive, affective, behavioral responses that arise in pursuing goals (Austin and Vancouver 1996). Goals are an extremely important aspect of understanding consumer psychology. No understanding of human behavior, including consumption, is complete without the understanding of personal goals and how these goals interact with the concerned elements in the external environment.

Mischel and Shoda (1995) considered goals as an integral part of the individual's personality system that interact reciprocally and are situationally activated. Karoly (1999) added to this by stating that "goals and self regulatory skills are at people's if-then, situation-behavior profiles" and that "goals defined the cross situational relevance of settings, served as the psychological links to roles and social identities, provided the temporal anchor for thinking and planning, establish the fitness of the person-environment interface and anchor the primary appraisal components for emotional reactions".

Consumption goals can be evaluated in terms of its 'importance' to the customers (Austin and Vancouver 1996). Goal importance, referred to as 'error sensitivity' by Hyland (1988) and 'gain' by Powers (1973), is the 'degree of energization associated with a specific goal' i.e. 'greater the error sensitivity, the greater the response to threats or deviations from the goal'(Austin and Vancouver 1996). Thus, the greater the importance the customer attaches to the goal, the

greater will be the sensitivity of the customer to the different aspects of the service experience and the service quality delivered.

Earlier, this chapter summarized prior research that has explored customer motivations in a service consumption context – e.g., in the context of consumer readiness to adopt SST (Meuter et al 2005). This dissertation departs from prior research by emphasizing that a customer's emotions, cognition and behavioral responses to a service interaction will largely depend on the consumer's consumption goal (commitment and importance felt). It is through these responses that the customer shapes his/her consumption experience. Hence, we believe that customers' goals play an important role in influencing their subsequent co-production behaviors, as discussed below.

Assessment of progress towards goals

An individual's evaluation of the progress that s/he is making towards the goals is considered an essential aspect of the structure of goals (Austin and Vancouver 1996). Two major theories of goal progress have shaped the thinking about assessment of progress towards goals and other goal processes.

The first major theory is by Miller et al. (1960) which proposed the Test-Operate-Test-Exit (TOTE) cycle. According to this theory "the stimulus input is evaluated through a comparison with a standard (i.e. a goal), operated on to bring the input in-line with the standard, and tested again for a match. Once a match is achieved the loop is exited" (Austin and Vancouver 1996, pg.340). Controls system theory, proposed by Powers (1973) "...is similar to that of Miller et

al.(1960) except that testing is continuous (i.e. the loop is never exited) and therefore requires parallel processing” (Austin and Vancouver 1996, pg.340). Both these theories based on the cybernetic model have lead to major work in social psychology (Carver and Scheier 1990) and motivational psychology (Hyland 1988; Klein 1989).

The second major theory that has shaped the study of goals is the living systems framework of D. H. Ford (1987). This theory describes “how the various pieces of the person-their goals, emotions, thoughts, actions and biological processes function simultaneously and as a part of a larger unit (the person)” (Ford and Ford 1987). It demonstrates that various aspects of the individual (e.g., thinking vs. affective reactions) do not operate in isolation. Instead, “people always function as a unit in a context” (Ford and Ford 1987, pg 3). Individuals are able to do so through their ability to process “information” which is defined as “a description or measure of the pattern of relationships or conditionalities among some set of phenomena” (Ford and Ford 1987, pg 11). Individuals collect information at different levels through sensory-perceptual processes. The information is then sifted, organized, used, and retained to organize, regulate and control ongoing behavior patterns. This occurs through various internal psychological functions such as directive function (prior expectations, anticipations, intentions and goals), collective information function (past and current learning), regulatory function (evaluation of the cues, environment and information collected through learning), arousal function (instrumental and social

emotions) and control function (formulation of required actions to ensure that there is no discrepancy between the regulatory function and the directive function).

Assessment of progress towards goals is the internal processes that occur in the 'regulatory' and 'control' function in the living systems framework or the 'matching of the stimulus with the standard (goal)' in the theories proposed by Miller et al. (1960) and Powers (1973). Assessment of progress towards goals is a very integral part of goals and motivation theories. In fact, no theory of goals operation is complete with analyzing individuals' progress towards their goals.

To our knowledge, the influence of consumer assessment of progress towards goals on co-production behaviors and (ultimately) service quality has not been studied in a services context. However, it is encouraging to note that studies of patient health behaviors and consumer usage of SSTs (described earlier) are not inconsistent with the notion that people are pursuing goals in a systemic fashion.

Role Clarity

Role clarity is defined as 'understanding the role that must be performed' (Dellande et al. 2004) or as "the clients understand(ing) their role in terms of the tasks and behaviors that are required..."(Bettencourt et al. 2002, pg.102). Role clarity can also be defined as "customers knowing what is expected of them" and "reflects the consumer's knowledge and understanding of what to do" (Meuter et al. 2005, pg. 63-64). In terms of role theory, in a services context, role clarity can be understood as the individual understanding his/her role scripts.

In other related studies, Dellande et al. (2004) position customer role clarity as a key construct in ensuring compliance from patients in the healthcare services and Bowen (1986), suggests that firm managers must provide customers with role clarity through proper orientation to the firm and its setting. Such orientation includes providing customers 'place orientation' (how the customer can get from here to there) and 'function orientation' (how the organization works). The firm can provide such orientation by making its internal operations and systems legible to the customer, providing customers with orientation aids and through the firm's consumption experience (Bowen 1986).

The concepts of 'roles', 'role clarity' and 'role performance' have their roots in role theory. Role theory itself is based on a dramaturgical metaphor, which emphasizes that people are social actors and the roles that people play depend upon the situation they are in and the positions they occupy in the society. This theory thus focuses on 'overt social conduct' rather than the study of the 'isolated individual' (Sarbin and Allen 1968, pg 490). The script or the behavior appropriate to these roles is learned through training, observation and through others reactions and is often strictly defined (Sarbin and Allen 1968).

Customers enact different roles at different times and often at different stages of the buying process (Kotler and Keller 2006). Customer roles have also been explored in collective consumption situations (Lovelock 1983) such as organizational buying and involve roles of initiators, users, influencers, deciders, approvers, buyers and gatekeepers (Kotler and Keller 2006).

While several customer characteristics such as ability and motivation will affect customer participation, this dissertation focuses on the effect of customer role clarity. Past research shows that “successful (SST) co-production relies on customers knowing what is expected of them (role clarity)” (Meuter et al. 2005, pg.63) and that customer participation in SST co-production can be constrained by insufficient clarity in terms of a customer’s understanding of his or her role in the service process (Meuter et al. 2005, pg. 64).

Several firms take steps to influence customer role clarity (e.g. education in the form of detailed, customer-friendly instructions, education aids such as wallet cards, magnets, mouse pads with instructions or posters; and tools such as frequently asked questions, a toll-free telephone number, and online help such as live text chat) (Bitner et al. 2002; Meuter et al. 2005). Despite the practical usefulness of such steps, more research is needed to understand and justify the cost/benefit implications associated with improving customer’ role clarity when they participate in service delivery.

There is a rich stream of research on customer roles in service contexts. This dissertation extends this work by focusing on how customer’ role clarity influences their assessment of progress towards goals and also their participation behaviors (i.e., both directly and indirectly). These relationships are relatively unexplored.

Concluding Remarks

This chapter has reviewed and synthesized research concerning customer participation and service quality and their key antecedents: consumption goals and role clarity. However, there is much more work that needs to be done to understand the relationships among these variables. Explicit discussion of the hypothesized relationships among them is reserved for Chapter 3.

Chapter 3

Conceptual Model Development And Hypotheses

This chapter describes how the focal constructs relate to one another and presents the hypotheses and their theoretical justifications. The hypotheses are depicted in Figure 2 and summarized in Table 2a. The research is grounded in the notion that customer behaviors are goal-directed and that an individual's evaluation of progress towards goals can be used to explain his/her behavior (Austin and Vancouver 1996), as well as his/her thoughts and emotions (Karoly 1999). Different customers will have different reactions to the same service attributes (e.g., waiting time) because they have different assessments of their progress towards their goals and (consequently) different role performance and information sharing behavior during the service experience. While firm outcomes such as customer satisfaction, loyalty and word-of-mouth are dependent on firm-delivered service attributes, customer variables such as role clarity and participation behavior (in-role performance, extra-role performance and information sharing) will also influence the customers' service experience and the related firm outcomes.

Direct effect of service quality on customer participation behavior

Prior research has established relationships between service quality and behavioral intentions (Zeithaml et al. 1996). Perceived service quality positively influences customer satisfaction, duration of the customer firm relationship,

service usage and other customer variables (Bolton 1998; Bolton and Lemon 1999; Rust et al. 1999). It is important to note that studies have evaluated the effects of service quality on customer purchase behavior rather than participation within an extended service encounter. Customers are playing an active role during the service interaction (Prahalad and Ramaswamy 2004; Prahalad and Ramaswamy 2000; Smith 2007). It seems unlikely that customers' perceptions of service quality will only influence their purchase behavior. Since customers are increasingly becoming more aware and involved in the service experience, it is likely that perceived service quality will influence customer participation during service interactions within an extended consumption experience. Thus, it is proposed that there is a positive effect of service quality on customer participation during service consumption similar to its positive effect on purchase behavior.

H1: Perceived service quality at time t_1 will have a positive effect on customers' in-role, extra-role performance and information sharing at time t_1 and t_2 .

H1a: Perceived service quality at time t_1 will have a positive effect on customers' in-role at time (i) t_1 and (ii) t_2 .

H1b: Perceived service quality at time t_1 will have a positive effect on customers' extra-role performance-citizenship behavior at time (i) t_1 and (ii) t_2 .

H1c: Perceived service quality at time t_1 will have a positive effect on customers' extra-role performance-elective behavior at time (i) t_1 and (ii) t_2 .

H1d: Perceived service quality at time t_1 will have a positive effect on customers' information sharing at time (i) t_1 and (ii) t_2 .

Indirect effect of service quality on customer participation behavior

As depicted in Figure 2, perceived service quality is hypothesized to influence customer participation indirectly. The following two hypotheses propose that perceived service quality influences assessment of progress towards goals, which then influences customer participation. Since a direct effect of service quality has already been predicted, these two hypotheses imply that customers' assessment of progress towards goals is a partial mediator of the effect of service quality on customer participation.

Effect of service quality on assessment of progress towards goals

The living systems framework by Ford and Ford (1987) states that various aspects of the individual (e.g., thinking vs. affective reactions) do not operate in isolation. Instead, "people always function as a unit in a context". According to the living systems framework, individuals are able to do so through their ability to process "information" which is defined as "a description or measure of the pattern of relationships or conditionalities among some set of phenomena". The information gets collected at different levels through sensory-perceptual processes, both at a conscious and non-conscious level. The information is then sifted, organized, used, and retained to organize, regulate and control ongoing behavior patterns (Ford and Ford 1987).

In a service environment, the different dimensions of service quality represent the sensory-perceptual input of customers and thereby the 'information' from the service environment. This is reflected in prior qualitative research by

Saxena et al. (2007). In this study, retrospective self-reports of service consumption experiences were collected and the verbal protocols were classified using Ford and Nichols' (1987) existing goal categories of **task-management** (maintaining order and organization in daily life), **task-material gain** (increasing or avoiding the loss of material possessions), **task-safety** (being physically secure and avoiding threatening or depriving situations), **affective** (feeling excitement or heightened arousal), **cognitive** (gaining knowledge or make sense of something), **integrative social relationship** (building or maintaining friendships or sense of community). The study found that 28% of the respondents' verbal protocols could not be categorized in these existing goal categories, but they could be coded according to service quality dimensions. Also, 58% of verbal protocols relating to goals were mentioned in tandem with service quality dimensions. A chi-square indicated that consumers were more likely to mention their service related goal categories (task material gain, task safety, affective, cognitive and integrative social relationship goals) *in tandem with service quality dimensions* than they were to not mention service quality dimensions ($p < .01$). This study results show that service quality dimensions act as significant sensory-perceptual input in service settings.

In a service environment, customers are purchasing a service for a particular purpose or to achieve a certain goal. Consequently, consistent with the living systems framework by Ford and Ford (1987), the sensory perceptual input or the dimensions of service quality will result in consumers consciously and non-

consciously evaluating their progress towards the goal. Hence, perceived service quality will positively influence customers' assessment of progress towards goals.

H2: Service quality at t_1 will have a direct positive effect on customer assessment of progress towards goals in (i) t_1 and (ii) t_2 .

Customers' assessment of progress towards goals influence their participation

Customers behave differently in the same service settings. One reason is that they are endowed with different characteristics. For example, Mittal and Kamakura (2001) find that consumers with different characteristics have different thresholds at the same level of rated satisfaction and that repurchase rates are systematically different among these different customer groups. Bolton and Myers (2003) found business customers differed in their willingness to pay for different types and levels of service depending on their characteristics (size, national origin etc.). Another reason is that different customers will perceive the same service experience differently. For example, Nayakankuppam and Mishra (2005) study the 'rose-tinted' and 'dark-tinted' spectacles effect and report that buyers and sellers in an interaction perceive the same item in fundamentally different ways because they focus on the sale item features with differing valence.

This study proposes that differences in customer behavior (especially participation) can be explained by differences in consumers' assessments of progress towards goals. The rationale is grounded marketers' current knowledge of how people pursue goals. Specifically, evaluations or assessments of progress towards goals are considered an integral part of traditional theories of goal

processes. According to TOTE cycle (Miller et al. 1960), “the stimulus input is evaluated through a comparison with a standard (i.e. a goal), operated on to bring the input in-line with the standard, and tested again for a match. Once a match is achieved the loop is exited” (Austin and Vancouver 1996, pg.340). The controls system theory (Powers 1973) is similar to that of Miller et al (1960) except that “testing is continuous (i.e. the loop is never exited) and therefore requires parallel processing” (Austin and Vancouver 1996, pg.340). In summary, individuals’ assessment of their progress towards goals can affect various processes of goal systems such as activation of sub-goals *and decisions and behaviors relating to goal revision, strategy change or goal attainment* (Powers 1973, Austin and Vancouver 1996).

It is predicted that, in service settings, customers’ assessments of progress towards goals will lead to conscious and non-conscious internal goal process decisions which are expressed through their participation behaviors. For example, if the consumer perceives the service quality to be high, it will result in high assessments of progress towards the goal. Prior research shows that high assessment of progress towards goals leads to individuals continuing to strive on their goals and also comply with what is expected of them (Austin and Vancouver 1996; Dellande et al. 2004). Thus, high assessment of progress towards goals will motivate the consumer to perform behaviors defined by the firm and within the organizational parameters (in-role performance).

H3a: Assessment of progress towards goals at time t_1 will have a positive effect on consumers' in-role performance at time (i) t_1 and (ii) t_2 .

On the other hand, if the consumer perceives the service quality to be low, it will result in low assessments of progress towards goals. According to the TOTE cycle and the controls systems theory, such low assessment of progress towards goals should result in internal processes that make the individual revise their decisions and behaviors in order to achieve the goal (Miller et al. 1960; Powers 1973). In a service setting if the consumer is assessing low progress towards their goals, it is likely that consumers will ask for more help or try to clarify their requirements to the service provider in order to achieve their consumption goal. This will result in greater sharing of information and performance of discretionary activities by consumers to assist the firm in helping them reach their consumption goal.

H3b: Assessment of progress towards goals at time t_1 will have a negative effect on consumers' extra-role performance-citizenship behavior at time (i) t_1 and (ii) t_2 .

H3c: Assessment of progress towards goals at time t_1 will have a negative effect on consumers' extra-role performance-elective behavior at time (i) t_1 and (ii) t_2 .

H3d: Assessment of progress towards goals at time t_1 will have a negative effect on consumers' information sharing at time (i) t_1 and (ii) t_2 .

However, the directionality of these hypotheses is debatable wherein it is possible that when consumers perceive low assessments of progress of towards

goals, they may in fact “give up” or “exit” the TOTE cycle (Miller et al. 1960). In such a case, the consumers will decrease rather than increase their participation behaviors. Similarly, if the consumers perceive high assessment of progress towards goals, they may feel more positively about the service experience and get engaged in the service delivery process as they get positive feedback in terms of outcomes and progress. This may also result in customers taking the initiative to perform discretionary activities (Bettencourt 1997). Hence, alternative hypotheses are proposed:

H3e: Assessment of progress towards goals at time t_1 will have a positive effect on consumers' extra-role performance-citizenship behavior at time (i) t_1 and (ii) t_2 .

H3f: Assessment of progress towards goals at time t_1 will have a positive effect on consumers' extra-role performance-elective behavior at time (i) t_1 and (ii) t_2 .

H3g: Assessment of progress towards goals at time t_1 will have a positive effect on consumers' information sharing at time (i) t_1 and (ii) t_2 .

Considering H1, H2 and H3 together, assessment of progress towards goals is considered to partially mediate the effect of perceived service quality on consumer participation behavior.

Potential Non-linear Effects

Recent longitudinal studies by Mittal, Ross and Baldasure (1998), Mittal, Kumar and Tsiros (1999) and Boulding et al. (1999) show that consumer perceptions of different service attributes have larger (or smaller) effects on satisfaction and perceived service quality at different time periods. Thus, it is

possible that the effect of perceived service quality on consumer participation behavior may be curvilinear in shape. For example, one possibility is an inverted U-shaped relationship. In the early stages of the customer-firm interaction, consumer participation behaviors may be less due to lack of role clarity or perceptions of incompatibility between consumer and firm goals. As the service interaction evolves, participation behaviors will increase and reach a peak where the consumer will be extremely comfortable sharing information and performing their roles. This will be followed by a stage wherein consumer participation behaviors will again reduce since consumers may perceive the firm as having already gained from their effort and not needing as much from them.

Perceived Service Quality is Influenced By Consumer Participation Behavior

Consumers with higher levels of in-role performance, extra-role performance and information sharing are helping service employees and the firm to do a better job and deliver a better service experience. Customer participatory behavior in one service interaction will also help firm employees react and possibly adapt (within firm parameters) to the customers' specific consumption goals in the subsequent service interaction during the extended service delivery. This argument suggests that customer participation will have a positive effect on their perceptions of service quality.

Research in psychology and consumer behavior has established that people exhibit a confirmatory bias (Chernev 2001; Crocker 1982; Ha and Hoch

1989), whereby their prior opinions influence not only their overall opinions but also how they perceive new information (Oliver and Burke 1999). Boulding et al.(1999) have found that confirmatory bias is reduced with higher levels of experience and lower levels of product/ service complexity and ambiguity.

Therefore, it is believed that consumers who participate at higher levels will be pre-disposed to see that subsequent service quality is higher.

H4a: Consumer in-role performance in t_1 has a direct positive effect on perceived service quality at t_2 .

H4b: Consumer extra-role performance-citizenship behavior in t_1 has a direct positive effect on perceived service quality at t_2 .

H4c: Consumer extra-role performance-elective behavior in t_1 has a direct positive effect on perceived service quality at t_2 .

H4d: Consumer information sharing in t_1 has a direct positive effect on perceived service quality at t_2 .

Role of Customer Characteristics

Consumer participation behaviors will also be influenced by individual customer characteristics, which are discussed as follows.

Role Clarity

Role clarity is defined as ‘understanding the role that must be performed’ (Dellande et al. 2004) or as “the clients understand(ing) their role in terms of the tasks and behaviors that are required...”(Bettencourt et al. 2002, pg.102). Role clarity is also defined as “customers knowing what is expected of them” and

“reflects the consumer’s knowledge and understanding of what to do” (Meuter et al. 2005, pg. 63-64). Prior research shows that when consumer role clarity increases, consumers are enabled to be better co-producers (Dellande et al. 2004; Meuter et al. 2005). Dellande et al. (2004) examined the effect of increased role clarity on consumer (patient) compliance in a weight loss environment and Meuter et al. (2005) studied the role of consumer role clarity in consumer trials of self-service technologies. The current study extends these noteworthy studies by showing that role clarity influences actual customer participation behaviors (both in-role and extra-role customer performance) during co-production in service interactions.

As this research examines customer co-production in terms of the actual participation behaviors, it is proposed that increased role clarity will positively influence customer participation behaviors.

H5a: Consumer role clarity has a direct positive effect on consumer in-role performance i.e. high (low) consumer role clarity will lead to high (low) consumer in-role performance.

H5b: Consumer role clarity has a direct positive effect on consumer extra-role performance-citizenship behavior i.e. high (low) consumer role clarity will lead to high (low) consumer extra-role performance.

H5c: Consumer role clarity has a direct positive effect on consumer extra-role performance-elective behavior i.e. high (low) consumer role clarity will lead to high (low) consumer extra-role performance.

Research shows that information sharing is influenced by the levels of trust among the two parties (Ennew and Binks 1999). While the antecedents of information sharing are not explicitly considered in the model, they will be treated as covariates and the test for their effects will be conducted. The effect of firm conditions and other individual characteristics on consumer participatory behaviors will also be controlled for in the study.

Moderating Effect of Consumer Goals

The goals and motivation literatures present a variety of empirical and theoretical approaches to identify goal dimensions including the commonly used dimensions - 'goal importance' and 'goal commitment' (Austin and Vancouver 1996). These dimensions vary between people such that "there are differences in the levels of the dimensions for the same goal or goal set across individuals" (Austin and Vancouver 1996, pg.343), making them extremely relevant to the study. These dimensions are also commonly used by those applied motivational researchers who conduct between-subject experiment studies of goals (Austin and Vancouver 1996).

The existing literature states that goals direct the individual's attention to that which is important to them and this occurs during the individual's

observation and encoding of perceptual input rather than retrospectively (Bandura 1991; Huffman and Houston 1993; O'Brien and Myers 1987). Similar research by Bettman (1979) also shows that a desired end state is related to goals and these in turn, interact with the decision processes through individual attention and choice processes. Based on these findings, it is proposed that the importance of consumers' goals will moderate the effect of perceived service quality on consumers' assessment of progress towards goals. Specifically, when the consumption goal is high in terms of importance and commitment to the consumer, he/she is more likely to be attentive to different aspects of the service interaction and the progress he/she is making towards their consumption goals. On the other hand, if the consumption goal is low terms of importance and commitment to the consumer, he/she is less likely to focus on the various aspects of service quality and the progress towards his/her goals.

H6a: When an individual's consumption goal is high, high (low) perceived service quality will lead to high (low) assessment of progress towards goals.

H6b: When an individual's consumption goal is low, high (low) perceived service quality will lead to low (low) assessment of progress towards goals (i.e., negative interaction effect).

Covariates

Emotions

Emotions have been widely studied in the marketing literature in various contexts such as advertising (Rummel et al. 1990), products/ services satisfaction (Wakefield and Blodgett 1999; Westbrook 1987; Westbrook and Oliver 1991), services quality (Zeithaml et al. 1996) and consumption experience (Arnould and Price 1993; Arnould et al. 1998; Babin et al. 1994; PineII and Gilmore 1999; Schmitt 1999). As Richins (1997, pg 127) states ‘...studies have found emotions to be an important component of consumer response, and the importance of emotions in the sphere of consumer behavior has been firmly established.’ In this study consumer generated emotions are treated as a covariate and though not explicitly hypothesized about, it is believed that emotions will affect consumers’ co-production behavior. Emotions generated during the consumption experience are captured using the ‘Consumption Emotion Set’ generated by Richins (1997). This typology captures a wide range of emotions that are typically generated during consumption and are considered different in character and intensity from the emotions generated in other contexts (Richins 1997). Specifically, this research examines emotion type (positive or negative) and the intensity of emotions as generated by consumers in response to their assessment of progress towards goals.

Chapter 4

Methodology And Study Design

This chapter describes the methodology followed to measure the theoretical model and the focal constructs defined in the earlier chapters. A multi-step process was adopted which began with a qualitative phase that included both structured and unstructured interviews. This was followed by two quantitative pretests that were used to finalize the survey instrument and establish convergent and discriminant validity among the construct measures. The finalized survey instrument was used to collect data in 2 studies—study 1 was cross-sectional in nature and study 2 was longitudinal in which data was collected at three points in time. For a detailed summarized look at the construct measures (new and existing), please refer to tables 3a and 3b.

Study Design and Context

While there are different research methodologies available for data collection each with its advantages and disadvantages, it was decided that survey design was the most suited methodology for this study. Also, given the nature of the research question (consumption in extended service interactions) it was decided that data will be collected at multiple points in time in the form of a longitudinal design study.

To test the hypotheses stated in the earlier chapter, it was necessary to have a study design context that allowed us to examine consumers who were interacting with the service providers at multiple time periods. One such context

is career counseling. University career counseling services, specifically the business school career counseling services was considered the appropriate context to test the theoretical model proposed since their counselors provide customized service for both undergraduate and graduate students. In most large universities students at both undergraduate and graduate levels typically attend classes on career management that help them understand the challenges and procedures involved in career selection and job search. After attending these classes the students meet with their counselors for various reasons, some of which can be as specific as getting feedback on their resume while others can be as generic as getting help in choosing a college major.

Like other service offerings, one of the biggest challenges faced in career counseling is that the service delivery by counselors (employees) cannot be a success if the students (customers) do not actively participate. This includes behavior during the sessions (e.g. learn how to use resources available to help in job search, editing resume etc.) and after the session ends (situations where the career counselor is not present—e.g. at home where the student should do individual research or assignments recommended by the counselors). Given that most counseling sessions require multiple interactions and significant participation on the part of the student for the counseling service to be a success, this seems to an ideal context to test the theoretical ideas proposed in the earlier chapters.

Sampling Process

Data was collected from students attending Arizona State University's W.P. Carey School of Business. The only criteria imposed was that the students must have used the career counseling services in the past or must be using the career counseling services at the time the data was collected. Both undergraduate and graduate students visiting the undergraduate and graduate counseling centers were surveyed so as to ensure that the sample represents different ages, motivation levels and reasons for using the career counseling service.

Qualitative Phase

The qualitative phase was designed to understand the applicability of the proposed theoretical model and focal constructs. This included six unstructured in-depth interviews with different career counselors to understand the nature of career counseling and establish the applicability of the current theoretical model.

Following the interviews, these career counselors were asked to generate a list of students who had visited the counseling center in the past 30 days. The students were then contacted with a request to participate in an in-depth structured interview that lasted approximately 30 minutes and was audio taped for later reference (please refer to the interview questions in appendix as attachment A). As a token of appreciation, the participants were given a \$5 gift certificate to a coffee shop frequented by students on the campus. Purposive sampling was used wherein the sample size was not specified a priori, rather interviews were continued until saturation or redundancy was achieved (Lincoln and Guba 1985;

Meuter 1999a). In this study, redundancy was achieved after 8 in depth interviews were completed. While this number appears small, as McCracken (1988) states “(sometimes) only eight respondents are necessary for generating themes in qualitative research”.

Quantitative Pretest 1

Pretest 1 was conducted to validate the use of existing scales in current context and to generate new measures for the key constructs. In this phase graduate students were asked to complete the survey instrument based on the qualitative interviews conducted in the first phase. The sample size was 71, of which 19.72% (n=14) were female and 73.24% (n=52) were male. Five respondents did not specify their gender. Pretest 1 was conducted with full time graduate students both in the first and second years of the full time MBA program. The students were approached during their classes and were requested to participate in the data collection during their class breaks. Snacks were offered as incentives for participating in the study. The pretest 1 survey instrument is included in the appendix as attachment B and results of the principle component analysis conducted is detailed in table 4.

Quantitative Pretest 2

Pretest 2 was conducted using undergraduate students attending a required career counseling class. The purpose of this pretest was to purify the newly created measures and continue to validate the existing scales. Undergraduate

students were contacted so as to ensure that the survey captures different student motivations and reasons for using the career counseling center, thereby wider applicability of the survey instrument. Extra course credit was given to the students for participating in the study. In this pretest, the survey was deployed using an online data collection website - [ww.zoomerang.com](http://www.zoomerang.com). The sample size was 78, of which 41.03% (n=32) were female and 57.69% (n=45) were male. One respondent did not specify their gender. Findings from the pretest 1 helped revise the survey instrument (item measures) and the new version (along with clear identifications of the construct measured) can be referred to in the appendix (attachment C). The results of the principle component analysis conducted on pretest 2 is detailed in table 5 and 6.

Quantitative Study-1

Study 1 was conducted using graduate MBA students. MBA students across different platforms (full time, part-time/ evening and online MBA students) were contacted inviting them to participate in the study (attachment D in appendix). Most full time MBA students primarily use the career-counseling center through individual contact sessions with the counselors. Hence, individual counselors were requested to submit weekly list of students that visited them either through a scheduled or walk-in appointment. The part-time/evening and online MBA students often contact the career counselors through emails, phone, webinars, offsite seminars and/or offsite events. The counselors maintained the list of all such contacts and weekly lists were also generated of the same.

The students were then contacted through an email describing the study and requesting their participation. The data was collected through a data collection website - www.zoomerang.com and the invitation letter contained a weblink which directed the respondents to the survey. As an incentive for participating, students were eligible to participate in 3 random prize drawings of \$50 VISA gift cards.

This study was set up as a longitudinal study wherein those who respondents who participated in wave 1 and subsequently used the career management center services, were contacted again with a request to participate in an identical survey for wave 2. The wave 2 participation request was again generated based on the weekly visit lists of the counselors and emails were sent to potential respondents with a weblink to the survey.

The data was collected from January 2009 to September 2009. In wave 1, 204 surveys were received online, of which only 123 were considered complete and usable. In wave 2, however, only 36 surveys were received online, of which only 18 were considered complete and usable. The high rate of incomplete surveys and the lack of participation in wave 2 can be probably be attributed to the long length of the survey and time commitment required from the respondents. To address this concern, a second study was planned with shorter measures of the same constructs (an abridged version of the original survey-refer attachment D in appendix). The existing data from study 1 was also analyzed by treating it as cross sectional at wave 1.

Longitudinal Study 2

Study 2 consisted of 3 waves of data collection. This data was collected during the period October-December 2009 (wave 1-October 2009; wave 2-November 2009; wave 3-December 2009). As mentioned above, the survey used was a shorter version of the earlier survey (see attachment E). To create the shorter survey and ensure strong predictive validity, at least 3-4 measures from the study 1 survey were retained for every construct (Bergkvist and Rossiter 2007). Care was taken to ensure that these measures were those that had the highest factor loadings and also possessed face validity. These measures were the most relevant to the context and the definitions of the constructs.

The data was collected with full time MBA students. First year full-time MBA students attend a required class on career management conducted by the career counseling center. As a part of this class, the students are required to attend counseling sessions and participate several activities (e.g. resume making, attending networking events etc.). The data was collected by requesting students to participate in the survey at the beginning of their career management class. Since the data was collected in one class every month throughout their first semester, the study was designed to capture the changes in student goals, participation and perceptions of service quality. As a token of gratitude, \$2 was provided to students towards a cup of coffee at the local coffee shop frequented by students on campus each time they completed the survey.

Since the second year students did not meet in any required class (the students were split across different electives), data from the second year students was collected by requesting individual students to participate during their class breaks. Coffee and snacks were provided to respondents as an incentive to participate. In order to track and match the student response over time, respondents were requested to enter the last 4 digits of their student id or any other unique number which they would remember and provide at subsequent waves of data collection.

Survey Instrument

The intent of the survey was to collect data from respondents about their participation in career counseling services over time and thereby test the hypotheses stated in the earlier chapter.

Survey Development

A multi-step process was utilized to develop the survey instrument. First, a literature review was conducted to find out which constructs had existing scales and the challenges associated with using them in survey research, if any. While some constructs had established scales, other constructs had to be adapted from the literature and still other constructs needed new scale development (see section 4.3.2 on construct measures). Based on these results, a draft survey was created which was tested in ‘think aloud’ interviews during the qualitative phase (see appendix-attachment A).

In the qualitative phase open-ended questions were also asked to gain a deeper understanding of the constructs that needed new scale development (e.g. in-role performance, extra role performance, information sharing behavior). This includes both the terminologies and the nature of the constructs of interest to the study. The qualitative phase consisted of two parts – first, unstructured interviews with the career counselors or the service providers and second, structured interviews with students who had used the career counseling service in the past 30 days. These interviews helped understand the unique terminologies and specifics of the counseling context and also establish the relevance of the theoretical model in the university career-counseling context. Interviews with students helped test some of the measures that existed in the literature and also help identify new scale items.

The interviews were conducted using open-ended questions in a survey instrument using the pretesting methodology described by Bolton and Bronkhorst (1995). The methodology ‘identifies the respondent’s cognitive difficulties as they form answers to survey questions’ and is used to ‘identify and improve defective questions’ (Bolton and Bronkhorst 1995, pg. 37). It focuses on ‘eliciting concurrent verbal protocols’ during an intensive interview wherein respondents are asked to ‘think aloud’ as they read the survey questions and arrive at their respective responses (for more details see Bolton and Bronkhorst 1995). The interviews were audio-taped and analyzed on how the survey instrument can be improved. Every pre-test interview was built on the earlier interview and this

process continued until no new findings emerged and the respondents appear to have no difficulties in comprehending and responding to the survey. Eight such pretesting rounds were conducted to develop the survey such that respondents comprehended the instructions and the questions in the manner that they were supposed to.

Based on the results of the qualitative study, a survey draft was created which was employed in the first quantitative pretest (see appendix-attachment B). This pretest was conducted with graduate full-time MBA students (n=71). The details of the measures used are presented below. This was a pencil and paper study and results of this study were used to test the existing and new measures. To test the reliability, convergent and discriminant validity among the newly created constructs and their measures (in-role performance, citizenship behavior, elective behavior and information sharing) descriptive statistics, item correlations and principle component analysis were analyzed carefully (refer table 4) (Campbell and Fiske 1959). On conducting principle component analysis, it was found that the items within each measure loaded on 8 components representing the different aspects of the newly created customer participation constructs. The results helped purify the measures and adapt the wordings of the survey instrument such that 15 measures were dropped (initial draft had 50 measures and new draft had 35 measures). Based on this analysis, a new survey draft was prepared for use in the second quantitative pretest which was deployed through an online research website (see appendix-attachment C).

The second pretest was conducted with undergraduate students (n=78). These students were contacted during their required class on career management and were requested to participate in our pretest study. Extra credit was given to these students as an incentive for participation. Conducting the pretest with undergraduate students ensured that the scales and the surveys were adequately tested across diverse sample groups and captured all aspects of the service experience. Pretest 2 further helped establish reliability, convergent and discriminant validity among the newly created measures and the existing measures. Descriptive statistics, item correlations and principle component analysis was conducted for both the undergraduate student data and stacked data of both pretests (graduate MBA and undergraduate students) (refer tables 5&6). The factor analysis showed that the measures loaded in a very clean manner on 6 components which captured the different constructs in an appropriate manner. Results of these qualitative and quantitative pretests helped finalize the survey that was used in Study 1 and Study 2.

Construct Measures

This section presents an overview of the constructs and the measures used to test the theoretical ideas presented in this study (please refer to table 1-list of constructs and their definitions and table 3a and 3b-constructs and related measures in the appendix).

Individual Customer Variables: Consumption goals were measured using Goal System Assessment Battery (GSAB), created by Karoly and Ruehlman

(1995). This four-item scale was assessed using a seven point Likert scale. Customer role clarity was measured using the well-established scale by Rizzo et al (1970) and its adapted versions as developed by Meuter et al. (2005) and Dellande et al. (2004). Certain wordings of the scale were adapted for the current study design context. This scale also employed a seven point Likert scale.

Assessment of progress towards Goals and Perceived Service Quality:

Assessment of progress towards goals was measured using scale items from the Goal System Assessment Battery (GSAB) proposed by Karoly and Ruehlman (1995). Certain new items were also created and adapted to measure the construct within the career-counseling context.

Perceptions of service quality were measured by using overall service quality measures developed by Brady and Cronin (2001). To measure the functional and technical quality of the service provider, service quality measures also adapted from Gallan (2008). Questions were also included on the survey to assess service quality behaviorally (whether, when and how many times the student interacted with the counselor). These questions were added to supplement the traditional service quality measures that are primarily based on individual reporting and can be fairly subjective. While these new questions are also based on individual reporting, the behavioral dimensions can be verified with the counselors' records. Since career counseling is not a required aspect of the student experience in the university, it is students' discretion to attend a counseling session and/or follow the counselor's suggestions regarding career pursuits.

Hence, if the student decides to go back to the career center for repeat counseling session, it can be assessed as an indicator of high levels of perceived service quality.

Customer Participation Behaviors: As stated in earlier chapters, customer participation behaviors are defined as customer in-role performance, customer extra-role performance (citizenship and elective behavior) and information sharing.

Customer in-role performance was measured using items developed by Dellande et al. (2004) to measure compliance. However, due to differences in the study context and the construct definitions, new scale items were also created to measure customer in-role performance. The new scale items were based on the interviews conducted with students and career counselors in the qualitative phase.

Customer extra-role performance (citizenship and elective behaviors) was measured using the items developed by MacKensie et al. (1991, 1997) and Podsakoff et al (1993) to measure employee extra role performance. Since these items were originally designed to be used in the employee literature, the scale items had to be adapted to suit the current study context. Certain new scale items were also created to adequately measure the citizenship and elective behaviors as relevant to the current study's construct definition and context.

Information sharing was measured using a two-part question. The first part used scale items developed by Fischer et al. (1997) to measure 'Bidirectionality' of communication. In this question certain new scale items were

also created to assess the nature of communication between the students and the career counselors. The second part of the question was based on scale items developed by Canon and Homburg (2001) to assess the frequency of information sharing between the students and the counselors.

Service Outcome Measures: Service outcome was measured by evaluating customer (student) satisfaction with the counselors and the counseling center. Satisfaction measures developed by Thomson (2006) were used for this purpose. Individual customer (student) experience with their goal pursuit (and thereby the service experience) was assessed using measures developed for the purpose.

Chapter 5

Results and Analysis

This chapter describes the results and the analysis of the two studies conducted to collect data to test the conceptual model described in chapter 3. The chapter is organized such that first study 1 is discussed in detail followed by study 2. As described in the previous chapter, study 1 is a cross sectional study and study 2 is a longitudinal study wherein data was collected in 3 waves (please refer to figure 2). Means and standard deviations of all the key constructs are presented in tables 11-12 and regression analyses run on the hypothesized relationships are presented in tables 13-22.

Study 1

Study 1 was conducted during the period-January-September 2009. The study generated 123 completed surveys, of which 48 respondents were in the 1st year of the MBA program; 42 respondents were in the 2nd year of the MBA program; 31 respondents had already graduated (alumni coming back to get assistance from the Career Management Center) and 2 respondents did not specify their program details.

Reliability and Validity

To establish construct validity (convergent and discriminant validity) and reliability, correlation matrix and principle component analysis was analyzed (refer to table 7) (Campbell and Fiske 1959). The principle component analysis (varimax rotation) results showed that the newly created items loaded on the

components in the expected manner. The items that represented existing constructs (e.g. goals, progress towards goals, service quality) loaded correctly on separate components as predicted by their existing scales.

The hypotheses were tested using linear regression analysis (see summary of the hypotheses in table 2a). Mediation testing was conducted using the step-wise technique suggested by Baron and Kenny (1986) (see summary of mediation results in table 2b). While most hypotheses were tested at $p < 0.05$, due to the small sample size some of the hypotheses were also tested at $p < 0.10$.

Study 2

Study 2 was conducted during the period-October-December 2009. Three waves of data collection were conducted-wave 1 in October 2009, wave 2 in November 2009 and wave 3 in December 2009. Data was analyzed cross-sectionally in each wave and also longitudinally by comparing the effects of waves 1 on wave 2 and the effect of wave 2 on wave 3.

In wave 1, there were 127 completed surveys of which 85 respondents were in the 1st year of the full-time MBA program and 42 respondents were in the 2nd year of the full-time MBA program. In wave 2, there were 130 completed surveys, of which 89 respondents were in the 1st year of the full-time MBA program and 41 respondents were in the 2nd year of the full-time MBA program. In wave 3, there were 113 completed surveys, of which 85 respondents were in

the 1st year of the full-time MBA program; 28 respondents were in the 2nd year of the full-time MBA program.

When comparing the surveys from wave 1 and wave 2, 59 respondents were matched based on the last 4 digits of their campus id (provided voluntarily by the respondents for the purpose of the study). Of these 59 respondents, 45 respondents were in the 1st year of the full-time MBA program and 14 respondents were in the 2nd year of the full-time MBA program.

When comparing the surveys from wave 2 and wave 3, 73 respondents were matched based on the last 4 digits of their campus id (provided voluntarily by the respondents for the purpose of the study). Of these 73 respondents, 64 respondents were in the 1st year of the full-time MBA program and 8 respondents were in the 2nd year of the full-time MBA program.

Reliability and Validity

As mentioned in the earlier chapter, the survey used in study 2 was a shorter version of the survey used in study 1. At least 3-4 measures were retained for every construct to ensure that their predictive validity remains the same (Bergkvist and Rossiter 2007). Newly created scales for constructs such as in-role performance, extra-role performance and information sharing were reduced such that only those measures were retained that had the highest factor loadings and also possessed face validity. This ensured that the measures used were the most relevant to the context and true to the construct definitions.

To establish construct validity (convergent and discriminant validity), principle component analysis was conducted (see table 8). Results showed that as hypothesized, the rotated solution (varimax rotation) had clean loadings with 5 components each representing the newly created constructs-in-role performance, citizenship behavior, elective behavior, information sharing and role clarity. Reliability measures were also calculated for each of the construct scales by calculating their cronbach alphas. All the cronbach alphas were above .70 (in-role behavior-.77; citizenship behavior--.87; elective behavior--.85; information sharing--.87; role clarity--.87; goals--.79; progress towards goals--.78; self efficacy--.85; service quality--.92; satisfaction--.95; trust--.93) (refer table 9). To establish discriminant validity, the correlation matrix of all the dependent variables was generated and the off-diagonal correlations were compared to ensure that shared variance between the construct measures was not high ($r < 0.60$) (refer table 10).

The hypotheses were tested using linear regression analysis (see summary of the hypotheses in table 2a). Mediation testing was conducted using the step-wise technique suggested by Baron and Kenny (1986) (see summary of mediation results in table 2b). While most hypotheses were tested at $p < 0.05$, due to the small sample size some of the hypotheses were also tested at $p < 0.10$.

Results and analyses

Assessment of progress towards goals

As described in the previous chapters, assessment of progress towards goals is hypothesized to be a function of perceived service quality, the interaction of perceived service quality and consumption goals and covariates (trust and emotions):

*Equation 1: Progress towards goals (t_1) = f (Perceived service quality (t_1); Perceived service quality*consumption goals (t_1); covariates (t_1)).*

(Hypotheses tested: H2 and H6)

On analyzing the full model, which included all the variables it was found that the effects of the covariates (emotions and trust) were not significant. Results also showed that high multi-collinearity existed between perceived service quality and the interaction of perceived service quality and consumption goals (study 1: $R^2=0.91$; study 2 wave 1: $R^2=0.86$; study 2 wave 2: $R^2=0.92$; study 2 wave 3: $R^2=0.89$). Hence, a reduced model in which the covariates and the interaction term were dropped was analyzed (see table 13).

Results showed that the model was positive and statistically significant in all the studies (study 1: $F=22.86^{***}$, $p<0.00$, adjusted $R^2=0.18$; study 2 wave 1: $F=16.00^{***}$, $p<0.00$, adjusted $R^2=0.11$; study 2 wave 2: $F=18.24^{***}$, $p<0.00$, adjusted $R^2=0.12$; Study 2 wave 3: $F=7.39^{***}$, $p<0.00$, adjusted $R^2=0.05$).

The effect of service quality on assessment of progress towards goals was positive and statistically significant in all the studies conducted (study 1: $t = 4.78^{***}$, $p < 0.000$; study 2 wave 1: $t = 4.00^{***}$, $p < 0.00$; study 2 wave 2: $t = 4.27^{***}$, $p < 0.00$; study 2 wave 3: $t = 2.72^{***}$, $p < 0.00$), thus *providing support for hypothesis H2*. These results show that service quality dimensions act as a significant sensory-perceptual input in service setting and play a key role as customers' evaluate their progress towards goals. When evaluating their progress towards goals, students take into account the service quality delivered by the career counselors and the career management center (CMC).

Since there was high multi-collinearity between perceived service quality and the interaction between perceived service quality and consumption goals, it was not possible to test H6 (the effect of interaction between service quality and consumption goals on assessment of progress towards goals).

Table 13: Regression Results for Assessment of Progress towards Goals

Dependent Variable: Assessment of Progress Towards Goals†				
Variable	Study 1	Study 2 Wave 1	Study 2 Wave 2	Study 2 Wave 3
N	98	127	130	113
Mean	5.83	5.91	5.69	5.53
Standard Deviation (SD)	0.85	1.19	1.00	1.24
F-Statistic	22.86^{***}	16.00^{***}	18.24^{***}	7.39^{***}
R-Square	0.19	0.11	0.13	0.06
Adjusted R-Square	0.18	0.11	0.12	0.05
Perceived Service Quality	B=0.35 β= 0.44 t=4.78^{***}	B=0.33 β =0.34 t=4.00^{***}	B=0.27 β =0.35 t=4.27^{***}	B=0.22 β = 0.25 t=2.72^{***}

Constant	B=3.66 t = 7.97***	B=4.04 t = 8.46***	B=4.23 t = 12.03***	B=4.37 t=9.91***
-----------------	-------------------------------------	-------------------------------------	--------------------------------------	-----------------------------------

*** $p < 0.00$, ** $p < 0.05$, * $p < 0.10$

† F-tests indicated that positive emotions, negative emotions and trust did not explain a statistically significant portion of the variance in the dependent variable ($p > 0.10$).

In-role Performance

It was proposed that customer in-role performance is a function of customer assessment of progress towards goals, perceived service quality, role clarity and covariates (emotions and trust).

Equation 2a: In-role performance (t_1) = f(Progress towards goals (t_1), perceived service quality (t_1), role clarity (t_1), covariates (t_1)).

(Hypotheses tested: H1a(i); H3a(i); H5a(i))

Results show that the model was positive and statistically significant in all the studies (Study 1: $F = 4.47***$, $p < 0.00$, adjusted $R^2 = 0.18$; study 2 wave 1: $F = 7.93***$, $p < 0.00$, adjusted $R^2 = 0.25$; study 2 wave 2: $F = 5.02***$, $p < 0.00$, adjusted $R^2 = 0.16$; study 2 wave 3: $F = 9.50***$, $p < 0.00$, adjusted $R^2 = 0.31$). (please refer to table 14 and chart 1)

The effect of role clarity on in-role performance was positive and statistically significant in all the studies (Study 1: $t = 1.68**$, $p < 0.05$, study 2 wave 1: $t = 2.16**$, $p < 0.05$; study 2 wave 2: $t = 2.31**$, $p < 0.05$; study 2 wave 3: $t = 3.35***$, $p < 0.00$), thereby providing support for hypothesis **H5a(i) in all the studies**.

Assessment of progress towards goals was positive and statistically significant in study 2 wave 1 ($t=1.56^*$, $p<0.10$) and study 2 wave 3 ($t=2.76^{**}$, $p<0.05$) and perceptions of service quality was positive and significant in study 2 wave 3 (service quality: $t = 2.14^{**}$, $p<0.05$). Thus, hypothesis *H1a(i) and H3a(i)* were supported only in *study 2 wave 3*.

Trust was negative and statistically significant only in study 2 wave 3 ($t = -2.29^{**}$, $p<0.05$). Positive emotions were positive and statistically significant in study 1 ($t = 2.71^{***}$, $p<0.00$) and study 2 wave 1 ($t = 2.24^{**}$, $p<0.00$). In study 2 wave 3, though both positive and negative emotions were statistically significant (positive emotions: $t = -1.93^*$, $p<0.10$ and negative emotions: $t = -2.10^{**}$, $p<0.05$), the direction of this relationship was negative. Negative emotions had similar results in study 1 also ($t = -3.36^{***}$, $p<0.00$).

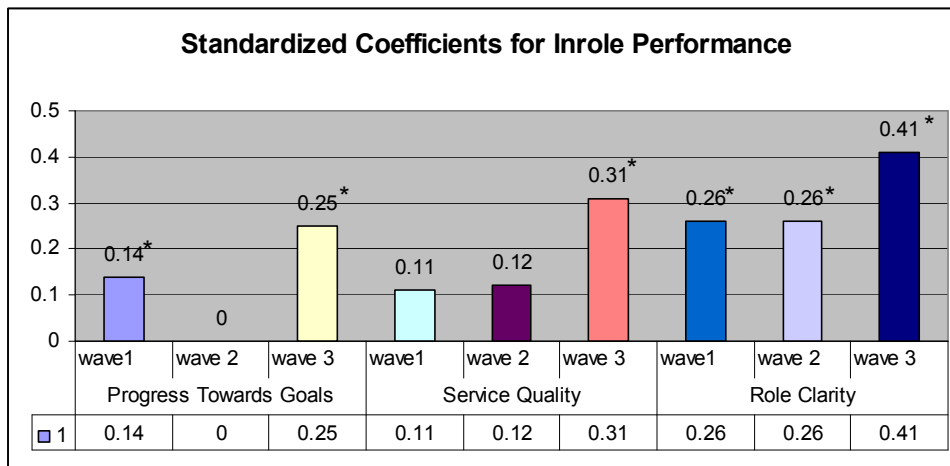
Thus, as hypothesized, students perform their in-role behavior when they feel certain they understand their roles. The significant effect of assessment of progress towards goals and perceived service quality on in-role behavior becomes significant only in wave 3 or during the latter part of the relationship. Thus, while initially, it is role clarity that drives student in-role performance, in later stages of the relationship, assessment of progress towards goals, perceptions of service quality become important drivers of customer in-role performance.

Table 14: Regression Results for In-role Performance

Dependent Variable: In-role Performance				
Variable	Study 1	Study 2 Wave 1	Study 2 Wave 2	Study 2 Wave 3
N	98	127	130	113
Mean	5.57	5.51	5.25	5.23
Standard Deviation (SD)	1.26	1.07	1.22	1.24
F-Statistic	4.47***	7.93*	5.02***	9.50***
R-Square	0.23	0.29	0.20	0.35
Adjusted R-Square	0.18	0.25	0.16	0.31
Assessment of progress towards goals	B=0.14 β=0.09 t=0.89	B=0.12 β=0.14 t=1.56*	B=-0.00 β=-0.00 t=-0.03	B=0.24 β=0.25 t=2.76**
Perceived Service Quality	B=0.17 β=0.14 t=0.96	B=0.10 β= 0.11 t=0.88	B=0.11 β=0.12 t=0.95	B=0.27 β=0.31 t=2.14**
Role Clarity	B=0.24 β=0.23 t=1.68*	B=0.28 β=0.26 t=2.16*	B=0.28 β=0.26 t=2.31**	B=0.40 β=0.41 t=3.35***
Trust	B=-0.21 β=-0.19 t=-1.39	B=0.15 β=-0.16 t=-1.38	B=-0.05 β=-0.05 t=-0.47	B=-0.28 β=-0.29 t=-2.29 (p<0.05)
Positive Emotions	B=.32 β=0.29 t=2.71**	B=0.27 β=0.27 t=2.24*	B=0.16 β=0.16 t=1.16	B=-0.27 β=-0.30 t=-1.93 (p<0.10)
Negative Emotions	B=-0.27 β=-0.34 t=-3.36 (p<0.00)	B=-0.01 β=-0.01 t=-0.13	B=-0.01 β=-0.02 t=-0.24	B=-0.09 β=-0.17 t=-2.10 (p<0.05)
Constant	B=2.37 t = 2.58**	B=1.80 t=3.02***	B=2.56 t=3.21***	B=3.63 t=6.00***

*** p < 0.00, ** p < 0.05, * p < 0.10

Chart 1: Standardized Coefficients for In-role Behavior in Study 2



Extra-role performance—Citizenship Behavior

Equation 2b: Extra-role performance (Citizenship Behavior) (t_1) = f
(Progress towards goals (t_1), perceived service quality (t_1), role clarity (t_1),
covariates (t_1)).

(Hypotheses tested: H1b(i); H3b(i); H3e(i); H5b(i))

On analyzing the full model, which included all the variables it was found that the effects of the covariates (emotions and trust) were not significant. Hence, a reduced model in which the covariates were dropped was analyzed (please refer to table 15 and chart 2).

Results show that the model was positive and statistically significant in all the studies (study 1: $F=17.72^{***}$, $p<0.00$, adjusted $R^2 = 0.34$; study 2 wave 1: $F=12.14^{***}$, $p<0.00$, adjusted $R^2=0.21$; study 2 wave 2: $F=4.23^{**}$, $p<0.05$, adjusted $R^2=0.07$; study 2 wave 3: $F=10.31^{***}$, $p<0.00$, adjusted $R^2=0.20$).

Progress towards goals was positive and statistically significant in all three waves of study 2 (wave 1: $t=3.33^{***}$, $p<0.00$; study 2 wave 2: $t=2.22^{**}$, $p<0.05$; study 2 wave 3: $t=2.39^*$, $p<0.10$), thereby providing ***support for hypothesis H3e(i) in all the three waves of study 2.***

Perceptions of service quality was positive and statistically significant in study 1 and negative and statistically significant in study 2 wave 3 (study 1: $t=3.18^{***}$, $p<0.00$; study 2 wave 3: $t=-4.31^{***}$, $p<0.00$). Thus, while ***hypothesis H1b(i) was supported in study 1***, the direction of the proposed relationship was opposite (negative) in study 2 wave 3.

Role clarity was positive and statistically significant in study 2 wave 1 ($t=3.12^{***}$, $p<0.00$) and study 2 wave 3 ($t=4.16^{***}$, $p<0.00$), thereby providing ***support to hypothesis H5b(i) in study 2 wave 1 and wave 3.***

As hypothesized, citizenship behavior (activities performed by the students to help the Career Management Center (CMC) improve their functioning and help students achieve their goals—e.g. conducting research on industries/ career options before coming to the CMC; completing the home-work/ suggested activities; researching companies/ career options other than those suggested by the counselors) was driven by the consumers' assessment of progress towards goals. When students made a favorable assessment about the progress towards their goals, they were inclined to perform discretionary activities during the service interaction. Perceptions of service quality also influenced citizenship behavior,

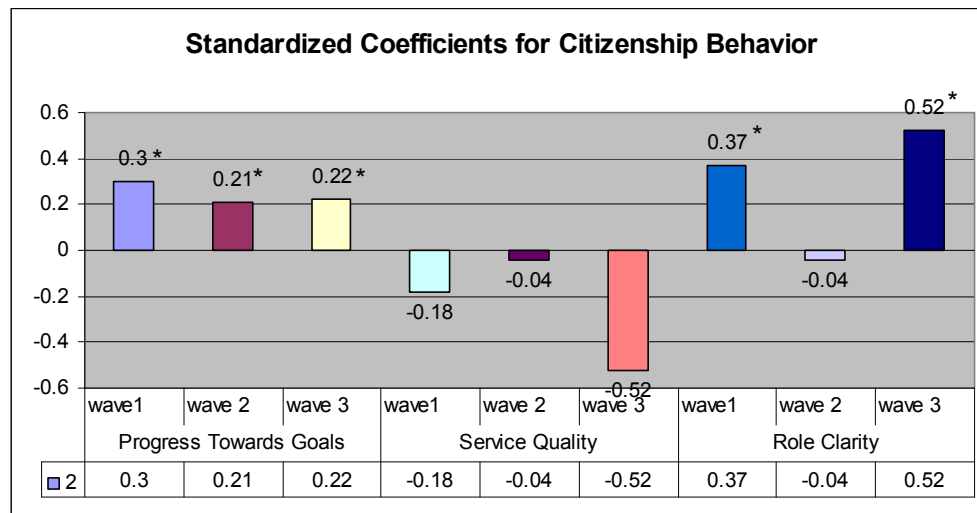
however this relationship was negative in nature wherein the students performed citizenship behavior only when they perceived the service quality to be low. Also, it must be noted that in study 2, the effect of perceived service quality became statistically significant only in wave 3, when the student-counselor (customer-service provider) relationship matured.

Similarly, customer role clarity also influenced citizenship behavior and though its effect was positive and statistically significant in study 2 waves 1 and 3, the effect of role clarity was more pronounced in wave 3 (study 2 wave 1 standardized coefficient β : .370; study 2 wave 3 β :.520) (refer chart 2). Results show that to be able to take initiative the students must be clear on their basic role requirements. Only once they understand their roles, are customers able to focus on the additional effort required to help the firm succeed. The Career Management Center and service providers in general must focus on customer role clarity not just for customer in-role behavior but also for extra-role behavior to emerge. It might also be worthwhile to focus on older/seasoned customers when trying to drive extra-role behavior within the firm interactions.

Table 15: Regression Results for Extra-role Performance (Citizenship Behavior)

Dependent Variable: Extra-role Performance (Citizenship Behavior) †				
Variable	Study 1	Study 2 Wave 1	Study 2 Wave 2	Study 2 Wave 3
N	98	127	129	113
Mean	6.17	5.77	5.56	5.72
Standard Deviation (SD)	1.08	1.12	1.22	1.20
F-Statistic	17.72***	12.14***	4.23**	10.31***
R-Square	0.36	0.23	0.09	0.22
Adjusted R-Square	0.34	0.21	0.07	0.20
Assessment of progress towards goals	B=0.19 β=0.15 t=1.62	B=0.28 β=0.30 t=3.33**	B=0.25 β=0.21 t=2.22*	B=0.21 β=0.22 t=2.38*
Perceived Service Quality	B=0.38 β=0.38 t=3.18**	B=-0.17 β=-0.18 t=-1.59	B=-0.04 β=-0.04 t=-0.37	B=-0.45 β=-0.52 t=-4.31 (p<0.00)
Role Clarity	B=0.16 β=0.18 t=1.52	B=0.41 β=0.37 t=3.12**	B=0.18 β=-0.04 t=1.57	B=0.49 β=0.52 t=4.16***
Constant	B=1.76 t = 2.61**	B=2.61 t =4.52***	B=3.25 t =4.84***	B=4.24 t =7.60***
*** p < 0.00, ** p < 0.05, * p < 0.10				

Chart 2: Standardized Coefficients for Citizenship Behavior in Study 2



Extra role Performance-Elective Behavior

Equation 2c: Extra-role performance (Elective Behavior) (t_1) = f

(Progress towards goals (t_1), perceived service quality (t_1), role clarity (t_1), covariates (t_1)).

(Hypotheses tested: H1c(i); H3c(i); H3f(i); H5c(i))

On analyzing the full model, which included all the variables it was found that the effects of the covariates (emotions and trust) were not significant. Hence, a reduced model in which the covariates were dropped was analyzed (see table 16 and chart 3).

Results show that the model was positive and statistically significant only in study 1 ($F=12.06^{***}$, $p<0.00$, adjusted $R^2=0.26$) and study 2 wave 3 ($F=3.27^*$, $p<0.10$, adjusted $R^2=.06$).

Within these models perceived service quality was positive and statistically significant in study 1 ($t=2.86^{**}$, $p<0.05$) and negative and statistically significant in study 2 wave 3 ($t=-1.79^{*}$; $p<0.10$). Thus, the direction of the relationship was opposite to what was hypothesized in study 2 wave3 and only ***hypothesis H1c(i) was supported only in study 1.***

Role clarity was positive and statistically significant only in study 2 wave 3 ($t=2.47^{**}$, $p<0.05$), thereby providing ***support for hypothesis H5c(i) in study 2 wave 3.***

As evidenced in study 2 (longitudinal study), the students were primarily focused on performing their in-role behavior and understanding their roles (role clarity). It was only in wave 3 (later stages of the student-counselor relationship) that they starting performing any elective behaviors and it was their role clarity that became the key driver in students taking additional initiative to help advance their goals. For elective behavior to emerge, firms must focus on service quality perceptions and customer role clarity.

However, further research is needed to strengthen these relationships. In the current studies, the sample was primarily first year MBA students who may not had the need to perform any additional efforts (e.g. making appointments to meet the career counselors; voluntarily reading brochures and handouts; bringing more material to show the career advisor than suggested) to achieve their career goals. As long as they were attending the career management class and doing

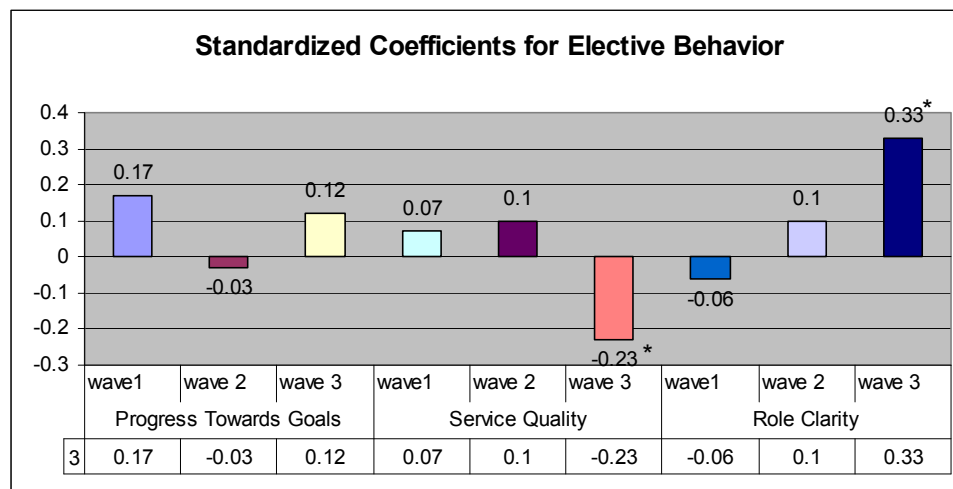
what was required (in-role performance), they would achieve their goals and not require additional effort.

Table 16: Regression Results for Extra-role Performance (Elective Behavior)

Dependent Variable: Extra-role Performance (Elective Behavior) †				
Variable	Study 1	Study 2 Wave 1	Study 2 Wave 2	Study 2 Wave 3
N	98	127	129	113
Mean	5.53	4.70	4.65	4.81
Standard Deviation (SD)	1.52	1.45	1.43	1.48
F-Statistic	12.06***	1.28	1.74	3.27*
R-Square	0.28	0.03	0.04	0.08
Adjusted R- Square	0.26	0.01	0.02	0.06
Assessment of progress towards goals	B=0.02 β=0.01 t=0.11	B=0.21 β=0.17 t=1.72	B=-0.04 β=-0.03 t=-0.31	B=0.14 β=0.12 t=1.36
Perceived Service Quality	B=0.52 β=0.36 t=2.86**	B=0.09 β=0.07 t=0.57	B=0.13 β=0.10 t=1.18	B=-0.25 β=-0.23 t=-1.79
Role Clarity	B=0.26 β=0.20 t=1.63	B=-0.09 β=-0.06 t=-0.48	B=0.13 β=0.10 t=0.89	B=0.39 β=0.33 t=2.47**
Constant	B=0.71 t = 0.70	B=3.54 t = 4.23***	B=3.40 t = 4.23***	B=3.19 t = 4.26***

*** $p < 0.00$, ** $p < 0.05$, * $p < 0.10$

Chart 3: Standardized Coefficients for Elective Behavior in Study 2



Information Sharing

Equation 3: Information Sharing (t_1) = f(Progress towards goals (t_1), perceived service quality (t_1), role clarity (t_1), covariates (t_1)).

(Hypotheses tested: H1d(i); H3d (i); H3g(i)).

On analyzing the full model, which included all the variables it was found that the effects of the covariates (emotions and trust) were not significant. Hence, a reduced model in which the covariates were dropped was analyzed (see table 17).

Results show that the model was positive and statistically significant in all the studies (study 1: $F=55.05^{***}$, $p<0.00$, adjusted $R^2=.53$; study 2 wave 1: $F=45.61^{***}$, $p<0.00$, adjusted $R^2=0.42$; study 2 wave 2: $F=19.02^{***}$, $p<0.00$, adjusted $R^2=0.22$; study 2 wave 3: $F=23.39^{***}$, $p<0.00$, adjusted $R^2=0.29$).

Assessment of progress towards goals was positive and statistically significant in two waves of study 2 (wave 1: $t=5.57^{***}$, $p<0.00$; wave 3: $t=4.23^{***}$, $p<0.00$), providing support for ***hypothesis H3g(i) in study 2 waves 1 and 3.***

Perceptions of service quality was positive and statistically significant in all the studies (study 1: $t=8.67^{***}$, $p<0.00$; study 2 wave 1: $t=5.43^{***}$, $p<0.00$; study 2 wave 2: $t=4.89^{***}$, $p<0.00$; study 2 wave 3: $t=4.15^{***}$, $p<0.00$). Thus, ***hypothesis H1d(i) was supported in all the studies.***

As hypothesized, perception of service quality and progress towards goals influence information sharing behavior. Results also show that as predicted the effect of service quality on customer participation behavior, specifically information sharing, varied at different time periods. This pattern can be witnessed in the changes in the standardized coefficients in the study 2 (wave 1: $\beta = 0.39$; wave 2: $\beta = 0.41$; wave 3: $\beta = 0.08$) (see chart 4), wherein information sharing increased slightly in wave 2 and then drastically decreased in wave 3. Thus, in extended service interactions, in an effort to help the service provider understand their expectations and requirements, consumer information sharing is initially high and then dips as the customer-firm relationship matures and clearer understanding emerges between the two parties. The career management center and firms in general should create clear channels of communication early into the customer relationship so as to encourage customer participation. They should also make it easy for consumers to share information and recognize that experienced

customers may not feel the need for extensive communication (“less may be more” in case of returning customers).

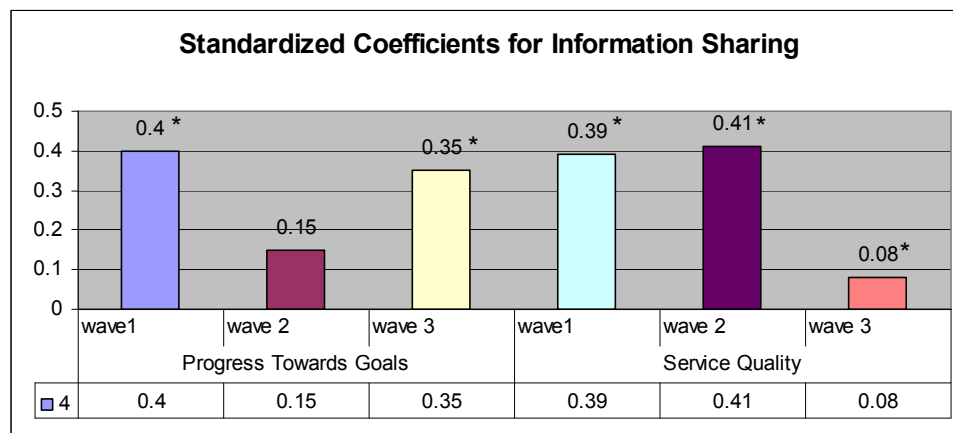
Table 17: Regression Results for Information Sharing

Dependent Variable: Information Sharing[†]				
Variable	Study 1	Study 2 Wave 1	Study 2 Wave 2	Study 2 Wave 3
N	98	127	129	113
Mean	5.57	5.00	4.85	5.10
Standard Deviation (SD)	1.25	1.41	1.39	1.38
F-Statistic	55.05***	45.61***	19.02***	23.39***
R-Square	0.54	0.42		0.30
Adjusted R- Square	0.53	0.42	0.22	0.29
Assessment of progress towards goals	B=0.17 β=0.12 t=1.51	B=0.48 β=0.40 t=5.57***	B=0.21 β=0.15 t=1.80	B=0.39 β=0.35 t=4.23***
Perceived Service Quality	B=0.80 β=0.67 t=8.67***	B=0.46 β=0.39 t=5.43***	B=0.44 β=0.41 t=4.89***	B=0.34 β=0.08 t=4.15***
Constant	B=-0.03 t = -0.05	B=-0.39 t = -0.69	B=1.36 t = 2.05**	B=1.22 t = 2.09**

*** $p < 0.00$, ** $p < 0.05$, * $p < 0.10$

[†] F-tests indicated that positive emotions, negative emotions and trust did not explain a statistically significant portion of the variance in the dependent variable ($p > 0.10$).

Chart 4: Standardized Coefficients for Information Sharing in Study 2



Longitudinal Variable: Perceived Service Quality (Time 2)

Equation 4: Perceived service quality (t_2) = f(In-role performance (t_1), extra-role performance (t_1), information sharing (t_1), covariates (t_1)).

(Hypotheses tested: H4a; H4b; H4c; H4d)

It was hypothesized that customer participation behavior (role performance and information sharing) and service quality perceptions from one service interaction would influence customer perceptions of service quality in the subsequent service interactions. Since this equation required longitudinal analysis, only study 2 (wave 2 as a function of wave 1 and wave 3 as a function of wave 2) was analyzed (see table 18).

On analyzing the full model, which included all the variables it was found that the effects of the covariates (emotions and trust) were not significant. Hence, a reduced model in which the covariates were dropped was analyzed. Results

show that the model was positive and statistically significant in both data sets (wave 2 as a function of wave 1: $F=5.95^{***}$, $p<0.00$; adjusted $R^2=0.26$; wave 3 as a function of wave 2: $F=3.13^*$, $p<0.10$; adjusted $R^2=0.11$).

Only information sharing influenced perceived service quality longitudinally (wave 2 as a function of wave 1: $t=3.52^{***}$, $p<0.00$; wave 3 as a function of wave 2: $t=2.48^*$, $p<0.10$) providing *support for hypothesis H4d* (hypotheses H4a-c were not supported).

Through information sharing, students allow the career counselors and Career Management Center (CMC) to react to their specifications and requirements which are reflected in the CMC delivered service quality in the next service interaction. Perhaps students attributed their in-role and extra-role behavior to themselves and did not see this as influencing the service quality. For the students, service quality was not an outcome variable, rather finding a job/internship was the final outcome of interest and they did not see this as a service goal of the Career Management Center (CMC).

Table 18: Longitudinal Regression Results for Perceived Service Quality (t2)

Dependent Variable: Perceived Service Quality (t2) †		
Variable	Study 2 wave 2 as a function of Study 2 wave 1	Study 2 wave 3 as a function of Study 2 wave 2
N	57	73
Mean	5.47	5.28
Standard Deviation (SD)	1.11	1.36
F-Statistic	5.95***	3.13*
R-Square	0.17	0.12
Adjusted R-	0.26	0.11

Square		
In-role Behavior	B=-0.01 β=-0.01 t=-0.04	B=0.01 β=0.01 t=0.05
Citizenship Behavior	B=-0.10 β=-0.12 t=-0.60	B=-0.34 β=-0.29 t=-1.61
Elective Behavior	B=0.12 β=0.15 t=-0.90	B=0.08 β=0.08 t=0.45
Information Sharing	B=0.43 β=0.54 t=3.52***	B=0.40 β=0.42 t=2.48*
Constant	B=3.43 t = 4.34***	B=4.82 t = 6.05***

*** $p < 0.00$, ** $p < 0.05$, * $p < 0.10$

† F-tests indicated that positive emotions, negative emotions and trust did not explain a statistically significant portion of the variance in the dependent variable ($p > 0.10$).

Longitudinal Variable: In-role Performance (Time 2)

Equation 5: In-role Performance (t_2) = f(Progress towards goals (t_1),

Perceived service quality (t_1), role clarity (t_1), covariates).

(Hypotheses tested: H1a(ii); H3a(ii); H5a(ii))

It was hypothesized that in extended service interactions, customer in-role performance in a service interaction would be influenced by customer perceptions of progress towards goals, perceived service quality, role clarity, emotions and trust experienced by consumers in the previous service interaction. Since this equation required longitudinal analysis, only study 2 (wave 2 as a function of wave 1 and wave 3 as a function of wave 2) was analyzed. On analyzing the full

model, which included all the variables it was found that the effects of the covariates (emotions and trust) were not significant. Hence, a reduced model in which the covariates were dropped was analyzed (see table 19).

Results showed that the model was positive and statistically significant in both data sets (wave 2 as a function of wave 1: $F=5.74^{***}$, $p<0.00$; adjusted $R^2=0.20$; and wave 3 as a function of wave 2: $F=4.44^{**}$, $p<0.5$; adjusted $R^2=0.13$).

Progress towards goals was not significant in either data sets while perceived service quality was positive and statistically significant in the second data set (wave 3 as a function of wave 2): $t = 2.08^*$, $p<0.10$. Role clarity was positive and statistically significant in the first data set (wave 2 as a function of wave 1): $t = 2.94^{**}$, $p<0.05$. Thus, in longitudinal analyses, hypotheses ***H1a(ii) was supported in wave 3 as a function of wave 2 and H5a(ii) was supported in wave 2 as a function of wave 1.***

These longitudinal results show that student in-role performance is influenced by role clarity in the initial stages of the student-career counselor relationship. As students understand their roles and the Career Management Center (CMC) requirements, role clarity becomes a part of their in-role performance and does not exist as a separate significant influence on customer behavior.

Results also show that in the early stages of the student-career counselor relationship, students are focused primarily on their efforts and understanding driving their role behavior rather than the Career Management Center (CMC) delivered service quality. It is only in later stages of the relationship that service provider delivered service quality starts to influence customer in-role behavior.

Table 19: Longitudinal Regression Results for In-role Behavior (t2)

Dependent Variable: In-role Behavior (t2) †		
Variable	Study 2 wave 2 as a function of Study 2 wave 1	Study 2 wave 3 as a function of Study 2 wave 2
N	57	73
Mean	5.24	5.22
Standard Deviation (SD)	1.24	1.19
F-Statistic	5.74***	4.44**
R-Square	0.25	0.16
Adjusted R-Square	0.20	0.13
Progress towards Goals	B=0.10 β=0.09 t=0.66	B=0.19 β=0.17 t=1.29
Perceived Service Quality	B=-0.01 β=-0.01 t=-0.04	B=0.27 β=0.30 t=2.08*
Role Clarity	B=0.62 β=0.45 t=2.94**	B=-0.01 β=-0.01 t=-0.08
Constant	B=1.02 t = 0.93	B=2.79 t = 3.63***

*** $p < 0.00$, ** $p < 0.05$, * $p < 0.10$

† F-tests indicated that positive emotions, negative emotions and trust did not explain a statistically significant portion of the variance in the dependent variable ($p > 0.10$).

Longitudinal Variable: Extra-role Performance-citizenship behavior (Time 2)

Equation 6: Citizenship Behavior (t_2) = f(Progress towards goals (t_1), Perceived service quality (t_1), role clarity (t_1), covariates).

(Hypotheses tested: H1b(ii); H3b(ii); H3e(ii); H5b(ii))

It was hypothesized that in extended service interactions, customer extra-role performance-citizenship behavior in a service interaction will be influenced by customer perceptions of progress towards goals, perceived service quality, role clarity, emotions and trust experienced by consumers in the previous service interaction. Since this equation required longitudinal analysis, only study 2 (wave 2 as a function of wave 1 and wave 3 as a function of wave 2) was analyzed (see table 20).

Results showed that the model was positive and statistically significant in both data sets (wave 2 as a function of wave 1: $F=3.78^{***}$, $p<0.00$, adjusted $R^2=0.23$ and wave 3 as a function of wave 2: $F=3.71^{***}$, $p<0.00$, adjusted $R^2=.18$). While progress towards goals and perceived service quality were not significant in either data sets, role clarity was positive and statistically significant in the first data set (wave 2 as a function of wave 1): $t=3.65^{***}$, $p<0.00$, thereby providing *support for hypothesis H5b (ii)*.

Among the covariates trust was negative and statistically significant in the first data set (wave 2 as a function of wave 1): $t=-3.11^{***}$, $p<0.00$. Positive

emotions were positive and statistically significant in the second data set (wave 3 as a function of wave 2): $t = 3.84^{***}$, $p < 0.00$.

Much like in-role behavior, in the case of citizenship behavior, role clarity influences customer behavior only in initial stages of the customer-firm relationship, when the customers are still becoming familiar with the service provider and perform the citizenship behavior activities to help the service provider understand them better. As the service interactions increase and the relationship evolves, role clarity does not influence customer behavior as a separate variable, rather it becomes inscribed and becomes a part of their behavior.

Table 20: Longitudinal Regression Results for Citizenship Behavior (t2)

Dependent Variable: Citizenship Behavior (t2)		
Variable	Study 2 wave 2 as a function of Study 2 wave 1	Study 2 wave 3 as a function of Study 2 wave 2
N	57	73
Mean	5.48	5.68
Standard Deviation (SD)	1.33	1.20
F-Statistic	3.78 ^{***}	3.71 ^{***}
R-Square	0.31	0.25
Adjusted R- Square	0.23	0.18
Progress towards Goals	B=0.20 $\beta=0.18$ t=1.28	B=0.06 $\beta=0.05$ t=3.67
Perceived Service Quality	B=-0.12 $\beta=-0.09$ t=-0.59	B=-0.11 $\beta=-0.12$ t=-0.79
Role Clarity	B=0.91 $\beta=0.62$	B=-0.21 $\beta=-0.20$

	t=3.65***	t=-1.26
Trust	B=-0.74 β=-0.57 t=-3.11(p<0.00)	B=-0.17 β=-0.16 t=-1.11
Positive Emotions	B=0.40 β=0.28 t=1.63	B=0.75 β=0.74 t=3.84***
Negative Emotions	B=0.07 β=0.10 t=0.80	B=0.00 β=0.01 t=0.06
Constant	B=1.27 t = 0.99	B=3.77 t = 4.00***

*** p < 0.00, ** p < 0.05, * p < 0.10

Longitudinal Variable: Extra-role Performance-Elective behavior (Time 2)

Equation 7: Elective Behavior (t₂) = f (Progress towards goals (t₁),

Perceived service quality (t₁), role clarity (t₁), covariates).

(Hypotheses tested: H1c(ii); H3c(ii); H3f(ii))

It was hypothesized that in extended service interactions, customer extra-role performance-elective behavior in a service interaction would be influenced by customer perceptions of progress towards goals, perceived service quality, role clarity, emotions and trust experienced by consumers in the previous service interaction. Since this equation required longitudinal analysis, only study 2 (wave 2 as a function of wave 1 and wave 3 as a function of wave 2) was analyzed (see table 21).

Results show that the model was positive and statistically significant in both databases—wave 2 as a function of wave 1: $F=2.09^{**}$, $p<0.05$; adjusted $R^2=0.10$; wave 3 as a function of wave 2: $F=2.31^{**}$, $p<0.05$; adjusted $R^2=0.10$.

Much like citizenship behavior, progress towards goals and perceived service quality was not significant in either data set. Role clarity was positive and statistically significant in wave 2 as a function of wave 1: $t=2.55^{**}$, $p<0.05$. Role clarity was negative and statistically significant in wave 3 as a function of wave 2: $t=-1.78^*$, $p<0.10$. Thus *hypothesis H5c (ii) was supported in wave 2 as a function of wave 1*.

Among the covariates, though trust was negative and statistically significant in the both data sets (wave 2 as a function of wave 1: $t=-2.89$, $p<0.00$; wave 3 as a function of wave 2: $t=-1.65$, $p<0.10$). Positive emotions were positive and statistically significant only in the second data set (wave 3 as a function of wave 2: $t=2.85$, $p<0.00$).

Like citizenship behavior, elective behavior is largely influenced by customer role clarity. It must be noted that in the initial stages of the customer-firm relationship elective behavior increases as role clarity increases (positive relationship), while in the later stages of the customer-firm relationship elective behavior increases as role clarity decreases (negative relationship). Thus, while in the initial stages students perform elective behaviors if they understand the career management center (CMC) requirements, in later stages of the relationship,

students perform the elective behaviors (discretionary effort to help themselves), if they were unsure about the CMC efforts.

Table 21: Longitudinal Regression Results for Elective Behavior (t2)

Dependent Variable: Elective Behavior (t2)		
Variable	Study 2 wave 2 as a function of Study 2 wave 1	Study 2 wave 3 as a function of Study 2 wave 2
N	57	73
Mean	4.58	4.78
Standard Deviation (SD)	1.41	1.40
F-Statistic	2.09*	2.31**
R-Square	0.20	0.17
Adjusted R-Square	0.10	0.10
Progress towards Goals	B=0.03 $\beta=0.02$ t=0.16	B=0.18 $\beta=0.14$ t=0.99
Perceived Service Quality	B=0.11 $\beta=0.08$ t=0.50	B=0.05 $\beta=0.05$ t=0.28
Role Clarity	B=0.73 $\beta=0.47$ t=2.55**	B=-0.37 $\beta=-0.30$ t=-1.78 (p<0.10)
Trust	B=-0.79 $\beta=-0.57$ t=-2.89 (p<0.00)	B=-0.30 $\beta=-0.25$ t=-1.65 (p<0.10)
Positive Emotions	B=0.26 $\beta=0.17$ t=0.90	B=0.68 $\beta=0.58$ t=2.85**
Negative Emotions	B=0.09 $\beta=0.13$ t=0.97	B=0.05 $\beta=0.07$ t=0.58
Constant	B=2.25 t = 1.53	B=3.20 t = 2.76**

*** p < 0.00, ** p < 0.05, * p < 0.10

Longitudinal Variable: Information Sharing Behavior (Time 2)

Equation 8: Information sharing (t_2) = f(Progress towards goals (t_1), Perceived service quality (t_1), covariates).

(Hypotheses tested: H1d(ii); H3d(ii); H3g(ii))

It was hypothesized that in extended service interactions, customer information sharing behavior in a service interaction would be influenced by customer perceptions of progress towards goals, perceived service quality, emotions and trust experienced by consumers in the previous service interaction. Since this equation required longitudinal analysis, only study 2 (wave 2 as a function of wave 1 and wave 3 as a function of wave 2) was analyzed (see table 22).

Results show that the model was positive and statistically significant in both data sets (wave 2 as a function of wave 1: $F=13.31^{***}$, $p<0.00$, adjusted $R^2=0.31$ and wave 3 as a function of wave 2: $F=9.67^{***}$, $p<0.00$, adjusted $R^2=0.19$). On analyzing the full model, which included all the variables it was found that the effects of the covariates (emotions and trust) were not significant. Hence, a reduced model in which the covariates were dropped was analyzed.

The effect of progress towards goals was positive and statistically significant in the first data set (wave 2 as a function of wave 1): $t = 2.87^{**}$, $p<0.5$; and perceived service quality was positive and statistically significant in both data

sets (wave 2 as a function of wave 1: $t = 3.47^{***}$, $p < 0.00$; wave 3 as a function of wave 2: $t = 3.49^{***}$, $p < 0.00$). Thus, *hypothesis H1d (ii) was supported in both data sets and hypothesis H3g (ii) was supported in wave 2 as a function of wave 1.*

As hypothesized, information sharing is driven by the perceptions of progress towards goals and the service quality of the previous service interaction. Clearly, information sharing is an important component of the customer-service provider relationship. Customers tend to take initiative in the customer-firm relationship by communicating to the firm employees. They take into consideration not just the firm delivered service quality in the current service interaction but also the perceptions of service quality from the previous transactions. Customer assessments of progress towards goals from previous service interactions also influence subsequent information sharing in the early stages of the customer-firm relationship when the customers are still trying to help the firm understand their requirements better. In the later stages of the customer-firm relationship when the customers are more aligned with the firm, assessments of progress towards goals does not exert a separate influence on customer information sharing.

Table 22: Longitudinal Regression Results for Information Sharing (t2)

Dependent Variable: Information Sharing (t2)†		
Variable	Study 2 wave 2 as a function of Study 2 wave 1	Study 2 wave 3 as a function of Study 2 wave 2
N	57	73
Mean	4.80	5.10
Standard Deviation (SD)	1.39	1.35
F-Statistic	13.31***	9.67***
R-Square	0.33	0.22
Adjusted R-Square	0.31	0.19
Progress towards Goals	B=0.40 β=0.33 t=2.87**	B=0.12 β=0.09 t=0.77
Perceived Service Quality	B=0.52 β=0.40 t=3.47***	B=0.42 β=0.41 t=3.49***
Constant	B=-0.55 t = -0.52	B=2.22 t = 2.78**

*** $p < 0.00$, ** $p < 0.05$, * $p < 0.10$

† F-tests indicated that positive emotions, negative emotions and trust did not explain a statistically significant portion of the variance in the dependent variable ($p > 0.10$).

Table 2a: Summary of Hypotheses, Proposed Directionalities and Results				Study 1	Study 2 Wave 1	Study 2 Wave 2	Study 2 Wave 3
Direct effect of service quality on consumer participatory behavior	H1a (i)	Perceived service quality (t_1) \rightarrow consumer in-role performance at t_1	+	NS	NS	NS	S
	H1a (ii)	Perceived service quality (t_1) \rightarrow consumer in-role performance at t_2	+	n/a	NS (wave 2 as a function of wave 1)	S (wave 3 as a function of wave 2)	
	H1b (i)	Perceived service quality (t_1) \rightarrow consumer extra-role performance-citizenship behavior at t_1	+	S	NS	NS	NS*
	H1b (ii)	Perceived service quality (t_1) \rightarrow consumer extra-role performance-citizenship behavior at t_2	+	n/a	NS (wave 2 as a function of wave 1)	NS (wave 3 as a function of wave 2)	
	H1c (i)	Perceived service quality (t_1) \rightarrow consumer extra-role performance-elective behavior at t_1	+	S	NS	NS	NS
	H1c (ii)	Perceived service quality (t_1) \rightarrow consumer extra-role performance-elective behavior at t_2	+	n/a	NS (wave 2 as a function of wave 1)	NS (wave 3 as a function of wave 2)	
	H1d (i)	Perceived service quality (t_1) \rightarrow consumer information sharing at t_1	+	S	S	S	S
	H1d (ii)	Perceived service quality (t_1) \rightarrow consumer information sharing at t_2	+	n/a	S (wave 2 as a function of wave 1)	S (wave 3 as a function of wave 2)	
Indirect Effect of service quality on consumer participatory behavior	H2	Service quality (t_1) \rightarrow customer assessment of progress towards goals at t_1 and t_2	+	S	S	S	S
	H3a (i)	Assessment of progress towards goals (t_1) \rightarrow consumer in-role performance at t_1	+	NS	S	NS	S
	H3a (ii)	Assessment of progress towards goals (t_1) \rightarrow consumer in-role performance at t_2	+	n/a	NS (wave 2 as a function of wave 1)	NS (wave 3 as a function of wave 2)	

	H3b (i)	Assessment of progress towards goals (t ₁) →consumer extra-role-citizenship behavior performance at t ₁	-	NS	NS	NS	NS
	H3b (ii)	Assessment of progress towards goals (t ₁) →consumer extra-role-citizenship behavior performance at t ₂	-	NS	NS	NS	NS
	H3c (i)	Assessment of progress towards goals (t ₁) →consumer extra-role-elective behavior performance at t ₁	-	NS	NS	NS	NS
	H3c (ii)	Assessment of progress towards goals (t ₁) →consumer extra-role-elective behavior performance at t ₂	-	NS	NS	NS	NS
	H3d (i)	Assessment of progress towards goals (t ₁) →consumer information sharing at t ₁	-	NS	NS	NS	NS
	H3d (ii)	Assessment of progress towards goals (t ₁) →consumer information sharing at t ₂	-	NS	NS	NS	NS
	H3e (i)	Assessment of progress towards goals (t ₁) →consumer extra-role-citizenship behavior performance at t ₁	+	NS	S	S	S
	H3e (ii)	Assessment of progress towards goals (t ₁) →consumer extra-role-citizenship behavior performance at t ₂	+	n/a	NS (wave 2 as a function of wave 1)	NS (wave 3 as a function of wave 2)	
	H3f (i)	Assessment of progress towards goals (t ₁) →consumer extra-role-elective behavior performance at t ₁	+	NS	NS	NS	NS
	H3f (ii)	Assessment of progress towards goals (t ₁) →consumer extra-role-elective behavior performance at t ₂	+	n/a	NS (wave 2 as a function of wave 1)	NS (wave 3 as a function of wave 2)	
	H3g(i)	Assessment of progress towards goals (t ₁) →consumer information sharing at t ₁	+	NS	S	NS	S

	H3g(ii)	Assessment of progress towards goals (t_1) → consumer information sharing at t_2	+	n/a	S (wave 2 as a function of wave 1)	NS (wave 3 as a function of wave 2)
Perceived Service Quality is Influenced By Consumer Co-production Behavior	H4a	Consumer in-role performance (t_1) → service quality (t_2)	+	n/a	NS (wave 2 as a function of wave 1)	NS (wave 3 as a function of wave 2)
	H4b	Consumer extra-role performance-citizenship behavior (t_1) → service quality (t_2)	+	n/a	NS (wave 2 as a function of wave 1)	NS (wave 3 as a function of wave 2)
	H4c	Consumer extra-role performance-elective behavior (t_1) → service quality (t_2)	+	n/a	NS (wave 2 as a function of wave 1)	NS (wave 3 as a function of wave 2)
	H4d	Consumer information sharing (t_1) → service quality (t_2)	+	n/a	S (wave 2 as a function of wave 1)	S (wave 3 as a function of wave 2)
Role of Customer Characteristics: Role Clarity and Goals	H5a (i)	Consumer role clarity (t_1) → consumer in-role performance (t_1)	+	S	S	S S
	H5a (ii)	Consumer role clarity (t_1) → consumer in-role performance (t_2)	+	n/a	S (wave 2 as a function of wave 1)	NS (wave 3 as a function of wave 2)
	H5b (i)	Consumer role clarity (t_1) → consumer extra-role performance-citizenship behavior (t_1)	+	NS	S	NS S
	H5b (ii)	Consumer role clarity (t_1) → consumer extra-role performance-citizenship behavior (t_2)	+	n/a	S (wave 2 as a function of wave 1)	NS (wave 3 as a function of wave 2)
	H5c (i)	Consumer role clarity (t_1) → consumer extra-role performance-elective behavior (t_1)	+	NS	NS	NS S

	H5c (ii)	Consumer role clarity (t ₁) → consumer extra-role performance-elective behavior (t ₂)	+	n/a	S (wave 2 as a function of wave 1)	NS* (wave 3 as a function of wave 2)	
	H6	Consumer goals moderates the effect of service quality on assessment of progress towards goal	Moderation	Not tested	Not tested	Not tested	Not tested

S=Supported

NS=Not Supported

n/a=not applicable

*= Statistically significant but directionality of the relationship is opposite to what was hypothesized

Mediating Effect: Assessment of progress towards goals partially mediates the effect of perceived service quality on customer participation behavior

Considering H1, H2 and H3 together, assessment of progress towards goals is considered to partially mediate the effect of perceived service quality on consumer participation behavior. To test mediation, the step-wise method proposed by Baron and Kenny (1986) was used. According to this method, partial mediation is proved if (1) independent variable significantly influences the mediator (2) independent variable significantly influences the dependent variable (3) on regressing the dependent variable on both independent variable and mediator, the mediator must affect dependent variable and the effect of the independent variable should be reduced. Please refer to **table 2b** for a summary of the mediation effects in all the studies conducted.

In ***Study 1***, when evaluating if assessment of progress towards goals mediates the effect of perceived service quality on in-role performance, results show that while step 1 (service quality→customer assessment of progress towards goals: adjusted $R^2=0.18$; $p<0.00$) and step 2 (assessment of progress towards goals→in-role performance: adjusted $R^2=0.04$; $p<0.05$) are significant, in step 3 (service quality, assessment of progress towards goals→in-role performance) ***the effect of assessment of progress towards goals on in-role performance is not significant.***

When evaluating if assessment of progress towards goals mediates the effect of perceived service quality on citizenship behavior, results show that while step 1 (service quality→customer assessment of progress towards goals: adjusted $R^2=0.18$; $p<0.00$) and step 2 (assessment of progress towards goals→citizenship behavior: adjusted $R^2=0.14$; $p<0.00$) are significant, in step 3 (service quality, assessment of progress towards goals→citizenship behavior) the effect of ***assessment of progress towards goals on citizenship behavior is not significant.***

When evaluating if assessment of progress towards goals mediates the effect of perceived service quality on elective behavior, results show that while step 1 (service quality→customer assessment of progress towards goals: adjusted $R^2=0.18$; $p<0.00$) and step 2 (assessment of progress towards goals→elective behavior: adjusted $R^2=0.05$; $p<0.05$) are significant, in step 3 (service quality, assessment of progress towards goals→elective behavior) ***the effect of assessment of progress towards goals on elective behavior is not significant.***

When evaluating if assessment of progress towards goals mediates the effect of perceived service quality on information sharing, results show that while step 1 (service quality→customer assessment of progress towards goals: adjusted $R^2=0.18$; $p<0.00$) and step 2 (assessment of progress towards goals→information sharing: adjusted $R^2=0.16$; $p<0.00$) are significant, in step 3 (service quality, assessment of progress towards goals→information sharing) ***the effect of assessment of progress towards goals on information sharing is not significant.***

Thus, the ***mediation hypotheses were not supported in study 1.***

In ***Study 2 wave 1***, when evaluating if assessment of progress towards goals mediates the effect of perceived service quality on in-role performance, results show that step 1 (service quality \rightarrow progress towards goals: adjusted $R^2 = 0.11$; $p < 0.00$), step 2 (service quality \rightarrow in-role performance: adjusted $R^2 = 0.10$; $p < 0.00$) and step 3 are significant ($p = 0.10$). When evaluating if assessment of progress towards goals mediates the effect of perceived service quality on citizenship behavior, results show that step 1 (adjusted $R^2 = .11$; $p < 0.00$), step 2 (adjusted $R^2 = .16$; $p < 0.00$) and step 3 are significant ($p = 0.00$). When evaluating if assessment of progress towards goals mediates the effect of perceived service quality on elective behavior, results show that while step 1 (adjusted $R^2 = .11$; $p < 0.00$), step 2 is not significant. When evaluating if assessment of progress towards goals mediates the effect of perceived service quality on information sharing, results show that step 1 (adjusted $R^2 = .11$; $p < 0.00$), step 2 (adjusted $R^2 = 0.29^*$; $p < 0.05$) and step 3 are significant ($p = 0.00$).

In ***Study 2 wave 2***, when evaluating if assessment of progress towards goals mediates the effect of perceived service quality on in-role performance, results show that step 1 (adjusted $R^2 = 0.12$; $p < 0.00$) and step 2 (adjusted $R^2 = 0.03$; $p < 0.05$) is significant, step 3 is not significant. When evaluating if assessment of progress towards goals mediates the effect of perceived service quality on citizenship behavior, results show that while step 1 (adjusted $R^2 = 0.12$; $p < 0.00$), step 2 (adjusted $R^2 = 0.08$; $p < 0.05$) and step 3 is significant ($p < 0.00$). When evaluating if assessment of progress towards goals mediates the effect of

perceived service quality on elective behavior, results show that while step 1 (adjusted $R^2 = 0.12$; $p < 0.00$), step 2 is not significant. When evaluating if assessment of progress towards goals mediates the effect of perceived service quality on information sharing, results show that while step 1 (adjusted $R^2 = 0.12$; $p < 0.00$) and step 2 (adjusted $R^2 = 0.08$; $p < 0.05$) are significant, step 3 is not significant.

In Study 2 wave 3, when evaluating if assessment of progress towards goals mediates the effect of perceived service quality on in-role performance, results show that step 1 (adjusted $R^2 = 0.05$; $p < 0.00$), step 2 (adjusted $R^2 = 0.09$; $p < 0.05$) and step 3 are significant ($p < 0.00$). When evaluating if assessment of progress towards goals mediates the effect of perceived service quality on citizenship behavior, results show that step 1 (adjusted $R^2 = 0.05$; $p < 0.00$), step 2 (adjusted $R^2 = 0.06$; $p < 0.05$) and step 3 is significant ($p < 0.00$). When evaluating if assessment of progress towards goals mediates the effect of perceived service quality on elective behavior, results show that while step 1 (adjusted $R^2 = 0.05$; $p < 0.00$) is significant, step 2 is not significant. When evaluating if assessment of progress towards goals mediates the effect of perceived service quality on information sharing, results show that step 1 (adjusted $R^2 = 0.05$; $p < 0.00$), step 2 (adjusted $R^2 = 0.18$; $p < 0.05$) and step 3 are significant ($p = 0.00$).

Thus, in *study 1*, service quality does not influence any customer participation behavior (in-role behavior, citizenship behavior, elective behavior

and information sharing) through the mediated path of assessment of progress towards goals.

In *study 2 wave 1*, service quality influences in-role and citizenship behaviors through the mediated effect of assessment of progress towards goals. In case of information sharing, service quality influences information sharing directly (H1d (i)) and indirectly through the partial mediation of assessment of progress towards goals. This is thus, a “double whammy effect” wherein the service quality influences information sharing both directly (unmediated) and indirectly (mediated).

In *study 2 wave 2*, service quality influences citizenship behavior through the mediated effect of assessment of progress towards goals. Service quality does not influence in-role behavior, elective behavior and information sharing through the mediated effect of assessment of progress towards goals.

In *study 2 wave 3*, service quality influences citizenship behavior through the mediated effect of assessment of progress towards goals. Service quality also influences in-role behavior (H1a (i)) and information sharing (H1d (i)) directly and indirectly through the partial mediation of assessment of progress towards goals. This is thus, a “double whammy effect” wherein the service quality influences in-role behavior and information sharing both directly (unmediated) and indirectly (mediated).

Table 2b: Summary of Mediation Effects

Effect of service quality on customer participation behavior through the mediated effect of assessment of progress towards goals

Study 1				
	Step 1	Step 2	Step 3	Supported
In-role Behavior	R ² =0.18* β=0.44	R ² =0.04* β=0.22	R ² =0.07 β=0.13	x
Citizenship Behavior	R ² =0.18* β=0.44	R ² =0.14* β=0.39	R ² =0.33 β=0.17	x
Elective Behavior	R ² =0.18* β=0.44	R ² =0.52* β=0.25	R ² =0.24 β=0.03	x
Information Sharing	R ² =0.18* β=0.44	R ² =0.16* β=0.41	R ² =0.53 β=0.12	x
Study 2 Wave 1				
	Step 1	Step 2	Step 3	Supported
In-role Behavior	R ² =0.11* β=0.34	R ² =0.10* β=0.33	R ² =0.21* β=0.22	√
Citizenship Behavior	R ² =0.11* β=0.34	R ² =0.16* β=0.41	R ² =0.15* β=0.39	√
Elective Behavior	R ² =0.11* β=0.34	R ² =0.02 β=0.17		x
Information Sharing	R ² =0.11* β=0.34	R ² =0.29* β=0.54	R ² =0.42* β=0.40	√
Study 2 Wave 2				
	Step 1	Step 2	Step 3	Supported
In-role Behavior	R ² =0.12* β=0.35	R ² =0.03* β=0.19	R ² =0.13 β=0.08	x
Citizenship Behavior	R ² =0.12* β=0.35	R ² =0.08* β=0.30	R ² =0.06 β=0.25*	√
Elective Behavior	R ² =0.12* β=0.35	R ² = -0.01 β=0.06		x
Information Sharing	R ² =0.12* β=0.35	R ² = 0.08* β=0.29	R ² =0.22 β=0.15	x
Study 2 Wave 3				
	Step 1	Step 2	Step 3	Supported
In-role Behavior	R ² =0.05* β=0.25	R ² =0.09* β=0.32	R ² =0.12 β=0.27*	√
Citizenship Behavior	R ² =0.05* β=0.25	R ² =0.06* β=0.26	R ² =0.08 β=0.31*	√
Elective Behavior	R ² =0.05* β=0.25	R ² =0.02 β=0.32		x
Information Sharing	R ² =0.05* β=0.25	R ² =0.18* β=0.43	R ² =0.29 β=0.35*	√

√=Supported

x =Not Supported

Chapter 6

Discussion, Implications And Future Research

This dissertation examines customer participation behavior in extended consumption experiences or service interactions that require multiple interactions between the customer and service provider for the service experience and service outcomes to fully emerge. This important topic was studied first through two qualitative and two quantitative pretests and then followed by two studies-one cross sectional in nature and one longitudinal in nature (with three waves of data collection) to assess the hypotheses developed and described in earlier chapters.

In this concluding chapter, four topics are covered. Firstly, the results of the two quantitative studies are summarized and discussed. Secondly, the theoretical and methodological contributions are described. Thirdly, managerial implications are discussed. Finally, limitations of the current studies and future research are explored.

Discussion of Results

Direct effect of service quality on customer participation behavior

In this hypothesis it is proposed that there is a positive effect of service quality on customer participation during service consumption. It is also proposed that perceptions of service quality in one service interaction will influence customer participation behavior in the subsequent service interactions, similar to the positive effect of service quality on purchase behavior. Customer participation

was defined and measured to include four behaviors: in-role performance, citizenship behavior, elective behavior and information sharing.

As hypothesized, service quality positively influenced information sharing in all the studies conducted (both study 1 and study 2-all three waves). Service quality also positively influenced customer in-role performance in the later stages of customer-firm relationship (study 2) and positively influenced extra-role behavior (citizenship behavior and elective behavior) only in study 1.

Service quality influenced information sharing throughout the customer-firm relationship in both study 1 and study 2. The pattern of this positive relationship however, changed as the relationship evolved supporting the prediction that the effect of service quality on customer participation behavior, specifically information sharing varied, at different time periods (as evidenced in study 2). As discussed in the previous chapter, as students continued to perceive positive service quality, information sharing increased slightly in and then drastically decreased in later stages of the customer-service provider relationship (see chart 4). Thus in the initial stages, students shared their requirements, expectations and goals with the CMC to help the career counselors understand them better. Once the understanding emerged, students did not feel the need to share as much information in every service interaction.

These results highlight the importance of communication channels in service interactions. Firms must train their employees to encourage customers

(especially new customers) to share their thoughts and expectations with the firm. They should also recognize that experienced customers may not feel the need for extensive communication (“less may be more” in case of returning customers). Given the differences in customer goals and expectations in service interactions and the active role played by the customers, open communication channels will greatly help firms’ better design service experiences.

The effect of service quality on customer in-role performance was positively statistically significant in wave 3 of study 2 i.e. in later stages of their relationship with the service provider of study 2. During the initial stages of the relationship, students probably attributed their in-role behavior to themselves and as the relationship progressed, the students started to see how the high levels of service provider delivered service quality helped them perform their in-role behavior. Since there is considerable effort made by the service employees to help new customers become familiar with their in-role performance, the CMC and firms in general must ensure that their employee effort is noticed by the customers. This understanding should not be taken for granted and this inter-relationship between the firm and the customer must be emphasized in every service interaction even as the firm tries to ensure perceptions of high service quality.

Though service quality positively influenced both citizenship and elective behaviors in study 1, service quality did not positively influence these behaviors in study 2. This is probably due to the differences in the respondent samples in

both studies. In study 1, the respondents were primarily evening/part-time and online MBA students and alumni who had been working with the career counselors for some time and had both time and opportunities to display discretionary behaviors. In this study, as hypothesized, the high levels of perceived service quality in the current service interaction encouraged customer discretionary behaviors (citizenship and elective behaviors).

In study 2, the respondents were primarily first year full-time MBA students in the fall semester, who might not had a chance or need to display any discretionary behaviors to achieve their career goals. Also, in wave 3 of study 2 (later stages of the customer-service provider relationship) service quality influenced citizenship behavior negatively (opposite to the hypothesized relationship) suggesting that only when the students perceived the service quality to be low, did they feel the need to perform discretionary effort to help themselves.

Perceptions of firm delivered service quality in one service interaction also influenced customer information sharing and in-role behavior in the subsequent service interactions. Results confirmed the hypotheses that customer in-role behavior (wave 3 as a function of wave 2) and information sharing (wave 2 as a function of wave 1 and wave 3 as a function of wave 2) are influenced by the customers' perceptions of service quality delivered in prior service interactions. This novel finding highlights the lasting impact of service quality on customer participation behaviors, specifically information sharing and customer

in-role behaviors. In most service experiences, customers at least perform in-role behaviors and try to create their service experience to some extent primarily through information sharing. This study shows the importance of managing every service interaction and shows that customer participation behaviors are dependent not just on perceptions of service quality of the current service interaction but also their past experiences with the service provider.

This longitudinal effect however, was not significant in case of extra-role behavior (elective behavior and citizenship behavior). This is probably because of the nature of the respondent sample and relatively small sample size when trying to match the participant responses across time periods (wave 2 as a function of wave 1: $n=57$; wave 3 as a function of wave 2: $n=73$).

Indirect effect of service quality on customer participation behavior

Effect of service quality on assessment of progress towards goals---This hypothesis predicts that service quality dimensions are a significant sensory-perceptual input in service setting and play a key role as customers' evaluate their progress towards goals. This relationship was positive and statistically significant in all the studies conducted. These results show that service quality dimensions act as a significant sensory-perceptual input in service setting and play a key role as customers' evaluate their progress towards goals.

In a service environment, the different dimensions of service quality represent the sensory-perceptual input of customers and thereby the 'information'

from the service environment. Service quality has traditionally been one of the most widely studied topics in services marketing and these results continue to build on the existing literature and show the importance of service quality in service interactions. CMC and firms in general must focus on the service processes and deliver what was promised along with actual communication and demonstration that the firms' goals and success are directly related to those of the customer.

Customers' assessment of progress towards goals influence their participation—This hypothesis proposes that differences in customer behavior especially customer participation (in-role performance, citizenship behavior, elective behavior and information sharing) can be explained by differences in customer assessments of progress towards goals.

Assessments of progress towards goals did not statistically influence customer participation behaviors (in-role, citizenship, elective or information sharing) in study 1. This is probably because this data was collected from evening/part-time and online MBA students who had mature relations with the career counselors. Though the students did assess their progress towards goals during the service interaction (as evidenced in the positive statistically significant relationship between service quality and assessment of progress towards goals), their participation behaviors were driven by factors other than their current assessments of progress towards goals. Since these respondents understood the service provider and the service processes really well, they probably assessed

their goal progress in more long term manner and attributed their participation behaviors to other factors including service quality (discussed above).

In study 2, data was collected with the same respondent sample (full time first year MBA students) at different times during the fall semester. The respondents were thus relatively unfamiliar with the career counselors and the service processes at the beginning of the semester (and early waves of data collection) and became more familiar with the career counselors and the service processes as the semester evolved (and at later stages of the data collection). Results show that assessment of progress towards goals positively influenced in-role behavior and information sharing in waves 1 and 3. Assessment of progress towards goals influenced citizenship behavior in all the three waves and did not influence elective behavior in any of the three waves. This is a key finding wherein results show that customers consciously and non-consciously evaluate the progress towards their goals and it is this difference in customers that drives the variations in their participation behaviors during a service interaction. When customers feel they are making progress towards their goals, they are inclined to perform their in-role behavior, citizenship behavior and share information. As service providers grapple with differences in customer levels of co-creation, this study empirically shows that differences in customers' assessments of progress towards goals can explain these variations.

Assessment of progress towards goals did not significantly influence elective behavior cross-sectionally and can be explained again by the nature of the

sample. As mentioned above, since the data was collected primarily with the 1st year full-time MBA students in the fall semester, many of the students might not have had a chance to exhibit elective behavior causing this hypothesis to be not significant.

Longitudinally, assessment of progress towards goals did not influence customer in-role performance or extra-role performance. This could be again due to the small sample size of matched customer responses (wave 2 as a function of wave 1: n=57; wave 3 as a function of wave 2: n=73) and the nature of the sample (first year MBA students).

The positive assessment of progress towards goals in one service interaction did influence customer information sharing in subsequent service interactions. In the current data and the career counseling environment, it is through information sharing that students take initiative and become active participants in creating their service experience. Results show that assessment of progress towards goals plays an important role in this process.

This is again, a key finding which highlights that when customers feel like they are making progress towards their goals in one service interaction they are likely to participate and share their information not just in the same service interaction but also the subsequent service interactions. Since customer information sharing is witnessed most commonly across service industries and is easily identifiable and measurable by service employees, this finding makes a

important contribution to the literature. It also highlights the importance of communication channels in firms and firm efforts at reminding or demonstrating to customers that they are making progress towards their goals.

Mediating effect: Assessment of progress towards goals mediates the effect of perceived service quality on customer participation behavior—It was proposed that service quality also influences customer participation behaviors indirectly through the effect of assessment of progress towards goals. This mediation hypothesis was partially supported in the current data sets.

Perceived service quality did not exert a significant indirect influence on customer participation behaviors (in-role performance, citizenship behavior, elective behavior and information sharing) in study 1. In study 2, the indirect effect of perceived service quality was significant on in-role behavior (waves 1 and 3), citizenship behavior (waves 1, 2 and 3) and information sharing (waves 1 and 3). In fact, perceived service quality exerted a complete effect (mediated and direct) effect on in-role behavior in study 2 wave 3 and on information sharing in study 2 waves 1 and 3.

These results further highlight the importance of assessment of progress towards goals in driving customer participation behaviors. As customers continue to interact with the service providers, they continue to consciously and non-consciously monitor their progress towards goals. As customers perceive higher progress towards goals, they tend to feel good about the service provider and

perform their in-role behaviors. They also share their information freely with the service provider and co-create their service experience.

Perceived service quality did not statistically influence elective behavior in study 2. This is probably again, due to the nature of the respondent sample in study 2, wherein the students were primarily first year MBA students in the fall semester who might not have had chance or need to perform elective behaviors to achieve their career goals.

Perceived service quality is influenced by consumer participation behavior

These hypotheses predict that customer participation behavior in t_1 influence consumer perceptions of service quality in t_2 . These hypotheses were partially supported in the studies conducted. While information sharing in t_1 did influence the service quality in t_2 , customer role performance (in-role and extra-role performance) did not influence service quality in subsequent service interactions.

Results show that for students to become active participants in service interactions, their information sharing behavior plays a very significant role. Through information sharing customers share their expectations and requirements with the service providers and also build their relationship with the firm. Customers expect to see the firm respond to this information and this to be reflected in the subsequent service interactions. This finding highlights the dyadic nature of service interactions and the importance of communications channels

within customer-firm interactions. Firm employees and managers should especially pay attention to any information shared by customers in one service interaction and be responsive to it in subsequent interactions to ensure that the customers perceive high levels of service quality.

It is interesting that in the current data, customer in-role and extra-role performance in one service interaction did not influence customer perceptions of service quality in the subsequent service interactions. This is probably because students do not always see the same career counselor during consecutive visits. Since the counselors currently do not maintain a file (electronic or hard-copy) on the student and simply pick-up from where the students ask them to, the students may not see their in-role and extra-role performance as a factor in the CMC delivered service quality.

Students may also consider their in-role and extra-role performance as their efforts which would result in personal outcomes for them such as an internship/job etc. Students do not consider themselves or their behavior as influencing the career management center's (CMC) success. The career management center has not been able to convince the students that the CMC and the counselors' success are directly related to their behaviors and students achieving their career goals. Past research shows that when customers are perceive themselves as actively creating the firm outcomes, their satisfaction with the process and the firm will be greater than otherwise (Bendapudi and Leone, 2003). The CMC and firms in general must especially focus on highlighting the

interdependence and goal alignment between them and the customers to ensure better firm outcomes such as perceptions of service quality and satisfaction.

Role of Customer Characteristics—Role Clarity

These hypotheses propose that customer participation behaviors within a service interaction are influenced by the individual customer variable- role clarity. Cross sectionally, role clarity positively influenced in-role performance in both study 1 and study 2. Though role clarity did not influence citizenship behavior or elective behavior in study 1, role clarity did positively influence citizenship behavior in study 2 (waves 1 and 3) and elective behavior in study 2 (wave 3). Longitudinally, role clarity influenced in-role and extra-role behaviors (citizenship and elective behaviors) in the first data set—wave 2 as a function of wave 1.

In this research, role clarity influenced in-role behavior in every study conducted. This research shows that customer role clarity plays an important factor in ensuring that customers perform the activities that are required by the firm. When assessing longitudinally, the results show that in early stages of the customer-firm relationship, role clarity in one service interaction influences not just the in-role performance in the current service interaction but also continues to influence in-role performance in the subsequent service interaction. However, as the customer-firm relationship evolves and the customers become familiar with the service provider and know what is expected from them, the effect of role

clarity in one service interaction does not influence in-role performance in subsequent service interactions. Role clarity then becomes inscribed within the customer in-role behavior such that it does exist as a separate influence. These results are important findings as they continue to build on prior research which shows that as role clarity increases, consumers are enabled to be better co-producers (Dellande et al. 2004; Meuter et al. 1995).

Role clarity also influences citizenship behavior and elective behavior in study 2. Though role clarity influences citizenship behavior in wave 1, it influences both citizenship and elective behaviors in wave 3 showing that when customers are aware and comfortable with their role expectations, they start taking any initiatives to perform discretionary effort. On assessing the longitudinal results, this study shows that in initial stages of the customer-firm relationship role clarity in one service interaction influences customer extra-role performance in the next service interaction as well (wave 2 as a function of wave 1 in study 2). However, this effect is not seen in the longitudinal results at later stages of the customer-firm relationship (wave 3 as a function of wave 2).

Taken together these results show that as customers get comfortable with the firm and knowledgeable about their roles, their discretionary effort increases and becomes more spontaneous and less dependent only on prior knowledge. This is a novel finding as such customer initiatives are key to service innovation. Firms need to encourage such participation from the customers and consciously spend money and effort on customer education and role clarity. These efforts will not

just ensure better compliance to firm standards but also generate more customer initiatives.

Moderating effects of Consumer Goals

This hypothesis proposed that the effect of service quality on customer assessment of progress towards goals is moderated by the individual customers' goals. It was proposed that the importance of consumers' goals will moderate the effect of perceived service quality on consumers' assessment of progress towards goals. Specifically, when the consumption goal is high in terms of importance to the consumer, he/she is more likely to be attentive to different aspects of the service interaction and the progress he/she is making towards their consumption goals. On the other hand, if the consumption goal is low terms of importance to the consumer, he/she is less likely to focus on the various aspects of service quality and the progress towards his/her goals. Since this interaction term was highly correlated with the perceived service quality, this hypothesis (the effect of the interaction of consumption goals and perceived service quality on assessment of progress towards goals) was not tested in the data collected.

Covariates-Customer Emotions and Trust

The influence of covariates-customers' emotions (positive and negative) and customers' trust in the service provider was evaluated when testing every hypotheses in the conceptual model proposed. Results show that cross-sectionally, customer emotions and trust influence customer in-role performance. In the initial

stages of the customer-firm relationship, positive emotions play an important role in influencing customer in-role performance. Customers tend to perform what is expected of them only when they feel good about the service interaction and the service experience. As the customer-firm relationship evolves and the customer becomes comfortable with the service provider, trust becomes statistically significant. Thus, in later stages of the customer-firm relationship the customer behavior is dependent not on just feeling good but the levels of trust that the firm and its employees have been able to generate in the customer.

However, it must be noted that these effects of positive emotions and trust do not influence customer in-role performance in subsequent service interactions irrespective of the duration of the customer-firm relationship. The service provider must continue to try to generate positive emotions and trust in every interaction with the customer.

The trust generated in one service interaction also exerts a negative influence on customer extra-role performance (citizenship and elective behaviors). If the customers feel that the firm is not doing enough to help them, customers tend to perform more discretionary activities to help themselves and the firm. Positive emotions also influence extra-role performance longitudinally i.e. positive emotions generated in one service interaction influence higher levels of citizenship behaviors and elective behaviors in subsequent service interactions. This effect is especially seen in later stages of the customer-firm relationship

when the trust between the service provider and the customer has been established.

Research Contributions

Theoretical Contributions

This research makes several contributions to the marketing and services literature. Firstly, this research examines consumption during the service interaction rather than before or after it. While many researchers have acknowledged that consumption and production of services occur at the same time and the dyadic nature of services, current research empirically shows the interrelationship between service quality and customer participation behaviors.

Secondly, this study considers customers as active participants in the creation of their consumption experiences rather than passive respondents. It defines customer participation behaviors as in-role performance, citizenship behavior, elective behavior and information sharing and studies its antecedents and consequences during extended service interactions.

Thirdly, this research explains the differences in customer behaviors and what makes some customers better co-producers and co-creators than others. It shows that assessment of progress towards goals drives variations in customers and their participation behaviors in service experiences.

Fourthly, this research integrates a forward-looking component (assessment of progress towards goals) and a retrospective component

(perceptions of service quality) to explain customer role performance and information sharing over time.

Fifth, this research helps build the co-production and co-creation literature by defining and building measures for customer participation behavior (in-role performance, extra-role performance and information sharing). This field is fairly conceptual and this study with its strong empirical base (qualitative and quantitative research) helps build this literature. It also adds to this literature by answering the important research of what drives customer value in service co-production.

This study also shows the importance of goal alignment between the customers and the service providers. The significant effect of assessment of progress towards goals on customer participatory behaviors and the indirect effect of service quality (through assessment of progress towards goals) on customer participatory behaviors, highlights that customers consciously and non-consciously evaluate their progress towards goals. Different aspects of service quality such as service processes, servicescapes and service provider initiatives are key perceptual inputs in this process. The service provider must be aware of and be aligned with customer goals. This is a key contribution in the area of service design and servicescape management.

In addition to the above, this research also contributes to the literature by highlighting certain key constructs. Firstly, results show that information sharing

is a key construct in service co-creation, wherein customers co-create their experience by sharing information with the service provider. This information sharing pattern tends to influence (in current transaction) and get influenced by (in extended service interactions) firm delivered service quality. Furthermore, results also show the differing impact of service quality on information sharing at different time periods (initially high and then a drastic decrease) thereby demonstrating the complexity of this construct and its importance in service settings. Information sharing, as a construct, has been studied primarily in the business-to-business contexts. Current results highlight the importance of information sharing in business-to-consumers contexts and demonstrate the importance of pay close attention to customer information sharing in service organizations.

Similarly, in-role performance has been studied primarily in employee or management literature. While there has been some research on customer compliance (Dellande et. al. 2004), current research builds on this literature base by showing how emotions, trust, customer role clarity, service quality and assessment of progress towards goals influence customer in-role performance both in micro-service transactions and in extended service interactions. This is a key contribution as these empirical results along with the scale development helps provide a complete understanding of customer in-role performance.

Similarly, while role clarity has been studied in prior literature (Dellande et al. 2004; Meuter et al. 2005) this dissertation builds on this and highlights the

importance of customer role clarity in service interactions. Role clarity is important not just for generating customer compliance (in-role performance) but also discretionary customer effort (extra-role performance) and customer information sharing which has a far-reaching and important impact on firm outcomes. Results show that customer training and education is important not just for new customers but also for returning customers to ensure that they continue to feel relaxed in the service environment and the role clarity becomes inscribed for them.

Finally, this dissertation also shows the importance of trust in business-to-consumer contexts. Trust has been studied extensively in business-to-business contexts and current results show that trust also plays a key role in customer co-production and service co-creation. Trust influences customers' in-role behaviors (positive relationship) and also extra-role behaviors (negative relationship) especially during later stages of extended service interactions.

Methodological Contributions

This research defines customer participation behavior, an essential aspect of services co-production, as in-role performance, extra-role performance and information sharing. With extensive testing (2 qualitative pretests, 2 quantitative pretests and 2 studies-one cross sectional and one longitudinal with three waves), this research adds to the literature by creating scales with good psychometric

properties to measure customer in-role performance, extra-role performance—citizenship behavior and elective behavior and information sharing.

The introduction of customer role performance is also a methodological contribution to the services literature. As employee roles get transferred to customers, this research helps conceptualize this trend and provides definitions and a scale to help make this concept more empirical. The acknowledgment of customer role performance as incorporating different aspects such as in-role performance, citizenship behavior and elective behavior along with new insight on how customers view this construct versus how firms view this, makes this construct detailed and representative of all aspects of customer behavior in a service interaction.

Managerial Implications

This dissertation studies customer experience in extended service interactions in the student counseling area. Data was collected to study student participatory behavior both cross-sectionally in individual sessions and longitudinally over time to assess the impact of student participatory behavior on firm outcomes and the impact of firm outcomes on students' behaviors. The Career Management Center (CMC) and the career counselors performed different activities at different stages of the extended service interaction. In the initial stages, the counselors focused on getting to know the students and assessing their skill levels in terms of job seeking, networking etc. This was followed by a period

when the counselors spent time making the students aware of the available resources (e.g. pamphlets, brochures, intranet and internet resources), suggesting certain activities to sharpen the students' job seeking skills and also making the students aware that the search for jobs/internships was really the student responsibility--the CMC would only assist in this effort. Since the students were also attending a required class on career management, some of the class activities (designed to sharpen the students' job seeking skills) were compulsory or non-optional for the students. As the student-counselor relationship progressed, the counselors stopped giving compulsory activities to the students and only continued to support the students' efforts (the initiatives had to come from the students).

The current research findings have several implications for career counselors and firms in general. Results from the different hypotheses empirically prove the importance of alignment between the firms' and the customers' goals. It is also important that all firms demonstrate and communicate this to the customers. Results show that perceptions of service quality influenced customer in-role performance only in the later stages of the customer-service provider relationship and had a negative relationship with customer extra-role performance (customers performed discretionary activities only when they perceived service quality to be low). In current times, customers are active participants in the service interaction but in the study context, they did not recognize the firms' efforts at helping them achieve their goals. In most service contexts (esp. in

counseling) employees spend considerable time and effort on new customers. This study data shows that the customers were not realizing this and attributing their behavior to only their efforts. To ensure better perceptions of the service process and the service outcome, managers need to consciously demonstrate and communicate the efforts they are making to help the customer succeed. This must be started in the early stages of the customer-firm relationship and the customer understanding should not be taken for granted or left to emerge as the customer-firm relationship naturally evolves. Small changes such as actual verbal communication about goal alignment during the service interaction or placing elements in the servicescape such as vision and mission statements or success stories of past customers can help managers achieve this outcome. Specifically, the CMC and career counselors should understand the student goals better and clearly communicate that CMC and career counselors' success is directly linked to and staked in the students' success. This should be clearly communicated either through counselors' job responsibilities (e.g. number of students' job placements made; satisfaction reviews by students etc.) or through servicescape elements.

Results also show that customers also did not see their in-role or extra-role performance as influencing service quality in subsequent service interactions. This again reflects that the customers did not see the interdependence between their success and the success of the service provider. To encourage customer participation activities, managers need to constantly remind customers that the service providers' success is linked to the customers' success and importance of

customer compliance and the customers' discretionary initiatives in the firms' success (which in-turn is linked to the customers' success).

One construct that played an important role in the customers' service experience is information sharing. Results show that customers actively participate and create their own service experience through their information sharing. Customer information sharing is highly linked to perceptions of firm delivered service quality---service quality perceptions of the service interaction influence the levels of information sharing within that service interaction; and the information sharing behavior within a service interaction influences service quality perceptions of the subsequent service interactions. Moreover, this relationship varies at different points in the customer-service provider relationship, wherein customer information sharing is initially high and the drastically decreases. This finding is highly relevant to managers. Firms must invest on setting up communication channels between their employees and customers. They must also train their employees to encourage customer information sharing and pay close attention to any information shared by customers. They should especially focus on new customers and realize that returning customers may not be as inclined to share the same levels of information (more may be less in case of older/returning customers). In case of service contexts like counseling, counselors must be encouraged to maintain detailed customer (student) records and take notes regarding every customer's (student's) goals, service expectations and requirements. Counselors should

explicitly acknowledge these student notes and take heed to every information that the student may have shared in the previous sessions.

As customers become active participants in the service co-production, the managers need to plan for differences in customers. Current results demonstrate the positive empirical link between customer assessment of progress towards goals and customer participation behavior. As customers perceive progress towards their goals, they tend to perform more in-role, extra-role and information sharing behaviors. Managers must provide some assurance and reminders to customers to show that they are making progress towards their goals. This could be through small verbal acknowledgements by the service providers or detailed customer reports depending upon the service industry. Some form of tangible or intangible marker for positive progress towards goals will help customer be better co-producers in the service interaction. Specifically, in case of career counseling, some form of student reports to indicate their progress should be especially considered.

Firms must also pay close attention to customer education, training and generating role clarity. Results showed that role clarity influenced customer in-role performance in early stages of the customer-firm relationship and influenced extra-role performance in later stages of the customer-firm relationship. Managers must realize that customer training and efforts made in the servicescape to help the customer understand their roles, will help ensure not just compliance to firm standards but also generate discretionary effort. These initial efforts at customer

understanding and role clarity will continue to “pay-off” in the long run as the customers perform discretionary and spontaneous behavior in subsequent service interactions. Managers need to encourage this behavior as it reflects customer adaptation to new firm situations (which managers cannot always control) and suggest ideas for service innovation. Such extra-role performance also helps buffer firms in case of service failures as customers perform citizenship behavior to help the firms and elective behavior to help themselves. Having the required class on career management is certainly a good initiative in the career counseling context. Care must be taken to ensure that the syllabus of such a class covers all the student tools (intranet and internet resources) which will help provide training and role clarity to students.

Finally, results show that managers must ensure every service transaction generates positive emotions and trust in the customer. Positive emotions influence customer in-role behavior in early stages of the customer-firm relationship and extra-role performance in later stages of the customer-firm relationship. Trust in the firm also encourages customer in-role performance. Moreover, the effect of positive emotions and trust do not “carry forward” in the subsequent service interaction. This finding empirically demonstrates how important it is that firm employees continue to work on every service experience even when interacting with older/returning customers.

Limitations and Future Research

Limitations

As with any research there are several limitations associated with this dissertation. The first limitation of the study is its generalizability to other contexts, since both studies in this research were conducted with the same context-career counseling within the university. Single context studies are sometimes recommended as they avoid “complexities of inherent differences between settings” (Meuter 1999b, pg 286). However, findings should be used cautiously in other industry settings.

The second limitation is that the limited size of the sample groups. There were 123 respondents in study 1; 127 in study 2 wave 1; 130 in study 2 wave 2 and 113 in study 2 wave 3. When assessing longitudinally only 57 responses could be matched in study 2 as function of wave 1 and 73 responses could be matched in study 3 as a function of wave 2. Increase in sample size may result in greater significance and increased power in several hypotheses. However, this is a common challenge when doing behavioral research in longitudinal setting. Participants lose interest and the drop out rates tend to increase.

The third limitation is the nature of the sample. The data was collected primarily with first year MBA students who were still becoming familiar with the Career Management Center. While sample group ensured us some uniformity and an unbiased sample (none of them had any prior experience with the career counselors), this sample group also posed certain challenges. They were in early

stages of the MBA program and may not have had a need to perform extra-role performance (elective and citizenship) behavior, resulting in lack of statistical significance in the related hypotheses.

Future Research

Customer participation in service interactions is an important and timely topic with great relevance to both academics and managers alike. While current research makes several contributions, there are several ways to further the existing research. Firstly, this conceptual framework and key constructs can be replicated in another service context such as healthcare or weight loss clinics where customer participation is key to a successful service experience. These research questions can also be studied in the business-to-business sector to help advance the current research. Methodologically, designing experimental studies in an innovative way to capture the dyadic nature of the service interaction in these other service industries would also help further the current research findings. The conceptual model can also be modified to examine the inter-relations between the customer participation behaviors (in-role performance, extra-role performance and information sharing) and if the nature of these behaviors changes over the several customer-firm interactions.

Constructs such as customer extra-role performance (elective and citizenship) behaviors must also be further explored in other contexts to provide a complete treatise on this important topic. This should especially be studied in

services that are not optional or are required to be performed by customers (e.g. monopolies, tax departments, veterans' affairs etc.) where the customer choice is restricted. Similarly, trust and emotions in business-to-consumer contexts must also be further explored as key constructs in different customer behaviors.

This research can also be advanced by considering other related questions such as what motivates the customer to co-produce across service industries. Service industries differ on several parameters and some industries seem more conducive to customer co-production than others. It is important to theoretically examine these underlying dimensions and then examine what motivates consumers to co-produce across these service industries. The findings will be particularly relevant to transformative services where customer welfare is dependent on customers ability to co-produce and participate in the service production.

Another related question that requires further exploration is how to price services or what drives value for customers while co-producing services. Most services require some form of customer participation but service providers are able to charge a premium in only certain service environments. It is important to examine what drives this price premium and how firms can create such high value service experiences.

REFERENCES

- Arnould, Eric J. and Linda L. Price (1993), "River Magic: Extraordinary Experience and the Extended Service Encounter," *Journal of Consumer Research*, 20 (1).
- Arnould, Eric J., Linda L. Price, and Patrick Tierney (1998), "Communicative Staging of the Wilderness Servicescape," *The Service Industries Journal*, 18 (3).
- Austin, James T. and Jeffrey B. Vancouver (1996), "Goal Constructs in Psychology: Structure, Process and Content," *Psychological Bulletin*, 120 (3), 338-75.
- Babin, Barry J., William R. Darden, and Mitch Griffin (1994), "Work and/or Fun: Measuring Hedonic and Utilitarian Shopping Value," *Journal of Consumer Research*, 20 (4).
- Bandura, Albert (1991), "Social Cognitive Theory of Self-Regulation," in *Organizational Behavior and Human Decision Processes*, Vol. 50.
- Baron, Reuben M. and David A. Kenny (1986), "The Moderator-Mediator Variable Distinction in Social Psychological Research: Conceptual, Strategic, and Statistical Considerations," *Journal of Personality and Social Psychology*, 51 (6), 1173-82.
- Becker, Marshall H. (1974), "The Health Belief Model and Personal Health Behaviors," *Health Education Monographs*, Winter (2), 324-508.
- Bendapudi, Neeli and Robert P. Leone (2003), "Psychological Implications of Customer Participation in Co-Production," *Journal of Marketing*, 67 (1), 14-28.
- Bergkvist, Lars and John R. Rossiter (2007), "The Predictive Validity of Multiple-Item Versus Single-Item Measures of the Same Constructs," *Journal of Marketing Research*, 44, 175-84.
- Berry, Leonard L. (1980), "Services Marketing is Different," *Business Week*, 30, 24-28.
- Berry, Leonard L., Lewis P. Carbone, and Stephan H. Haeckel (2002), "Managing the Total Customer Experience," *MIT Sloan Management Review*, 43 (3).

- Bettencourt, Lance A. (1997), "Customer Voluntary Performance: As Partners In Service Delivery," *Journal of Retailing*, 73 (3), 383-406.
- Bettencourt, Lance A., Amy L. Ostrom, Stephen W. Brown, and Robert I. Roundtree (2002), "Client Co-production in Knowledge Intensive Business Services," *California Management Review*, 44 (4).
- Bettman, James R (1979), *An Information Processing Theory of Consumer Choice*: Reading, MA: Addison-Wesley.
- Bitner, Mary Jo (1992), "Servicescapes: The Impact of Physical Surroundings on Customers and Employees," *Journal of Marketing*, 56, 57-71.
- Bitner, Mary Jo, Stephen W. Brown, and Matthew L. Meuter (2000), "Technology Infusion in Service Encounters," *Journal of the Academy of Marketing Science*, 28 (1), 138-49.
- Bitner, Mary Jo, Amy L. Ostrom, and Matthew L. Meuter (2002), "Implementing successful self service technologies," *Academy of Management Executive*, 16 (4).
- Bolton, Ruth N. (1998), "A Dynamic Model of the Duration of the Customer's Relationship with a Continuous Service Provider: The Role of Satisfaction," *Marketing Science*, 17 (1), 45-65.
- Bolton, Ruth N. and Tina M. Bronkhorst (1995), "Questionnaire Pretesting: Computer Assisted Coding of Concurrent Protocols," in *Answering Questions*, Seymour Sudman, Ed. San Francisco: Jossey-Bass Publishers.
- Bolton, Ruth N. and Katherine N. Lemon (1999), "A Dynamic Model of Customers' Usage of Services: Usage as an Antecedent and Consequence of Satisfaction," *Journal of Marketing Research*, 36 (2), 171-86.
- Bolton, Ruth N. and Matthew B. Myers (2003), "Price-Based Global Market Segmentation for Services," *Journal of Marketing*, 67, 108-28.
- Boulding, William, Ajay Kalra, and Richard Staelin (1999), "The Quality Double Whammy," *Marketing Science*, 18 (4), 463.
- Boulding, William, Ajay Kalra, Richard Staelin, and Valarie A Zeithaml (1993), "A Dynamic Process Model of Service Quality: From Expectations to Behavioral Intentions," *Journal of Marketing Research*, 30 (1), 7.

- Bowen, David E. (1986), "Managing Customers as Human Resources in Service Organizations," *Human Resource Management*, 25 (3), 371.
- Bowers, Michael R., Charles L. Martin, and Alan Luker (1990), "Trading Places: Employees as customers, customers as employees," *The Journal of Services Marketing*, 4 (2), 55.
- Campbell, Donald T. and Donald W. Fiske (1959), "Convergent and Discriminant Validation by the Multitrait-Multimethod Matrix," *Psychological Bulletin* (March), 81-105.
- Cannon, Joseph and Christian Homburg (2001), "Buyer-Supplier Relationships and Customer Firm Costs," *Journal of Marketing*, 65 (1), 29-43.
- Carver, Charles S. and Michael F. Scheier (1990), "Origins and Functions of Positive and Negative Affect: A Control-Process View," *Psychological Review*, 97 (1), 19-35.
- Chernev, Alexander (2001), "The Impact of Common Features on Consumer Preferences: A Case of Confirmatory Reasoning," *Journal of Consumer Research*, 27, 475-88.
- Claycomb, Cindy, Cynthia A. Lengnick-Hall, Lawrence W. Inks (2001), "The Customer as a Productive Resource: A Pilot Study and Strategic Implications," *Journal for Business Strategies*, 18 (1), 47.
- Crocker, Jennifer (1982), "Biased Questions in Judgment of Covariation Studies," *Personality and Social Psychology Bulletin*, 8 (2), 214-20.
- Cronin, J. Joseph and Steven A. Taylor (1992), "Measuring Service Quality: A Reexamination and Extension," *Journal of Marketing*, 56 (3), 55-68.
- Curran, James M., Matthew L. Meuter, and Carol F. Surprenant (2003), "Intentions to use Self Service Technologies: A confluence of Multiple Attitudes," *Journal of Service Research*, 5 (3), 209-24.
- Dabholkar, Prathiba, Dayle I. Thorpe, and Joseph O. Rentz (1996), "A Measure of Service Quality for Retail Stores," *Journal of Academy of Marketing Science*, 24 (Winter), 3-16.

- Dabholkar, Pratibha (1996), "Customer Evaluations of New Technology-Based Self Service Options: An Investigation of Alternative Models of Service Quality," *International Journal of Research in Marketing*, 13 (1), 29-51.
- Dabholkar, Pratibha A., C.D. Shepherd, and D.I. Thorpe (2000), "A Conceptual Framework for Service Quality: An Investigation of Critical Conceptual and Measurement Issues through a Longitudinal Study," *Journal of Retailing*, 7 (2), 193-218.
- Dabholkar, Pratibha and Richard P. Bagozzi (2002), "An Attitudinal Model of Technology-Based Self Service: Moderating effects of Consumer Traits and Situational Factors," *Academy of Marketing Science*, 30 (3), 184-201.
- Dellande, Stephanie, Mary C. Gilly, and John L. Graham (2004), "Gaining Compliance and Losing Weight: The Role of the Service Provider in Health Care Services," *Journal of Marketing*, 68, 78-91.
- Ennew, Christine T and Martin R Binks (1999), "Impact of Participative Service Relationships on Quality, Satisfaction and Retention: An Exploratory Study," *Journal of Business Research*, 46 (2), 121-32.
- Firat, A Fuat, Nikhilesh Dholakia, and Alladi Venkatesh (1995), "Marketing in a postmodern world," *European Journal of Marketing*, 29 (1), 40.
- Fisher, Robert J, Elliot Maltz, and Bernard J. Jaworski (1997), "Enhancing Communication Between Marketing and Engineering: The Moderating Role of Relative Functional Identification," *Journal of Marketing*, 61 (3), 54-70.
- Ford, Donald H. and Martin E. Ford (1987), *Human as Self-Constructing Living Systems: Putting the Framework to Work*. Hillsdale, New Jersey: Lawrence Erlbaum Associates Publishers.
- Ford, M. E. and C.W. Nichols (1987), "A Taxonomy of Human Goals and Some Possible Applications," in *Humans as Self Constructing Systems: Putting the Framework to Work*, D.H. Ford, Ed. Hillsdale, NJ: Erlbaum.
- Gallan, Andrew S. (2008), "Effects of Interorganizational Coordination and Customer Participation on Service Excellence: Evidence from the Healthcare Sector," Arizona State University.
- Gilmore, James H. and B Joseph Pine II (2002), "Customer Experience Places: The New Offering Frontier," *Strategy and Leadership*, 30 (4).

- Gould, Stephen J. (1990), "Health Consciousness and Health Behavior: The Application of a New Health Consciousness Scale," *American Journal of Preventive Medicine*, 6 (July/August), 228-37.
- Gronroos, Christian (1984), "A Service Quality Model and Its Marketing Implications," *European Journal of Marketing*, 18 (4), 36-44.
- (1982), "Strategic Management and Marketing in the Services Sector," Helsingfors: Swedish School of Economics and Business Administration.
- Ha, Young-Won and Stephen J. Hoch (1989), "Ambiguity, Processing Strategy, and Advertising-Evidence Interactions," *Journal of Consumer Research*, 16 (3).
- Huffman, Cynthia and Michael J. Houston (1993), "Goal-oriented Experiences and the Development of Knowledge," *Journal of Consumer Research*, 20 (2), 190.
- Hyland, Michael E. (1988), "Motivational Control Theory: An Integrative Framework," *Journal of Personality and Social Psychology*, 55 (4), 642-51.
- Janz, Nancy K and Marshall H Becker (1984), "The Health Belief Model: A Decade Later," *Health Education Quarterly*, 11 (November), 1-47.
- Karoly, Paul (1999), "A Goal Systems-Self-Regulatory Perspective on Personality, Psychopathology, and Change," *Review of General Psychology*, 3 (4), 264-91.
- Kelley, Scott W., Steven J. Skinner, and James Jr. Donnelly (1992), "Organizational Socialization of Service Customers," *Journal of Business Research*, 25 (3), 197-214.
- Kelly, Scott W., James H. Donnelly Jr, and Steven J. Skinner (1990), "Customer Participation in Service Production and Delivery," *Journal of Retailing*, 66 (3), 315.
- Klein, H J (1989), "An Integrated Control Theory Model of Work Motivation," *Academy of Management Review*, 14, 150-72.
- Kotler, Philip and Kevin Lane Keller (2006), *Marketing Management* (Twelfth ed.). Upper Saddle River, New Jersey: Pearson Education Inc.

- Lau, Richard R. (1982), "Origins of Health Locus of Control Beliefs," *Journal of Personality and Social Psychology*, 42, 322-34.
- Lewis, Robert C. and Bernard H. Booms (1983), "The Marketing Aspects of Service Quality," in *Emerging Perspectives on Services Marketing*, L. Berry and G. Shostack and G. Upah, Eds. Chicago: American Marketing.
- Lincoln, Yvonna S and Egon G Guba (1985), *Naturalistic Inquiry*: Sage Publications Inc.
- Lovelock, Christopher H (1983), "Classifying Services to Gain Strategic Marketing Insights," *Journal of Marketing*, 47, 9-20.
- Lovelock, Christopher H. and Robert F. Young (1979), "Look to Consumers to Increase Productivity," *Harvard Business Review*, 57 (March-June), 168-78.
- Lusch, Robert F. and Stephen L. Vargo (2006), "Service-dominant logic: reactions, reflections and refinements," *Marketing Theory*, 6 (3), 281-88.
- MacKensie, Scott B., Philip M. Podsakoff, and Michael Ahearne (1998), "Some Possible Antecedents and Consequences of In-Role and Extra-Role Salesperson Performance," *Journal of Marketing*, 62 (3), 87-98.
- MacKensie, Scott B., Philip M. Podsakoff, and Richard Fetter (1993), "The impact of organizational citizenship behavior on evaluations of salesperson performance," *Journal of Marketing*, 57 (1), 70.
- Mano, Haim and Richard L. Oliver (1993), "Assessing the Dimensionality and Structure of the Consumption Experience: Evaluation, Feeling, and Satisfaction," *Journal of Consumer Research*, 20 (3).
- McCracken, Grant David (1988), *The Long Interview*: Sage Publications Inc.
- Meuter, Matthew L, Amy L Ostrom, Robert I Roundtree, and Mary Jo Bitner (2000), "Self Service Technologies: Understanding Customer Satisfaction with Technology-Based Service Encounters," *Journal of Marketing*, 64 (July), 50-64.
- Meuter, Matthew L. (1999a), "Consumer Adoption of Innovative Self-Service Technologies: A Multi-Method Investigation," Doctoral, Arizona State University.

- (1999b), "Customer Adoption of Innovative Self-service Technologies: A Multi-method Investigation," Arizona State University.
- Meuter, Matthew L., Mary Jo Bitner, Amy L. Ostrom, and Stephen W. Brown (2005), "Choosing Among Alternative Service Delivery Modes: An investigation of customer trial of self-service technologies," *Journal of Marketing*, 69 (2), 61.
- Miller, G. A., E. Galanter, and K. H. Pribram (1960), *Plans and Structure of Behavior*. New York: Holt.
- Mills, Peter K. and James H. Morris (1986), "Clients as 'Partial' employees as service: Role development in client participation," *The Academy of Management Review*, 11 (4), 726-35.
- Mischel, W. and Y. Shoda (1995), "A Cognitive-Affective System Theory of Personality: Reconceptualizing Situations, Dispositions, Dynamics and Invariance in Personality Structure," *Psychological Review*, 102, 246-68.
- Mittal, Vikas, William T. Ross Jr, and Patrick M. Baldasare (1998), "The Asymmetric Impact of Negative and Positive Attribute-Level Performance on Overall Satisfaction and Repurchase Intentions," *Journal of Marketing*, 62 (1), 33.
- Mittal, Vikas and Wagner A. Kamakura (2001), "Satisfaction, Repurchase Intent, and Repurchase Behavior: Investigating the Moderating Effect of Customer Characteristics," *Journal of Marketing Research*, 38, 131-42.
- Mittal, Vikas, Pankaj Kumar, and Michael Tsiros (1999), "Attribute-Level Performance, Satisfaction, and Behavioral Intentions over Time: A Consumption-System Approach," *Journal of Marketing*, 63 (2), 88.
- Moorman, Christine and Erika Matulich (1993), "A Model of Consumers' Preventive Health Behaviors: The Role of Health Motivation and Health Ability," *Journal of Consumer Research*, 20 (2).
- Morgan, Ivor and Jay Rao (2003), "Making Routine Customer Experiences Fun," *MIT Sloan Management Review*, 45 (1).
- Nayakankuppam, Dhananjay and Himanshu Mishra (2005), "The Endowment Effect: Rose-Tinted and Dark-Tinted Glasses," *Journal of Consumer Research*, 32 (3), 390-95.

- O'Brien, Edward J and Jerome L. Myers (1987), "The Role of Causal Connections in the Retrieval of Text," *Memory and Cognition*, 15 (5), 419-27.
- Oliver, Richard L. and Raymond R. Burke (1999), "Expectation Processes in Satisfaction Formation," *Journal of Service Research*, 1 (3), 196-214.
- Organ, Dennis W (1988), *Organizational Citizenship Behavior: The Good Soldier Syndrome*. Lexington, MA: Lexington Books.
- Parasuraman, A (2000), "Technology Readiness Index (TRI) A Multiple-Item Scale to Measure Readiness to Embrace New Technologies," *Journal of Service Research*, 2 (4), 307-20.
- Parasuraman, A, Valarie A Zeithaml, and Leonard L Berry (1988), "SERVQUAL: A Multi-Item Scale for Measuring Consumer Perceptions of Service Quality," *Journal of Retailing*, 64 (1), 12-40.
- Parasuraman, A., V.A. Zeithaml, and L.L. Berry (1985), "A Conceptual Model of Service Quality and It's Implications for Future Research," *Journal of Marketing*, 49 (4), 41-50.
- Pham, Michel Tuan, Joel B. Cohen, John W. Pracejus, and G. David Hughes (2001), "Affect Monitoring and the Primacy of Feelings in Judgment," *Journal of Consumer Research*, 28 (2).
- Pine II, B Joseph and James H. Gilmore (1999), *The Experience Economy - Work is Theatre and Every Business a Stage*. Boston, Massachusetts: Harvard Business School Press.
- Powers, W.T. (1973), *Behavior: The control of perception*. Chicago: Aldine Publishing Company.
- Prahalad, C K and Venkatram Ramaswamy (2000), "Co-opting customer competence," *Harvard Business Review*, 78 (1), 79.
- Prahalad, C.K. and V Ramaswamy (2004), "Co-creation Experiences: The Next Practice in Value Creation," *Journal of Interactive Marketing*, 18 (3), 5-14.
- Pullman, Madeleine E. and Michael A. Gross (2003), "Welcome to Your Experience: Where you can check out anytime you'd like, but you can never leave," *Journal of Business and Management*, 9 (3).

- Reio Jr, Thomas G. and Jamie L. Callahan (2004), "Affect, curiosity and socialization related learning: a path analysis of antecedents to job performance," *Journal of Business and Psychology*, 19 (1).
- Richins, Marsha L. (1997), "Measuring Emotions in the Consumption Experience," *Journal of Consumer Research*, 24 (2).
- Rizzo, John R, Robert J House, and Sidney I Lirtzman (1970), "Role Conflict and Ambiguity in Complex Organizations," *Administrative Science Quarterly*, 15 (March), 150-63.
- Rummel, Amy, Mary Goodwin, and Mike Shephard (1990), "Self-efficacy and Stereotyping in Advertising: Should Consumers Want A Change?," *International Journal of Advertising*, 9 (4), 308-17.
- Rust, Roland T., J. Jeffrey Inman, Jianmin Jia, and Anthony Zahorik (1999), "What You Don't Know About Customer-Perceived Quality: The Role of Customer Expectation Distributions," *Marketing Science*, 18 (1), 77-92.
- Sarbin, Theodore R and Vernon L Allen (1968), "Role Theory," in *The Handbook of Social Psychology*, Elliott Aronson, Ed. Reading, MA: Addison-Wesley.
- Saxena, Shruti, Ruth Bolton, and Mary Jo Bitner (2007), "Role of Goals in Customer Participation."
- Schmitt, Bernd H. (1999), *Experiential Marketing*. New York: The Free Press.
- Schneider, Benjamin and David E. Bowen (1995), *Winning the Service Game*. Boston, Massachusetts: Harvard Business Press.
- Seiders, Kathleen, Glenn B. Voss, Dhruv Grewal, and Andrea L. Godfrey (2005), "Do Satisfied Customers Buy More? Examining Moderating Influences in a Retailing Context," *Journal of Marketing*, 69, 26-43.
- Shiv, Baba and Alexander Fedorikhin (1999), "Heart and Mind in Conflict: The Interplay of Affect and Cognition in Consumer Decision Making," *Journal of Consumer Research*, 26 (3).
- Smith, Erika D. (2007), "Second Life in the Classroom: A Whole New World," in *Indystar.com*.

- Solomon, Michael R, Carol Surprenant, John A Czepiel, and Evelyn G Gutman (1985), "A Role Theory Perspective on Dyadic Interactions: The Service Encounter," *Journal of Marketing*, 49 (1), 99-111.
- Thomson, Matthew (2006), "Human Brands: Investigating Antecedents to Consumers' Strong Attachments to Celebrities," *Journal of Marketing*, 70 (3), 104-19.
- Vargo, Stephen L and Robert F Lusch (2004), "Evolving to a New Dominant Logic for Marketing," *Journal of Marketing*, 68, 1-17.
- Wakefield, Kirk L. and Jeffrey G. Blodgett (1999), "Customer Response to Intangible and Tangible Service Factors," *Psychology and Marketing*, 16 (1).
- Westbrook, Robert A. (1987), "Product/ Consumption-Based Affective Responses and Postpurchase Processes," *Journal of Marketing Research*, 24 (3).
- Westbrook, Robert A. and Richard L. Oliver (1991), "The Dimensionality of Consumption Emotion Patterns and Consumer Satisfaction," *Journal of Consumer Research*, 18 (1).
- Wong, Y H, Ricky Y K Chan, and T K P Leung (2004), "Managing Information Diffusion in Internet Marketing," *European Journal of Marketing*, 39 (7/8), 926-46.
- Zeithaml, Valarie A, Leonard L Berry, and A Parasuraman (1996), "The Behavioral Consequences of Service Quality," *Journal of Marketing*, 60 (2), 31-46.
- Zeithaml, Valarie A., Mary Jo Bitner, and Dwayne D. Gremler (2006), *Services Marketing: Integrating Customer Focus Across the Firm* (4th ed.): McGraw-Hill Irwin.

APPENDIX A
STRUCTURED INTERVIEWS

Dear Student,

I am a PhD student in the department of marketing and I am conducting research on how consumers evaluate different services including those offered on campus. Currently we are examining how students perceive career services offered at Arizona State University and we will deeply appreciate if you could spend 15-20 minutes answering our few questions. Your insights will help us a great deal in understanding how to improve services for consumers like you. Your responses will also help us get feedback on our survey instrument that we will be employing in the new future.

All the information you provide will be kept confidential and your identity will not be revealed in any report of the study's findings. On completing this questionnaire, you will receive a \$5 gift certificate as a token of our appreciation to your time and effort in participating in this survey.

We thank you very much for taking the time to complete this questionnaire. If you have any questions, or would like additional information about this study, please contact us. Our telephone and email addresses are provided

Sincerely,

Shruti Saxena
Instructor and PhD Candidate

W.P. Carey School of Business
480-727-7076
Shruti.Saxena@asu.edu

Ruth N. Bolton
Professor and W.P. Carey Chair in
Marketing
W.P. Carey School of Business
480-965-2322
Ruth.Bolton@asu.edu

CUSTOMER SERVICE SURVEY

INSTRUCTIONS:

I will be reading questions to you from the survey. However, I want you to answer these questions somewhat differently than you would in a regular survey. I want you to constantly think aloud while you are deciding about your answers. What I mean by think aloud is that I want you to tell me EVERYTHING you are thinking from the time you hear the question until you have given your final answer to the question. Thinking aloud will help us understand your thoughts about the question.

When I say think aloud, I mean say aloud everything that goes through your mind. You shouldn't worry if you sometimes feel that what you are thinking is not relevant to the question. I am interested in all your thoughts.

Do you understand what I am asking you to do? [If necessary, clarify by re-reading the sentences.]

Just act as if you are alone in the room talking to yourself. If you are silent for any length of time, I will remind you to keep talking. Thinking aloud may seem a little difficult at first, but then it should become very easy.

During the survey, if you want to go back to a question I asked earlier, either to change your answer or give more information, please feel free to do so.

Now, Shall we begin?

Date: _____ Starting Time: _____

(Probe: Now could you please read aloud the following two questions and think aloud while you are deciding your questions?)

Practicing Questions:

1. *Overall, how would you rate the quality of the services that provided by the Starbucks located in the ground floor of W.P. Carey School of Business? Would you say it is poor, below average, average, good, or excellent?*
(Probe: How did you arrive at that answer?)
2. *How likely will you go to this Starbucks if you are required to make the coffee by yourself? Would you say very unlikely, unlikely, neutral, likely, or very likely?*
(Probe: How did you arrive at that answer?)

1. What specific circumstances led up to your first ASU career services session?

(Probe: As what I have mentioned in the task instruction, please read aloud and think aloud each question and tell us what you are thinking.)

(Probe: Do you have any questions? If not, we will now begin the next questions)

2. How did you learn about the ASU career services?

3. Describe in your own words why you used the ASU career services and what goals you had when you originally started using the ASU career services.

4. How many total visits have you had to the ASU career services including your last visit?

5. Did your goals and reasons for using the ASU career services change over time? If so, how did they change and what new goals emerged?

(Probe: *“Remember, I am interested in what you are thinking” or “Keep telling me what you are thinking”*)

(Positive feedback: *“You’re doing exactly what I want you to do. Keep thinking aloud” or “You are giving me really good input. Keep thinking aloud”*)

6. What was your primary goal during your most recent session at the ASU career services? (Please write in the space below)
7. What other goals did you have regarding your most recent session at the ASU career services? (Please write in the space below)
8. Please indicate in the space (____) preceding each statement below the strength of your agreement with each statement, utilizing a scale in which **1** means you **strongly disagree** with the statement and **5** means you **strongly agree** with the statement.

Strongly Disagree 1 2 3 4 5 Strongly Agree

<p>For the following statements, please think about the primary goal you mentioned in Q.6.</p>

- 8.1. _____ The goal is valuable to me
- 8.2. _____ The goal is worthwhile to me
- 8.3. _____ The goal is meaningful to me
- 8.4. _____ The goal is important to me
9. Exactly what happened during the most recent ASU career services session?

(Probe: *“Remember, I am interested in what you are thinking” or “Keep telling me what you are thinking”*)

(Positive feedback: *“You’re doing exactly what I want you to do. Keep thinking aloud” or “You are giving me really good input. Keep thinking aloud”*)

10. Please describe your thoughts and feelings about the most recent ASU career services session.

11. Please indicate in the space (____) preceding each statement below the strength of your agreement with each statement, utilizing a scale in which **1** means you **strongly disagree** with the statement and **5** means you **strongly agree** with the statement.

Strongly Disagree 1 2 3 4 5 Strongly Agree

<p>For the following statements please think generally about all your goals.</p>

- 11.1. _____ I feel I am making progress towards my goals
- 11.2. _____ I possess the necessary skills to attain my goals
- 11.3. _____ I have what it takes to reach my goals
- 11.4. _____ I have the necessary knowledge to reach my goals
- 11.5. _____ I have the ability to reach my goals

12. The following set of statements relate to your feelings about the importance of each feature described in your decision to use career services. A “5” means you consider the feature very important in deciding where to use career services, a “1” means it is very unimportant. You may place any of the numbers shown on the scale below beside each feature to indicate its importance to you. There are no right or wrong answers-all we are interested in is your perception of how important each feature is to you in your decision where to use career services.

	Very Unimportant	1	2	3	4	5	Very Important

12.1.	_____						Up-to-date equipment
12.2.	_____						Physical facilities that are visually appealing
12.3.	_____						Employees that are well dressed and appear neat
12.4.	_____						Physical facilities that appear to be in keeping with the type of service provided
12.5.	_____						When something is promised by a certain time, doing it
12.6.	_____						When there is a problem, being sympathetic and reassuring
12.7.	_____						Dependability
12.8.	_____						Providing service by the time promised
12.9.	_____						Accurate record keeping
12.10.	_____						Telling the student exactly when the service will be performed
12.11.	_____						Receiving prompt service
12.12.	_____						Employees who are always willing to help students
12.13.	_____						Employees who are not too busy to respond to student requests promptly
12.14.	_____						Employees who are trustworthy
12.15.	_____						The feeling that you are safe when conducting transactions with the career center’s employees
12.16.	_____						Employees who are polite
12.17.	_____						Adequate support from the university so career center employees can do their job well
12.18.	_____						Individual attention
12.19.	_____						Employees who know what your needs are
12.20.	_____						A career center which has your best interests at heart
12.21.	_____						Convenient operating hours

13. Please think about the quality of service ASU career services offers compared to *your desired service*-the level of performance you believe a career services *can and should deliver* (i.e. the level of service you desire). For each of the following statements, state the number that indicates how ASU career services' compares with your desired service level.

			The same as my desired service level				
Lower than my desired service level	1	2	3	4	5	Lower than my desired service level	

- 13.1. _____ Have information readily available for job searches
- 13.2. _____ Cover job opportunities in all geographical areas
- 13.3. _____ Present a full range of career-planning resources
- 13.4. _____ Have complete information on employers
- 13.5. _____ Promise to do something by a certain time, then do it
- 13.6. _____ Show sincere interest in solving your problems
- 13.7. _____ Provide the right information the first time
- 13.8. _____ Insist on error free records
- 13.9. _____ Tell students when they will be served
- 13.10. _____ Serve students promptly
- 13.11. _____ Always be eager to provide assistance
- 13.12. _____ Be consistently courteous with students
- 13.13. _____ Be friendly and courteous when I phone them
- 13.14. _____ Show respect for students
- 13.15. _____ Have employees who give personal attention
- 13.16. _____ Have the student's best interest at heart
- 13.17. _____ Have operating hours convenient to all

14. In your opinion, what activities/ behavior did the ASU career services counselor require you to do during the career management center session?
15. In your opinion, what activities/ behavior did the ASU career services counselor require you to do after the ASU career services session ended (e.g. at home where the counselor was not present)?
16. In addition to what the ASU career services counselor required you to do, did you perform any activities/ behavior to help the counselor improve their ASU career services session? If yes, please describe the activities/ behavior.
17. In addition to what the ASU career services counselor required you to do, did you perform any activities/ behavior to get a better outcome from the ASU career services sessions? If yes, please describe the activities/ behavior.
18. Other information:
- 18.1. Year of Program (Junior/Senior etc.) in School:
 - 18.2. Area of specialization/ Major in School:
 - 18.3. Gender:

**END OF QUESTIONNAIRE
THANK YOU VERY MUCH FOR YOUR HELP!!**

APPENDIX B

PRETEST 1 (MBA STUDENTS)

Dear MBA student,

I am a PhD student in the department of marketing and I am conducting research on how consumers evaluate different services including those offered on campus. Currently we are examining how students perceive career-advising services offered at Arizona State University and we will deeply appreciate if you could spend 15-20 minutes answering our few questions. Your insights will help us a great deal in understanding how students evaluate career-advising services. Your responses will also help us get feedback on our survey instrument that we will be employing in the near future.

All the information you provide will be kept confidential and your identity will not be revealed in any report of the study's findings. We thank you very much for taking the time to complete this questionnaire. If you have any questions, or would like additional information about this study, please contact us. Our telephone and email addresses are provided below.

Sincerely,

Shruti Saxena
Instructor and PhD Candidate
W.P. Carey School of Business
480-727-7076

Shruti.Saxena@asu.edu

Ruth N. Bolton
Professor and W.P. Carey Chair in
Marketing
W.P. Carey School of Business
480-965-2322

Ruth.Bolton@asu.edu

1. What were your primary goals during your most recent session at the Graduate Career Management Center (CMC)? (Please write in the space below)

2. For the following set of questions, please think about how you feel about the goals you mentioned in the previous question.

Please indicate in the space (____) preceding each statement below the strength of your agreement with each statement, utilizing a scale in which **1** means you **strongly disagree** with the statement and **7** means you **strongly agree** with the statement.

Strongly Disagree 1 2 3 4 5 6 7 Strongly Agree

(Construct-GOALS)

- 2.1. _____ The goals are valuable to me
- 2.2. _____ The goals are worthwhile to me
- 2.3. _____ The goals are meaningful to me
- 2.4. _____ The goals are important to me

(Construct-ASSESSMENT OF PROGRESS TOWARDS GOALS)

- 2.5. _____ I feel I am making progress toward my goals
- 2.6. _____ I completed the tasks I came in for during the most recent session at the Career Management Center
- 2.7. _____ I met my objectives for the most recent session at the Career Management Center
- 2.8. _____ During the most recent session at the Career Management Center, I felt I was making progress toward achieving my goals
- 2.9. _____ I feel I am making progress towards my immediate goals
- 2.10. _____ I feel I am making progress towards my long term goals

(Construct- SELF-EFFICACY)

- 2.11. _____ I possess the necessary skills to attain my goals
- 2.12. _____ I have what it takes to reach my goals
- 2.13. _____ I have the necessary knowledge to reach my goals
- 2.14. _____ I have the ability to reach my goals

(Construct-SERVICE QUALITY)

3. We would like to get your impressions about how well Career Management Center performs relative to your expectations. Utilizing the following scale, please show the extent to which you think that the Career Management Center performs relative to your expectations on each of the following attributes.

If you believe that the Career Management Center performs **better than your expectations** please write a **7** in the space (____) preceding the statement; if believe that the Career Management Center performs **worse than your expectations** please write a **1** in the space (____) preceding the statement and if you believe that the Career Management Center **meets your expectations** please select **4** in the space (____) preceding each statement.

Worse than my expectations									Better than my expectations
	1	2	3	4	5	6	7		

- 3.1 _____ Providing services as promised
- 3.2 _____ Dependability in handling students' service problems
- 3.3 _____ Performing services right the first time
- 3.4 _____ Providing services at the promised time
- 3.5 _____ Keeping students informed about when the service will be performed
- 3.6 _____ Prompt service to students
- 3.7 _____ Willingness to help students
- 3.8 _____ Readiness to respond to students' requests
- 3.9 _____ Employees who instill confidence in students
- 3.10 _____ Making students feel safe in their transactions
- 3.11 _____ Employees who are consistently courteous
- 3.12 _____ Employees who have the knowledge to answer student questions
- 3.13 _____ Giving students individual attention
- 3.14 _____ Employees who deal with students in a caring fashion
- 3.15 _____ Having the students best interests at heart
- 3.16 _____ Employees who understand the needs of their students
- 3.17 _____ Convenient business hours
- 3.18 _____ Modern equipment

- 3.19 _____ Visually appealing facilities
- 3.20 _____ Employees who have a neat, professional appearance
- 3.21 _____ Visually appealing materials associated with the service
- 3.22 _____ Overall quality of the services provided

(Construct: CUSTOMER INROLE PERFORMANCE)

4. For the following set of questions, please think about the activities/ behavior you performed as a part of the sessions at the Career Management Center.

Please indicate in the space (____) preceding each statement below the strength of your agreement with each statement, utilizing a scale in which **1** means you **strongly disagree** with the statement and **7** means you **strongly agree** with the statement.

Strongly Disagree 1 2 3 4 5 6 7 Strongly Agree

- 4.1. _____ As suggested by my professors/ career advisor, I visit the Career Management Center regularly
- 4.2. _____ As suggested by my professors/ career advisor, I make future appointments to meet the career advisors at the Career Management Center
- 4.3. _____ As suggested by my career advisor, I do research on the companies/ industries/ career options that I am interested in
- 4.4. _____ As suggested by my career advisor, I go the e-Recruiting web-link to post my resume and find the internships/full time jobs available
- 4.5. _____ As suggested by my career advisor, I read the handouts, books and other material available at the Career Management Center
- 4.6. _____ As suggested by my career advisor, I go to the career related events (e.g. career fairs, networking night etc.)
- 4.7. _____ I draft my resume as suggested by my career advisor
- 4.8. _____ I draft my cover letter as suggested by my career advisor
- 4.9. _____ I complete all the tasks suggested by my career advisor before coming to the Career Management Center

Please turn to next page.

(Construct: CITIZENSHIP BEHAVIOR)

5. For the next set of questions, please think about the activities/ behavior performed by you **with the objective of assisting the CMC career advisor in doing his/her job effectively for you.**

Please indicate in the space (____) preceding each statement below the strength of your agreement with each statement, utilizing a scale in which **1** means you **strongly disagree** with the statement and **7** means you **strongly agree** with the statement.

Strongly Disagree 1 2 3 4 5 6 7 Strongly Agree

- 5.1. ____ To avoid any inconvenience to my career advisor, I make appointments in advance _____ to meet with him/her
- 5.2. ____ To ensure that my career advisor is aware of the developments in my career, I “touch base” and follow up with my career advisor regularly
- 5.3. ____ In order to help the career advisor better perform his/her duties toward me and other students, I let the career advisor know about the discrepancies or inconsistencies in the information given by him/her and what I learned from other sources such as the interviewing company website, potential recruiters etc.
- 5.4. ____ In order to help the career advisor better assist me, I do research on companies, industries/ career options before I come to the Career Management Center
- 5.5. ____ In order to help the career advisor better assist me, I complete all the suggested activities/ homework before coming to the Career Management Center
- 5.6. ____ To assist my career advisor, I carry hard copies of my resume/ cover letter for the career advisor to look at
- 5.7. ____ To assist my career advisor, I carry job descriptions of my preferred job when I go to the Career Management Center

Please turn to next page.

(Construct: ELECTIVE BEHAVIOR)

6. For the next set of questions, please think about the activities/ behavior performed **by you with the objective of helping yourself to achieve your goals.**

Please indicate in the space (____) preceding each statement below the strength of your agreement with each statement, utilizing a scale in which **1** means you **strongly disagree** with the statement and **7** means you **strongly agree** with the statement.

Strongly Disagree 1 2 3 4 5 6 7 Strongly Agree

- 6.1. _____ I anticipate delays and unavailability of the career advisor and make appointments to avoid waiting or not being able to meet the career advisor
- 6.2. _____ I sometimes just “walk-in” to the Career Management Center to ask a specific quick question
- 6.3. _____ To ensure that the career advisor knows my progress, I “touch base” and follow up with my career advisor regularly
- 6.4. _____ I stay aware of even those career events organized by ASU and the W.P. Carey School of Business that have not been suggested by my career advisor
- 6.5. _____ To show respect to my career advisor, I dress professionally when I go to meet my career advisor
- 6.6. _____ I send “thank you” notes to my career advisor after my session ends
- 6.7. _____ I voluntarily pick up and read brochures/ handouts kept in the career service center even if the career advisor has not suggested so
- 6.8. _____ I research companies/ industries/career options other than those suggested by the career advisor
- 6.9. _____ I stay aware of even those internships or job postings on e-Recruiting web-link that have not been suggested by my career advisor
- 6.10. _____ I stay aware of internships or job postings on other job search websites that have not been suggested by my career advisor

- 6.11. _____ I try to search for jobs through my own network of friends, family, professors etc.
- 6.12. _____ I carry hard copies of my resume/ cover letter so that I can make changes/ edits right away
- 6.13. _____ I carry my laptop to my session at the Career Management Center so that I can make changes/edits to my resume and cover letter right away
- 6.14. _____ I take extensive notes during my session at the Career Management Center
- 6.15. _____ I take more material to show the career advisor than asked/ suggested by the career advisor
- 6.16. _____ I take the initiative to make appointments and use other services (e.g. practice mock interviews) offered at the Career Management Center even before the career advisor suggests the same
- 6.17. _____ I do all the activities/tasks suggested by career advisor before coming to the Career Management Center

Please turn to next page.

(Construct: INFORMATION SHARING-BIDIRECTIONALITY & NATURE)

7. For the next set of questions, please think about the information exchanged between you and your career advisor at the Career Management Center.

Please indicate in the space (____) preceding each statement below the strength of your agreement with each statement, utilizing a scale in which **1** means you **strongly disagree** with the statement and **7** means you **strongly agree** with the statement.

Strongly Disagree 1 2 3 4 5 6 7 Strongly Agree

- 7.1. ____ I always respond to the communication from my career advisor
- 7.2. ____ The career advisor always responds to my communication.
- 7.3. ____ We have great dialogues.
- 7.4. ____ I frequently send emails to my career advisor
- 7.5. ____ My career advisor emails me frequently
- 7.6. ____ S/he provides a lot of feedback
- 7.7. ____ There's a lot of two-way communication between me and the career advisor
- 7.8. ____ I am always willing to share my information (career ambitions, job preferences, personal constraints etc.) required for the career advisor to help me
- 7.9. ____ The career advisor is always willing to share information with me
- 7.10. ____ I discuss my personal goals and issues with the career advisor to help him/her better understand my needs and find an internship/job suitable to me
- 7.11. ____ The career advisor shares his/her personal information in order to make me feel comfortable
- 7.12. ____ We regularly discuss my career goals
- 7.13. ____ We regularly discuss my interview skills
- 7.14. ____ We regularly discuss my verbal skills
- 7.15. ____ We regularly discuss my written skills
- 7.16. ____ We regularly discuss my networking skills

- 7.17. _____ We regularly discuss professional grooming goals (e.g. how to dress/
sit/ behave during interviews and job internships)

(Construct: INFORMATION SHARING-FREQUENCY)

8. Over the **past month**, how often did you communicate with the career advisor about career-related matters in each of the following ways? Please check the box next to the statement that most closely corresponds to you.

8.1. Scheduled one-to-one meetings (face-to-face)

- | | | | |
|-------|--|-------|-------------------------------------|
| 8.1.1 | Communicated once per month
per month | 8.1.2 | Communicated 2-3 times
per month |
| 8.1.3 | Communicated 1-3 times per week
every day | 8.1.4 | Communicated almost
every day |
| 8.1.5 | Method not used at all | | |

8.2. Impromptu face-to-face meetings

- | | | | |
|-------|--|-------|-------------------------------------|
| 8.2.1 | Communicated once per month
per month | 8.2.2 | Communicated 2-3 times
per month |
| 8.2.3 | Communicated 1-3 times per week
every day | 8.2.4 | Communicated almost
every day |
| 8.2.5 | Method not used at all | | |

8.3. Scheduled one-to-one phone conversations

- | | | | |
|-------|--|-------|-------------------------------------|
| 8.3.1 | Communicated once per month
per month | 8.3.2 | Communicated 2-3 times
per month |
| 8.3.3 | Communicated 1-3 times per week
every day | 8.3.4 | Communicated almost
every day |
| 8.3.5 | Method not used at all | | |

8.4. Impromptu one-to-one phone conversations

- | | | | |
|-------|--|-------|-------------------------------------|
| 8.4.1 | Communicated once per month
per month | 8.4.2 | Communicated 2-3 times
per month |
|-------|--|-------|-------------------------------------|

8.4.3 Communicated 1-3 times per week every day

8.4.4 Communicated almost

8.4.5 Method not used at all

8.5. Emails

8.5.1 Communicated once per month per month

8.5.2 Communicated 2-3 times

8.5.3 Communicated 1-3 times per week every day

8.5.4 Communicated almost

8.5.5 Method not used at all

(Construct: ROLE CLARITY)

9. For the next set of questions, please think about how you feel about your sessions at the Career Management Center.

Please indicate in the space (____) preceding each statement below the strength of your agreement with each statement, utilizing a scale in which **1** means you **strongly disagree** with the statement and **7** means you **strongly agree** with the statement.

Strongly Disagree 1 2 3 4 5 6 7 Strongly Agree

- 9.1. _____ My sessions at the Career Management Center have made it clear how I should plan my career
- 9.2. _____ My sessions at the Career Management Center have made it clear how to develop my resume
- 9.3. _____ My sessions at the Career Management Center have made it clear how to write a cover letter
- 9.4. _____ My sessions at the Career Management Center have made it clear how I should look for an internship/ a job
- 9.5. _____ My sessions at the Career Management Center have made it clear how I can develop my career options

- 9.6. _____ My sessions at the Career Management Center have made it clear how I should behave in an interview
- 9.7. _____ My sessions at the Career Management Center have made it clear how I should network
- 9.8. _____ I know exactly what is expected of me during the career advising sessions
- 9.9. _____ During the career advising sessions, explanation is clear of what has to be done by me
- 9.10. _____ I feel certain about how to effectively use the e-Recruiting web-link and other career related resources available at the Career Management Center
- 9.11. _____ I know what is expected of me if I use the e-Recruiting web-link and other career related resources available at the Career Management Center
- 9.12. _____ I believe there are clear directions available regarding how to use the e-Recruiting web-link and other career related resources available at the Career Management Center

(Construct: GOALS)

10. Now that you have thought about your sessions at the Career Management Center, please tick which goals you had during the most recent session at the Career Management Center. Please tick as many as applicable to you.

- 10.1. Understand how to edit my resume
- 10.2. Understand how to edit my cover letter
- 10.3. Get information about companies/ industries/career options
- 10.4. Understand future education options
- 10.5. Understand future career options
- 10.6. Eliminate my concerns and anxieties about my career goals
- 10.7. Get confidence and motivation to handle my search for
internship/job
- 10.8. Have a meaningful career
- 10.9. Gain an edge over other students/applicants for internships/jobs
- 10.10. Build or maintain my friendship with the career advisor
- 10.11. Update the career advisor about my progress
- 10.12. Fulfill my class requirement
- 10.13. Learn about internship opportunities
- 10.14. Learn about full time job opportunities
- 10.15. Gain an internship/job
- 10.16. Continue making progress towards my career goals
- 10.17. Get a specific question answered
- 10.18. Other: _____

Please turn to next page.

(Construct: EMOTIONS)

11. Please think about your feelings during the career advising sessions. To what degree did you experience each of the feelings below? Please indicate in the space (____) preceding each statement below how you felt by utilizing a scale in which **1** means you **did not experience the feeling at all** with the statement and **7** means you **experienced the feeling very much**.

Not at all 1 2 3 4 5 6 7 Very Much

- 11.1. _____ Good
 11.2. _____ Disgusted
 11.3. _____ Angry
 11.4. _____ Dirty
 11.5. _____ Frustrated
 11.6. _____ Mad
 11.7. _____ Comfortable
 11.8. _____ Afraid
 11.9. _____ Bad
 11.10. _____ Annoyed
 11.11. _____ Fearful
 11.12. _____ Distrustful
 11.13. _____ Revolted
 11.14. _____ Happy
 11.15. _____ Irritated
 11.16. _____ Sad
 11.17. _____ Interest
 11.18. _____ Enjoyment
 11.19. _____ Surprise
 11.20. _____ Contempt
 11.21. _____ Shame/shyness
 11.22. _____ Guilt
 11.23. _____ Positive
 11.24. _____ Negative

Please turn to next page.

(Construct: SATISFACTION)

12. For the following set of questions, please think about your overall feelings about your sessions at the Career Management Center?

Please indicate in the space (____) preceding each statement below the strength of your agreement with each statement, utilizing a scale in which **1** means you **strongly disagree** with the statement and **7** means you **strongly agree** with the statement.

Strongly Disagree 1 2 3 4 5 6 7 Strongly Agree

- 12.1. _____ I am content with my career advisor
- 12.2. _____ I am happy with my career advisor
- 12.3. _____ I am completely satisfied with my career advisor
- 12.4. _____ I am content with the Career Management Center
- 12.5. _____ I am happy with the Career Management Center's services
- 12.6. _____ I am completely satisfied with the Career Management Center's services
13. Do you have any other thoughts about your experience at the CMC? Please write in the space below.
14. Other information:
- 14.1. Year in the MBA program:
- 14.2. Area of specialization in School:
- 14.3. Expected date of graduation:
- 14.4. Gender:

END OF QUESTIONNAIRE
THANK YOU VERY MUCH FOR YOUR HELP!!

APPENDIX C

PRETEST 2--ONLINE SURVEY (UNDERGRADUATE STUDENTS)

Dear Student,

I am a PhD student in the department of marketing and I am conducting research on how people use different services including those offered on campus. Currently we are studying how students think about and pursue their career goals during their undergraduate years on campus. We deeply appreciate your willingness to spend 15 minutes answering our questions. Your insights will help us a great deal in understanding students' opinions.

All the information you provide will be kept confidential and your identity will not be revealed in any report of the study's findings. We thank you very much for taking the time to complete this questionnaire. If you have any questions, or would like additional information about this study, please contact us. Our telephone and email addresses are provided below.

Sincerely,

Shruti Saxena
Instructor and PhD Candidate
W.P. Carey School of Business
480-727-7076
Shruti.Saxena@asu.edu

Ruth N. Bolton
Professor and W.P. Carey Chair in
Marketing
W.P. Carey School of Business
480-965-2322
Ruth.Bolton@asu.edu

As a part of thinking about your career goals, you may have visited the W.P. Carey Business Career Center.

1. Did you have a specific appointment in the W.P. Carey Business Career Center in the last 6 months?

1.1 Yes

1.2 No

If your response to Q.1 is Yes, please proceed to Q.2; if your response to Q.1. is No, please skip ahead to Q.18.

2. On your last visit to the W.P. Carey Business Career Center whom did you meet?

2.1 My 301 instructor

2.2 A career counselor/coach

Please Note: Construct definitions have been added before each section for your benefit. These will not be included on the online survey.

GOALS: Goals are the internal representations of desired states, where states are broadly construed as outcomes, events or processes.

3. What were your primary goals during your most recent session at the W.P. Carey Business Career Center? (Please write in the space below)

4. For the following set of questions, please think about how you feel about the goals you mentioned in the previous question.

Please indicate in the space (____) preceding each statement below the strength of your agreement with each statement, utilizing a scale in which **1** means you **strongly disagree** with the statement and **7** means you **strongly agree** with the statement.

Strongly Disagree 1 2 3 4 5 6 7 Strongly Agree 8=Non
Applicable

GOALS

- 4.1 _____ The goals mentioned above in Q.3 are valuable to me
- 4.2 _____ The goals mentioned above in Q.3 are worthwhile to me
- 4.3 _____ The goals mentioned above in Q.3 are meaningful to me
- 4.4 _____ The goals mentioned above in Q.3 are important to me

PROGRESS TOWARDS GOALS: Individual evaluation of the progress that s/he is making towards the goals

- 4.5 _____ I completed the tasks I came in for during the most recent session at the Business Career Center
- 4.6 _____ I met my objectives for the most recent session at the Business Career Center
- 4.7 _____ During the most recent session at the Business Career Center, I felt I was making progress toward achieving my goals

SELF EFFICACY: people's beliefs about their capabilities to exercise control over their own level of functioning and over events that affect their lives

- 4.8 _____ I possess the necessary skills to attain my goals
- 4.9 _____ I have what it takes to reach my goals
- 4.10 _____ I have the necessary knowledge to reach my goals
- 4.11 _____ I have the ability to reach my goals

PROGRESS TOWARDS GOALS

- 4.12 _____ Overall, I feel I am making progress toward my goals
- 4.13 _____ I feel I am making progress towards my immediate goals
- 4.14 _____ I feel I am making progress towards my long term goals

INROLE PERFORMANCE: In-role performance is defined as including activities that the people are traditionally expected to perform (e.g. standing in queue, making payments for the service/good purchased etc.).

5 For the following set of questions, please think about your activities and behavior.

Please indicate in the space (____) preceding each statement below the strength of your agreement with each statement, utilizing a scale in which **1** means you **strongly disagree** with the statement and **7** means you **strongly agree** with the statement.

Strongly Disagree 1 2 3 4 5 6 7 Strongly Agree 8=Non
Applicable

5.1 _____ As suggested by my career advisor, I go the Sun Devil career link to post my resume and find the internships/full time jobs available

5.2 _____ As suggested by my career advisor, I read the handouts and other material available at the Business Career Center

5.3 _____ As suggested by my career advisor, I go to the career related events (e.g. career fairs, networking night etc.)

5.4 _____ I draft my resume as suggested by my career advisor

5.5 _____ I draft my cover letter as suggested by my career advisor

5.6 _____ I stay aware of even those internships or job postings on Sun Devil career link that have not been suggested by my career advisor

5.7 _____ As suggested by my professors/ career advisor, I visit the Business Career Center

5.8 _____ As suggested by my professors/ career advisor, I make future appointments to meet the career advisors at the Business Career Center

5.9 _____ I “touch-base” and follow-up with my career advisors at the Business Career Center.

Please turn to next page.

CITIZENSHIP BEHAVIOR: Discretionary activities that are conducted by people with the objective of helping the organization improve their functioning and deliver a better service outcome.

6. For the next set of questions, please think about the activities/ behavior performed by you **with the objective of assisting the BUSINESS CAREER CENTER career advisor in doing his/her job effectively.**

Please indicate in the space (____) preceding each statement below the strength of your agreement with each statement, utilizing a scale in which **1** means you **strongly disagree** with the statement and **7** means you **strongly agree** with the statement.

Strongly Disagree 1 2 3 4 5 6 7 Strongly Agree 8=Non
Applicable

6.1 _____ In order to help the career advisor better assist me, I do research on companies, industries/ career options before I come to the Business Career Center

6.2 _____ In order to help the career advisor better assist me, I complete all the suggested activities/ homework before coming to the Business Career Center

6.3 _____ As suggested by my career advisor, I do research on the companies/ industries/ career options that I am interested in

6.4 _____ I research companies/ industries/career options other than those suggested by the career advisor

6.5 _____ I stay aware of internships or job postings on other job search websites that have not been suggested by my career advisor

6.6 _____ I try to search for jobs through my own network of friends, family, professors etc.

6.7 _____ In order to help the career advisor better assist me, I make appointments in advance _____ to meet with him/her

6.8 _____ In order to help the career advisor better assist me, I let the career advisor know about the discrepancies or inconsistencies in the information given by him/her and what I learned from other sources such as the interviewing company website, potential recruiters etc.

Please turn to next page.

ELECTIVE BEHAVIOR: Elective behaviors are discretionary activities performed by people with the objective of helping themselves achieve their consumption goals.

7. For the next set of questions, please think about the activities/ behavior performed **by you with the objective of helping yourself to achieve your goals.**

Please indicate in the space (____) preceding each statement below the strength of your agreement with each statement, utilizing a scale in which **1** means you **strongly disagree** with the statement and **7** means you **strongly agree** with the statement.

Strongly Disagree 1 2 3 4 5 6 7 Strongly Agree 8=Non
Applicable

7.1 _____ I make appointments to avoid waiting or not being able to meet the career advisor

7.2 _____ I send “thank you” notes to my career advisor after my session ends

7.3 _____ I voluntarily pick up and read brochures/ handouts kept in the career service center even if the career advisor has not suggested that I do so

7.4 _____ I take extensive notes during my session at the Business Career Center

7.5 _____ I take more material to show the career advisor than asked/ suggested by the career advisor

Please turn to next page.

INFORMATION SHARING: Information required as a pre-condition to the service being delivered and information that is not formally required but that can lead to a much more appropriate service being provided.

8 For the next set of questions, please think about the information exchanged between you and your career advisor at the Business Career Center.

Please indicate in the space (____) preceding each statement below the strength of your agreement with each statement, utilizing a scale in which **1** means you **strongly disagree** with the statement and **7** means you **strongly agree** with the statement.

Strongly Disagree 1 2 3 4 5 6 7 Strongly Agree 8=Non
Applicable

- 8.1 _____ My career advisor and I have great dialogues.
- 8.2 _____ My career advisor and I exchange emails frequently
- 8.3 _____ There's a lot of two-way communication between me and the career advisor
- 8.4 _____ I am always willing to share my information (career ambitions, job preferences, personal constraints etc.) required for the career advisor to help me
- 8.5 _____ The career advisor is always willing to share information with me
- 8.6 _____ I discuss my personal goals and issues with the career advisor to help him/her better understand my needs and find an internship/job suitable to me
- 8.7 _____ We regularly discuss the skills I need (interviewing, verbal, written, networking, professional grooming etc.)

TRUST: Trust is considered existing when one party has confidence in an exchange partner's reliability and integrity.

- 8.8 _____ My career advisor can be trusted at all times
- 8.9 _____ My career advisor can be counted on to do what is right
- 8.10 _____ My career advisor has high integrity
- 8.11 _____ The Business Career Center can be trusted at all times
- 8.12 _____ The Business Career Center can be counted on to do what is right
- 8.13 _____ The Business Career Center has high integrity

9. Over the **past month**, how often did you communicate with the career advisor about career-related matters in each of the following ways? Please check the box next to the statement that most closely corresponds to you.

Scheduled one-to-one meetings (face-to-face)

- | | | | |
|-------|--|-------|------------------------|
| 9.1.1 | Communicated once per month
per month | 9.1.2 | Communicated 2-3 times |
| 9.1.3 | Communicated 1-3 times per week
every day | 9.1.4 | Communicated almost |
| 9.1.5 | Method not used at all | | |

Impromptu face-to-face meetings

- | | | | |
|-------|--|-------|------------------------|
| 9.2.1 | Communicated once per month
per month | 9.2.2 | Communicated 2-3 times |
| 9.2.3 | Communicated 1-3 times per week
every day | 9.2.4 | Communicated almost |
| 9.2.5 | Method not used at all | | |

Scheduled one-to-one phone conversations

- | | | | |
|-------|--|-------|------------------------|
| 9.3.1 | Communicated once per month
per month | 9.3.2 | Communicated 2-3 times |
| 9.3.3 | Communicated 1-3 times per week
every day | 9.3.4 | Communicated almost |
| 9.3.5 | Method not used at all | | |

Impromptu one-to-one phone conversations

- | | | | |
|-------|--|-------|------------------------|
| 9.4.1 | Communicated once per month
per month | 9.4.2 | Communicated 2-3 times |
| 9.4.3 | Communicated 1-3 times per week
every day | 9.4.4 | Communicated almost |
| 9.4.5 | Method not used at all | | |

Emails

- | | | | |
|-------|--|-------|------------------------|
| 9.5.1 | Communicated once per month
per month | 9.5.2 | Communicated 2-3 times |
| 9.5.3 | Communicated 1-3 times per week
every day | 9.5.4 | Communicated almost |
| 9.5.5 | Method not used at all | | |

ROLE CLARITY: Understanding the role that must be performed or the students understand(ing) their role in terms of the tasks and behaviors that are required to reach their goals.

10. For the next set of questions, please think about how you feel about your sessions at the Business Career Center.

Please indicate in the space (____) preceding each statement below the strength of your agreement with each statement, utilizing a scale in which **1** means you **strongly disagree** with the statement and **7** means you **strongly agree** with the statement.

Strongly Disagree 1 2 3 4 5 6 7 Strongly Agree 8=Non
Applicable

10.1 _____ My sessions at the Business Career Center have made it clear how to develop my resume

10.2 _____ My sessions at the Business Career Center have made it clear how to write a cover letter

10.3 _____ My sessions at the Business Career Center have made it clear how I should look for an internship/ a job

10.4 _____ My sessions at the Business Career Center have made it clear how I can develop my career options

10.5 _____ My sessions at the Business Career Center have made it clear how I should behave in an interview

10.6 _____ My sessions at the Business Career Center have made it clear how I should network

10.7 _____ I know exactly what is expected of me during the career advising sessions

10.8 _____ During the career advising sessions, there is a clear explanation of what has to be done by me

10.9 _____ I feel certain about how to effectively use the Sun Devil career link and other career related resources available at the Business Career Center

10.10 _____ I know what is expected of me if I use the Sun Devil career link and other career related resources available at the Business Career Center

10.11 _____ I believe there are clear directions available regarding how to use the Sun Devil career link and other career related resources available at the Business Career Center

GOALS: Goals are the internal representations of desired states, where states are broadly construed as outcomes, events or processes

11. Now that you have thought about your sessions at the Business Career Center, please tick which goals you had during the most recent session at the Business Career Center.

Please tick as many as applicable to you.

- Understand how to edit my resume
- Understand how to edit my cover letter
- Get information about companies/ industries/career options
- Understand future education options
- Understand future career options
- Eliminate my concerns and anxieties about my career goals
- Get confidence and motivation to handle my search for internship/job
- Have a meaningful career
- Gain an edge over other students/applicants for internships/jobs
- Build or maintain my friendship with the career advisor
- Update the career advisor about my progress
- Fulfill my class requirement
- Learn about internship opportunities
- Learn about full time job opportunities
- Gain an internship/job
- Continue making progress towards my career goals
- Get a specific question answered
- Help me figure out what I want to do
- Other: _____

Please turn to next page.

13.8 _____ I believe Business Career Center offers excellent service

14. For the following questions, please use the scale below. If you believe that your experience was **favorable** please write a **7** in the space (____) preceding the statement; if believe that your experience was **unfavorable** please write a **1** in the space (____) preceding the statement.

Unfavorable 1 2 3 4 5 6 7 Favorable 8 = N/A

14.1 _____ Describe your opinion of the overall quality of your experience pursuing your career goals at ASU.

14.2 _____ Describe your opinion of the overall quality of your experience during your most recent visit to the Business Career Center

SATISFACTION

For the following set of questions, please think about your overall feelings about your sessions at the Business Career Center?

15. Please indicate in the space (____) preceding each statement below the strength of your agreement with each statement, utilizing a scale in which **1** means you **strongly disagree** with the statement and **7** means you **strongly agree** with the statement.

Strongly Disagree 1 2 3 4 5 6 7 Strongly Agree 8=Non
Applicable

15.1 _____ I am content with how I am pursuing my career related goals

15.2 _____ I am happy with how I am pursuing my career related goals

15.3 _____ I am completely satisfied with how I am pursuing my career related goals

15.4 _____ I am content with my career advisor

15.5 _____ I am happy with my career advisor

15.6 _____ I am completely satisfied with my career advisor

15.7 _____ I am content with the Business Career Center

15.8 _____ I am happy with the Business Career Center's services

- 15.9 _____ I am completely satisfied with the Business Career Center's services
- 15.10 _____ I am on the right track towards my career goals.
- 15.11 _____ The process that I am following to reach my career goals is excellent.
- 15.12 _____ I have reached some important milestones on the way to my career goals.

16. Do you have any other thoughts about pursuing your career goals? Please write in the space below.

17. Other information:

17.1 Year in the program:

17.2 Area of specialization in School:

17.3 Expected date of graduation:

17.4 Gender:

18. Please provide your email address in order to get full extra course credit for this activity. We are collecting this information so that you will receive extra course credit for co-operating in the survey. The email addresses will be deleted once they are sent to your instructor and will not be matched to your responses for any purpose.

**END OF QUESTIONNAIRE
THANK YOU VERY MUCH FOR YOUR HELP!!**

APPENDIX D

STUDY 1

Dear MBA Student,

We are conducting research studying how graduate students think about and pursue career goals using different services on campus. We appreciate your willingness to spend about 15 minutes answering the questions. Your insights will help other students and us to better understand this important process.

We request your participation at the end of a counseling session at the W.P. Carey Graduate Career Management Center (CMC). On the completion of this survey, you will be eligible for a random prize drawing of five \$50 ASU bookstore gift certificates as a token of our appreciation for your time and efforts.

All the information you provide will be kept confidential and your identity will not be revealed in any report of the study's findings. We thank you for taking the time to help your fellow students and us.

Please click on the following link or cut and paste this link to your Internet browser to be taken to the survey.

If you have any questions, or would like additional information about this study, please contact us.

Sincerely,

Shruti Saxena
Instructor and PhD Candidate

W.P. Carey School of Business
480-727-7076
Shruti.Saxena@asu.edu

Michael Mokwa
Professor and Department Chair in
Marketing
W.P. Carey School of Business
480-965-3622
Michael.Mokwa@asu.edu

When thinking about acting on your career goals, you may have visited the W.P. Carey Graduate Career Management Center (CMC).

1. How many total visits have you had to the W.P. Carey Career Management Center including your last visit? Please indicate in the space below.

2. What is your overall goal/s during the sessions at the W.P. Carey Career Management Center? (Please write in the space below).

3. What were your goals during your most recent session at the W.P. Carey Career Management Center? (Please write in the space below).

4. Now, for the following set of questions, please think about how you feel about the goals you mentioned in the previous question.

Please indicate in the space (____) preceding each statement below the strength of your agreement with each statement, utilizing a scale in which **1** means you **strongly disagree** with the statement and **7** means you **strongly agree** with the statement.

Strongly Disagree 1 2 3 4 5 6 7 Strongly Agree 8=Non
Applicable

GOALS (GSAB scale)

- 4.1. ____ Compared to my goals in other counseling sessions, the goals mentioned above in Q.3 are valuable to me
- 4.2. ____ Compared to my goals in other counseling sessions, the goals mentioned above in Q.3 are worthwhile to me
- 4.3. ____ Compared to my goals in other counseling sessions, the goals mentioned above in Q.3 are meaningful to me
- 4.4. ____ Compared to my goals in other counseling sessions, the goals mentioned above in Q.3 are important to me

PTG

- 4.5. ____ I completed the tasks I came in for during the most recent session at the Career Management Center
- 4.6. ____ I met my objectives for the most recent session at the Career Management Center
- 4.7. ____ During the most recent session at the Career Management Center, I felt I was making progress toward achieving my goals

SELF EFFICACY (GSAB scale)

- 4.8. ____ I possess the necessary skills to attain my goals
- 4.9. ____ I have what it takes to reach my goals
- 4.10. ____ I have the necessary knowledge to reach my goals
- 4.11. ____ I have the ability to reach my goals

PTG (Better loadings/ High level)

- 4.12. _____ Overall, I feel I am making progress toward my goals
- 4.13. _____ I feel I am making progress towards my immediate goals
- 4.14. _____ I feel I am making progress towards my long term goals

5. For the following set of questions, please think about your activities and behavior.

Please indicate in the space (____) preceding each statement below the strength of your agreement with each statement, utilizing a scale in which **1** means you **strongly disagree** with the statement and **7** means you **strongly agree** with the statement.

Strongly Disagree 1 2 3 4 5 6 7 Strongly Agree 8=Non
Applicable

INROLE

- 5.1. _____ As suggested by my professors/ career advisor, I visit the Career Management Center
- 5.2. _____ As suggested by my professors/ career advisor, I make future appointments to meet the career advisors at the Career Management Center
- 5.3. _____ I “touch-base” and follow-up with my career advisors at the Career Management Center
- 5.4. _____ As suggested by my career advisor, I go the E-Recruiting career link to post my resume and find the internships/full time jobs available
- 5.5. _____ As suggested by my career advisor, I read the handouts and other material available at the Career Management Center
- 5.6. _____ As suggested by my career advisor, I go to the career related events (e.g. career fairs, networking night etc.)
- 5.7. _____ I draft my resume as suggested by my career advisor
- 5.8. _____ I draft my cover letter as suggested by my career advisor
- 5.9. _____ I stay aware of even those internships or job postings on E-Recruiting career link that have not been suggested by my career advisor

Please turn to next page.

For the next set of questions, please think about the activities/ behavior performed by you **with the objective of assisting the CAREER MANAGEMENT CENTER career advisor in doing his/her job effectively.**

Please indicate in the space (____) preceding each statement below the strength of your agreement with each statement, utilizing a scale in which **1** means you **strongly disagree** with the statement and **7** means you **strongly agree** with the statement.

Strongly Disagree 1 2 3 4 5 6 7 Strongly Agree 8=Non
Applicable

EXTRA ROLE-CITIZENSHIP

- 5.10. ____ In order to help the career advisor better assist me, I do research on companies, industries/ career options before I come to the Career Management Center
- 5.11. ____ In order to help the career advisor better assist me, I complete all the suggested activities/ homework before coming to the Career Management Center
- 5.12. ____ As suggested by my career advisor, I do research on the companies/ industries/ career options that I am interested in
- 5.13. ____ I research companies/ industries/career options other than those suggested by the career advisor
- 5.14. ____ I stay aware of internships or job postings on other job search websites that have not been suggested by my career advisor
- 5.15. ____ I try to search for jobs through my own network of friends, family, professors etc.

Please turn to next page.

6. For the next set of questions, please think about the activities/ behavior performed **by you with the objective of helping yourself to achieve your goals.**

Please indicate in the space (____) preceding each statement below the strength of your agreement with each statement, utilizing a scale in which **1** means you **strongly disagree** with the statement and **7** means you **strongly agree** with the statement.

Strongly Disagree 1 2 3 4 5 6 7 Strongly Agree 8=Non
Applicable

EXTRA ROLE-ELECTIVE

- 6.1. _____ I make appointments to avoid waiting or not being able to meet the career advisor
- 6.2. _____ I send “thank you” notes to my career advisor after my session ends
- 6.3. _____ I voluntarily pick up and read brochures/ handouts kept in the career service center even if the career advisor has not suggested that I do so
- 6.4. _____ I take extensive notes during my session at the Career Management Center
- 6.5. _____ I take more material to show the career advisor than asked/ suggested by the career advisor

Please turn to next page.

7. For the next set of questions, please think about the information exchanged between you and your career advisor at the Career Management Center.

Please indicate in the space (____) preceding each statement below the strength of your agreement with each statement, utilizing a scale in which **1** means you **strongly disagree** with the statement and **7** means you **strongly agree** with the statement.

Strongly Disagree 1 2 3 4 5 6 7 Strongly Agree 8=Non
Applicable

INFORMATION SHARING

- 7.1. _____ My career advisor and I have productive conversations
- 7.2. _____ My career advisor and I exchange emails frequently
- 7.3. _____ There is a lot of two-way communication between me and the career advisor
- 7.4. _____ I am always willing to share my information (career ambitions, job preferences, personal constraints etc.) required for the career advisor to help me
- 7.5. _____ The career advisor is always willing to share information with me
- 7.6. _____ I discuss my personal goals and issues with the career advisor to help him/her better understand my needs and find an internship/job suitable to me
- 7.7. _____ We regularly discuss the skills I need (interviewing, verbal, written, networking, professional grooming etc.)
- 7.8. _____ My career advisor can be trusted at all times
- 7.9. _____ My career advisor can be counted on to do what is right
- 7.10. _____ My career advisor has high integrity

8. For the next set of questions, please think about how you feel about your sessions at the Career Management Center.

Please indicate in the space (____) preceding each statement below the strength of your agreement with each statement, utilizing a scale in which **1** means you **strongly disagree** with the statement and **7** means you **strongly agree** with the statement.

Strongly Disagree 1 2 3 4 5 6 7 Strongly Agree 8=Non
Applicable

ROLE CLARITY

- 8.1. _____ My sessions at the Career Management Center have made it clear how to develop my resume
- 8.2. _____ My sessions at the Career Management Center have made it clear how to write a cover letter
- 8.3. _____ My sessions at the Career Management Center have made it clear how I should look for an internship/ a job
- 8.4. _____ My sessions at the Career Management Center have made it clear how I can develop my career options
- 8.5. _____ My sessions at the Career Management Center have made it clear how I should behave in an interview
- 8.6. _____ My sessions at the Career Management Center have made it clear how I should network
- 8.7. _____ My sessions at the Career Management Center have made it clear how I should use the E-Recruiting career link and other career related resources at the Career Management Center
- 8.8. _____ I feel certain about how to effectively use the E-Recruiting career link and other career related resources available at the Career Management Center
- 8.9. _____ I believe there are clear directions available regarding how to use the E-Recruiting career link and other career related resources available at the Career Management Center

GOALS

9. Now that you have thought about your sessions at the Career Management Center, please tick which goals you had during the most recent session at the Career Management Center. Please tick as many as applicable to you.
- 9.1. Understand how to edit my resume
 - 9.2. Understand how to edit my cover letter
 - 9.3. Get information about companies/ industries/career options
 - 9.4. Understand future education options
 - 9.5. Understand future career options
 - 9.6. Eliminate my concerns and anxieties about my career goals
 - 9.7. Get confidence and motivation to handle my search for internship/job
 - 9.8. Have a meaningful career
 - 9.9. Gain an edge over other students/applicants for internships/jobs
 - 9.10. Build or maintain my friendship with the career advisor
 - 9.11. Update the career advisor about my progress
 - 9.12. Fulfill my class requirement
 - 9.13. Learn about internship opportunities
 - 9.14. Learn about full time job opportunities
 - 9.15. Gain an internship/job
 - 9.16. Continue making progress towards my career goals
 - 9.17. Get a specific question answered
 - 9.18. Help me figure out what I want to do
 - 9.19. Other: _____

10. Please think about the feelings experienced as you pursued your career goals. Please indicate to what extent you have felt this way during your last visit to the Career Management Center.

Very slightly or not at all 1 2 3 4 5 6 7 Extremely 8=Non
Applicable

EMOTIONS

- 10.1. Interested
- 10.2. Distressed
- 10.3. Excited
- 10.4. Upset
- 10.5. Strong
- 10.6. Guilty
- 10.7. Scared
- 10.8. Hostile
- 10.9. Enthusiastic
- 10.10. Proud
- 10.11. Irritable
- 10.12. Alert
- 10.13. Ashamed
- 10.14. Inspired
- 10.15. Nervous
- 10.16. Determined
- 10.17. Attentive
- 10.18. Jittery
- 10.19. Active
- 10.20. Afraid

We would like to get your impressions about your experience pursuing your career goals.

Please indicate in the space (____) preceding each statement below the strength of your agreement with each statement, utilizing a scale in which **1** means you **strongly disagree** with the statement and **7** means you **strongly agree** with the statement.

SERVICE QUALITY

Strongly Disagree 1 2 3 4 5 6 7 Strongly Agree 8=Non
Applicable

(Gallan 2008-functional and technical quality)

10.21. _____ My counselor at Career Management Center is highly trained
in his or her specialty

10.22. _____ My counselor at Career Management Center is quite skilled in
his or her job

10.23. _____ My counselor at Career Management Center treated me with
respect

10.24. _____ My counselor at Career Management Center provided courteous and
friendly service to me

(Brady and Cronin 2001-Overall service quality)

10.25. _____ I would say Career Management Center provides superior
service

10.26. _____ I believe Career Management Center offers excellent service

11. For the following set of questions, please think about your overall feelings about your sessions at the Career Management Center?

Please indicate in the space (____) preceding each statement below the strength of your agreement with each statement, utilizing a scale in which **1** means you **strongly disagree** with the statement and **7** means you **strongly agree** with the statement.

Strongly Disagree 1 2 3 4 5 6 7 Strongly Agree 8=Non
Applicable

SATISFACTION (Thomson 2006)

- 11.1. _____ I am content with my career advisor
11.2. _____ I am happy with my career advisor
11.3. _____ I am completely satisfied with my career advisor
11.4. _____ I am content with the Career Management Center
11.5. _____ I am happy with the Career Management Center's services
11.6. _____ I am completely satisfied with the Career Management
Center's services

TRUST (Morgan and Hunt 1994)

- 11.7. _____ The Career Management Center can be trusted at all times
11.8. _____ The Career Management Center can be counted on to do what
is right
11.9. _____ The Career Management Center has high integrity

GOALS

- 11.10. _____ I am on the right track towards my career goals.
11.11. _____ The process that I am following to reach my career goals is
effective.
11.12. _____ I have reached some important milestones on the way to my
career goals.

12. Do you have any other thoughts about pursuing your career goals? Please write in the space below.
13. Other information:
- 13.1. Year in the program:
 - 13.2. Area of specialization in School:
 - 13.3. Expected date of graduation:
 - 13.4. Gender:
14. Please provide the last four digits of your ASU id in order to be eligible to participate in the 5 random prize drawings of \$50 ASU bookstore gift certificate.

**END OF QUESTIONNAIRE
THANK YOU VERY MUCH**

APPENDIX E

E-STUDY 2 (SHORTER SURVEY)

Dear MBA Student,

We are conducting research studying how graduate students think about and pursue career goals using different services on campus. The services offered at W.P. Carey School of Business Career Management Center (CMC) are aimed to help you attain your career goals. These services are the result of the hard work and efforts of several individuals at Arizona State University, and also the feedback and comments from other W.P. Carey students like yourself, and alumni in the past.

Today, we invite you to participate in our study to share your comments and feedback about your career goals and related services you have used at the W. P. Carey School's CMC. This will help us understand your needs better and help the CMC serve you better.

This study will be conducted over time and we will ask you to fill out this short survey at 3 different times during this semester. The study will take approximately 5 minutes of your time and all the information you provide will be kept confidential. Your identity will not be revealed in any report of the study's findings.

While your comments and feedback are truly invaluable, as a token of our appreciation, we would like to buy you a cup of coffee. Attached is \$2 for a cup of coffee at your neighborhood coffee shop.

We thank you for taking the time to help your fellow students and us.

If you have any questions, or would like additional information about this study, please contact us.

Sincerely,

Shruti Saxena
Instructor and PhD Candidate

W.P. Carey School of Business
480-727-7076
Shruti.Saxena@asu.edu

Michael Mokwa
Professor and Department Chair in
Marketing

W.P. Carey School of Business
480-965-3622
Michael.Mokwa@asu.edu

Section A: When thinking about acting on your career goals, you may have visited the W.P. Carey Graduate Career Management Center (CMC).

1. When did you last use the W.P. Carey Career Management Center services (including counseling, web resources, events etc.)?
 - Sometime in the past 1 week
 - Sometime in the past 2 weeks
 - Sometime in the past 1 month
 - Don't remember

2. What were your goals during your most recent session at the W.P. Carey Career Management Center? Please tick as many as applicable to you.
 - 2.1. Understand how to edit my resume
 - 2.2. Understand how to edit my cover letter
 - 2.3. Get information about companies/ industries/career options
 - 2.4. Understand future education options
 - 2.5. Gain an edge over other students/applicants for internships/jobs
 - 2.6. Update the career advisor about my progress
 - 2.7. Fulfill my class requirement
 - 2.8. Learn about internship opportunities
 - 2.9. Learn about full time job opportunities
 - 2.10. Get a specific question answered
 - 2.11. Other: _____

(Continued on the next page)

Section B: For the following set of questions, please think about how you feel about the goals you mentioned in the previous question.

Please indicate your level of agreement regarding the following statements by circling a number between 1 and 7, utilizing a scale in which **1** means you **strongly disagree** with the statement and **7** means you **strongly agree** with the statement.

If a statement does not apply to you or you do not know the answer to the question, please circle, "n/a".

		Strongly Disagree					Strongly Agree			
		1	2	3	4	5	6	7	n/a	
1	The goals I selected above are valuable to me	1	2	3	4	5	6	7	n/a	
2	The goals I selected above are worthwhile to me	1	2	3	4	5	6	7	n/a	
3	The goals I selected above are meaningful to me	1	2	3	4	5	6	7	n/a	
4	The goals I selected above are important to me	1	2	3	4	5	6	7	n/a	
5	I possess the necessary skills to attain my goals	1	2	3	4	5	6	7	n/a	
6	I have what it takes to reach my goals	1	2	3	4	5	6	7	n/a	
7	I have the necessary knowledge to reach my goals	1	2	3	4	5	6	7	n/a	
8	I have the ability to reach my goals	1	2	3	4	5	6	7	n/a	
9	Overall, I feel I am making progress toward my goals	1	2	3	4	5	6	7	n/a	
10	I feel I am making progress towards my immediate goals	1	2	3	4	5	6	7	n/a	
11	I feel I am making progress towards my long term goals	1	2	3	4	5	6	7	n/a	

(Continued on the next page)

Section C: For the following set of questions, please think about your activities and behavior related to your career goals.

Please indicate your level of agreement regarding the following statements by circling a number between 1 and 7, utilizing a scale in which **1** means you **strongly disagree** with the statement and **7** means you **strongly agree** with the statement.

If a statement does not apply to you or you do not know the answer to the question, please circle, “n/a”.

		Strongly Disagree						Strongly Agree		
		1	2	3	4	5	6	7	n/a	
1	I “touch-base” and follow-up with my career advisors at the Career Management Center	1	2	3	4	5	6	7	n/a	
2	As suggested by my career advisor, I go the E-Recruiting career link to post my resume and find the internships/full time jobs available	1	2	3	4	5	6	7	n/a	
3	As suggested by my career advisor, I read the handouts and other material available at the Career Management Center	1	2	3	4	5	6	7	n/a	
4	As suggested by my career advisor, I go to the career related events(e.g. career fairs, networking night)	1	2	3	4	5	6	7	n/a	
5	In order to help the career advisor better assist me, I do research on companies, industries/ career options before I come to the Career Management Center	1	2	3	4	5	6	7	n/a	
6	In order to help the career advisor better assist me, complete all the suggested activities/ homework before coming to the Career Management Center	1	2	3	4	5	6	7	n/a	
7	I research companies/ industries/career options other than those suggested by the career advisor	1	2	3	4	5	6	7	n/a	
8	I make appointments to avoid waiting or not being able to meet the career advisor	1	2	3	4	5	6	7	n/a	
9	I voluntarily pick up and read brochures/handouts kept in the career service center even if the career advisor has not suggested that I do so	1	2	3	4	5	6	7	n/a	
10	I bring more material to show the career advisor than asked/ suggested by the career advisor	1	2	3	4	5	6	7	n/a	
11	My career advisor and I exchange emails frequently	1	2	3	4	5	6	7	n/a	
12	There is a lot of two-way communication between me and the career advisor	1	2	3	4	5	6	7	n/a	

13	I am always willing to share information (career ambitions, job preferences, personal constraints) required for the career advisor to help me	1	2	3	4	5	6	7	n/a
----	---	---	---	---	---	---	---	---	-----

(Continued on the next page)

Section D: Please think about how you feel about your sessions at the Career Management Center.

Please indicate your level of agreement regarding the following statements by circling a number between 1 and 7, utilizing a scale in which **1** means you **strongly disagree** with the statement and **7** means you **strongly agree** with the statement.

If a statement does not apply to you or you do not know the answer to the question, please circle, "n/a".

		Strongly Disagree						Strongly Agree		
		1	2	3	4	5	6	7	n/a	
1	My sessions at the Career Management Center have made it clear how to develop my resume	1	2	3	4	5	6	7	n/a	
2	My sessions at the Career Management Center have made it clear how I should look for an internship/ job	1	2	3	4	5	6	7	n/a	
3	My sessions at the Career Management Center have made it clear how I should behave in an interview	1	2	3	4	5	6	7	n/a	
4	My counselor at Career Management Center is highly trained in his or her specialty	1	2	3	4	5	6	7	n/a	
5	I would say Career Management Center provides superior service	1	2	3	4	5	6	7	n/a	
6	I believe Career Management Center offers excellent service	1	2	3	4	5	6	7	n/a	
7	The quality of the service I received at the Career Management Center meets my expectations	1	2	3	4	5	6	7	n/a	
8	I am content with the Career Management Center	1	2	3	4	5	6	7	n/a	
9	I am happy with the Career Management Center's services	1	2	3	4	5	6	7	n/a	
10	I am completely satisfied with the Career Management Center's services	1	2	3	4	5	6	7	n/a	
11	The Career Management Center can be trusted at all times	1	2	3	4	5	6	7	n/a	
12	The Career Management Center can be counted on to do what is right	1	2	3	4	5	6	7	n/a	

13	The Career Management Center has high integrity	1	2	3	4	5	6	7	n/a
14	Overall, my feelings about the last interaction with CMC were positive	1	2	3	4	5	6	7	n/a
15	Overall, my feelings about the last interaction with CMC were negative	1	2	3	4	5	6	7	n/a

Section E: Demographic Information

E1: Year in the program: First Year Second Year

E2: Area of specialization in School: _____

E3: Gender: Male Female

E4: While your responses remain anonymous, please provide the last four digits of your ASU id (or any other id) so that we can track your responses in this multi-part study.
Please note: Your id will not be matched with any personal information:

END OF QUESTIONNAIRE! THANK YOU FOR YOUR HELP!!

TABLE 1: LIST OF CONSTRUCTS AND THEIR DEFINITIONS

Number	Construct	Definition	Source
1	In-role Performance	In-role performance is defined as including activities that the customers are traditionally expected to perform (e.g. standing in queue, making payments for the service/good purchased etc.). Since there can be differences between what consumers and firms understand as customer in-role performance, customer in-role performance as defined by firms and their customers will be measured.	
2	Extra-role Performance	Customer extra-role performance is defined as optional activities that customers can perform to enhance or improve their service experience and has two aspects—citizenship behavior and elective behavior. Based on the definition offered by Organ (1988), citizenship behavior can be understood as ‘discretionary activities that directly enhance the effective functioning of the organization’. These include activities that reflect aspects such as civic virtue, helping behavior, altruism and courtesy. All these consumer activities are conducted by consumers with the objective of <u>helping the organization</u> improve their functioning and deliver a better service outcome. Elective behaviors are similar activities that consumers perform with the objective of <u>helping themselves</u> achieve their consumption goals. Since there can be differences between what firms and customers perceive as customer extra-role performance, customer extra-role performance as defined by firms and their customers will be measured.	Organ (1988)
3	Information Sharing	Information sharing is information customers shares with the service provider to ensure that the service can be customized to their preferences for a positive outcome.	Ennew and Binks’ (1999); Cannon and Homburg (2001)
4	Goals	Goals are the internal representations of desired states, where states are broadly construed as outcomes, events or processes. Consumption goals are evaluated in terms of their ‘importance’. Goal importance also referred to as ‘error sensitivity’ by Hyland (1988), and ‘gain’ by Powers (1973).	Austin and Vancouver (1996)
5	Perceived Service Quality	Service quality can be defined as “the customer’s assessment of the overall excellence or superiority of the service”	Parasuraman et al. (1988); Zeithaml et al. (2006, pg 108).
6	Assessment of Progress Towards Goals	Assessment of progress towards goals is the internal processes that occur in the ‘regulatory’ and ‘control’ function in the living systems framework or the ‘matching of the stimulus	Ford and Ford (1987)

		with the standard (goal)' in the theories proposed by Miller et al. (1960) and Powers (1973).	
7	Role Clarity	Role clarity is defined as 'understanding the role that must be performed' (Dellande et al. 2004) or as "the clients understand (ing) their role in terms of the tasks and behaviors that are required..."(Bettencourt et al. 2002, pg.102).	Dellande et. al. (2004); Bettencourt et. al. (2002)

TABLE 2B: SUMMARY OF MEDIATION EFFECTS

Effect of service quality on customer participation behavior through the mediated effect of assessment of progress towards goals

Study 1				
	Step 1	Step 2	Step 3	Supported
In-role Behavior	R ² =0.18* β=0.44	R ² =0.04* β=0.22	R ² =0.07 β=0.13	x
Citizenship Behavior	R ² =0.18* β=0.44	R ² =0.14* β=0.39	R ² =0.33 β=0.17	x
Elective Behavior	R ² =0.18* β=0.44	R ² =0.52* β=0.25	R ² =0.24 β=0.03	x
Information Sharing	R ² =0.18* β=0.44	R ² =0.16* β=0.41	R ² =0.53 β=0.12	x
Study 2 Wave 1				
	Step 1	Step 2	Step 3	Supported
In-role Behavior	R ² =0.11* β=0.34	R ² =0.10* β=0.33	R ² =0.21* β=0.22	√
Citizenship Behavior	R ² =0.11* β=0.34	R ² =0.16* β=0.41	R ² =0.15* β=0.39	√
Elective Behavior	R ² =0.11* β=0.34	R ² =0.02 β=0.17		x
Information Sharing	R ² =0.11* β=0.34	R ² =0.29* β=0.54	R ² =0.42* β=0.40	√
Study 2 Wave 2				
	Step 1	Step 2	Step 3	Supported
In-role Behavior	R ² =0.12* β=0.35	R ² =0.03* β=0.19	R ² =0.13 β=0.08	x
Citizenship Behavior	R ² =0.12* β=0.35	R ² =0.08* β=0.30	R ² =0.06 β=0.25*	√
Elective Behavior	R ² =0.12* β=0.35	R ² = -0.01 β=0.06		x
Information Sharing	R ² =0.12* β=0.35	R ² = 0.08* β=0.29	R ² =0.22 β=0.15	x
Study 2 Wave 3				
	Step 1	Step 2	Step 3	Supported
In-role Behavior	R ² =0.05* β=0.25	R ² =0.09* β=0.32	R ² =0.12 β=0.27*	√
Citizenship Behavior	R ² =0.05* β=0.25	R ² =0.06* β=0.26	R ² =0.08 β=0.31*	√
Elective Behavior	R ² =0.05* β=0.25	R ² =0.02 β=0.32		x
Information Sharing	R ² =0.05* β=0.25	R ² =0.18* β=0.43	R ² =0.29 β=0.35*	√

√=Supported x=Not Supported

TABLE 3A: NEWLY CREATED CONSTRUCTS AND THEIR MEASURES

	Pretest 1*	Pretest 2*	Study 1*	Study 2*
In-role Performance	<ol style="list-style-type: none"> As suggested by my professors/ career advisor, I visit the Career Management Center regularly As suggested by my professors/ career advisor, I make future appointments to meet the career advisors at the Career Management Center As suggested by my career advisor, I do research on the companies/ industries/ career options that I am interested in As suggested by my career advisor, I go the e-Recruiting web-link to post my resume and find the internships/full time jobs available As suggested by my career advisor, I read the handouts, books and other material available at the Career Management Center As suggested by my career advisor, I go to the career related events (e.g. career fairs, networking night etc.) I draft my resume as suggested by my career advisor I draft my cover letter as suggested by my career advisor I complete all the tasks suggested by my career advisor before coming to the Career Management Center 	<ol style="list-style-type: none"> As suggested by my career advisor, I go the Sun Devil career link to post my resume and find the internships/full time jobs available As suggested by my career advisor, I read the handouts and other material available at the Business Career Center As suggested by my career advisor, I go to the career related events (e.g. career fairs, networking night etc.) I draft my resume as suggested by my career advisor I draft my cover letter as suggested by my career advisor I stay aware of even those internships or job postings on Sun Devil career link that have not been suggested by my career advisor As suggested by my professors/ career advisor, I visit the Business Career Center As suggested by my professors/ career advisor, I make future appointments to meet the career advisors at the Business Career Center I “touch-base” and follow-up with my career advisors at the Business Career Center. 	<ol style="list-style-type: none"> As suggested by my professors/ career advisor, I visit the Career Management Center As suggested by my professors/ career advisor, I make future appointments to meet the career advisors at the Career Management Center I “touch-base” and follow-up with my career advisors at the Career Management Center As suggested by my career advisor, I go the E-Recruiting career link to post my resume and find the internships/full time jobs available As suggested by my career advisor, I read the handouts and other material available at the Career Management Center As suggested by my career advisor, I go to the career related events (e.g. career fairs, networking night etc.) As suggested by my career advisor, I go to the career related events (e.g. career fairs, networking night etc.) I draft my resume as suggested by my career advisor I draft my cover letter as suggested by my career advisor I stay aware of even those internships or job postings on E-Recruiting career link that have not been suggested by my career advisor 	<ol style="list-style-type: none"> I “touch-base” and follow-up with my career advisors at the Career Management Center As suggested by my career advisor, I go the E-Recruiting career link to post my resume and find the internships/full time jobs available As suggested by my career advisor, I read the handouts and other material available at the Career Management Center As suggested by my career advisor, I go to the career related events(e.g. career fairs, networking night)
Extra-role (Citizenship Behavior)	<ol style="list-style-type: none"> To avoid any inconvenience to my career advisor, I make appointments in advance to meet with him/her 	<ol style="list-style-type: none"> In order to help the career advisor better assist me, I do research on companies, industries/ career options before I come 	<ol style="list-style-type: none"> In order to help the career advisor better assist me, I do research on companies, 	<ol style="list-style-type: none"> In order to help the career advisor better assist me, I do research on companies,

	<ol style="list-style-type: none"> 2. To ensure that my career advisor is aware of the developments in my career, I “touch base” and follow up with my career advisor regularly 3. In order to help the career advisor better perform his/her duties toward me and other students, I let the career advisor know about the discrepancies or inconsistencies in the information given by him/her and what I learned from other sources such as the interviewing company website, potential recruiters etc. 4. In order to help the career advisor better assist me, I do research on companies, industries/ career options before I come to the Career Management Center 5. In order to help the career advisor better assist me, I complete all the suggested activities/ homework before coming to the Career Management Center 6. To assist my career advisor, I carry hard copies of my resume/ cover letter for the career advisor to look at 7. To assist my career advisor, I carry job descriptions of my preferred job when I go to the Career Management Center 	<ol style="list-style-type: none"> to the Business Career Center 2. In order to help the career advisor better assist me, I complete all the suggested activities/ homework before coming to the Business Career Center 3. As suggested by my career advisor, I do research on the companies/ industries/ career options that I am interested in 4. I research companies/ industries/career options other than those suggested by the career advisor 5. I stay aware of internships or job postings on other job search websites that have not been suggested by my career advisor 6. I try to search for jobs through my own network of friends, family, professors etc. 7. In order to help the career advisor better assist me, I make appointments in advance to meet with him/her 8. In order to help the career advisor better assist me, I let the career advisor know about the discrepancies or inconsistencies in the information given by him/her and what I learned from other sources such as the interviewing company website, potential recruiters etc. 	<ol style="list-style-type: none"> industries/ career options before I come to the Career Management Center 2. In order to help the career advisor better assist me, I complete all the suggested activities/ homework before coming to the Career Management Center 3. As suggested by my career advisor, I do research on the companies/ industries/ career options that I am interested in 4. I research companies/ industries/career options other than those suggested by the career advisor 5. I stay aware of internships or job postings on other job search websites that have not been suggested by my career advisor 6. I try to search for jobs through my own network of friends, family, professors etc. 	<ol style="list-style-type: none"> industries/ career options before I come to the Career Management Center 2. In order to help the career advisor better assist me, complete all the suggested activities/ homework before coming to the Career Management Center 3. I research companies/ industries/career options other than those suggested by the career advisor
Extra-role (Elective Behavior)	<ol style="list-style-type: none"> 1. I anticipate delays and unavailability of the career advisor and make appointments to avoid waiting or not being able to meet the career advisor 2. I sometimes just “walk-in” to the Career Management Center to ask a specific quick question 3. To ensure that the career advisor knows my progress, I “touch base” and follow up with my career advisor regularly 4. I stay aware of even those career events organized by ASU and the W.P. Carey 	<ol style="list-style-type: none"> 1. I make appointments to avoid waiting or not being able to meet the career advisor 2. I send “thank you” notes to my career advisor after my session ends 3. I voluntarily pick up and read brochures/ handouts kept in the career service center even if the career advisor has not suggested that I do so 4. I take extensive notes during my session at the Business Career Center 5. I take more material to show the career advisor than asked/ suggested by the 	<ol style="list-style-type: none"> 1. I make appointments to avoid waiting or not being able to meet the career advisor 2. I send “thank you” notes to my career advisor after my session ends 3. I voluntarily pick up and read brochures/ handouts kept in the career service center even if the career advisor has not suggested that I do so 4. I take extensive notes during 	<ol style="list-style-type: none"> 1. I make appointments to avoid waiting or not being able to meet the career advisor 2. I voluntarily pick up and read brochures/handouts kept in the career service center even if the career advisor has not suggested that I do so 3. I bring more material to show the career advisor than

	<p>School of Business that have not been suggested by my career advisor</p> <ol style="list-style-type: none"> 5. To show respect to my career advisor, I dress professionally when I go to meet my career advisor 6. I send "thank you" notes to my career advisor after my session ends 7. I voluntarily pick up and read brochures/ handouts kept in the career service center even if the career advisor has not suggested so 8. I research companies/ industries/career options other than those suggested by the career advisor 9. I stay aware of even those internships or job postings on e-Recruiting web-link that have not been suggested by my career advisor 10. I stay aware of internships or job postings on other job search websites that have not been suggested by my career advisor 11. I try to search for jobs through my own network of friends, family, professors etc. 12. I carry hard copies of my resume/ cover letter so that I can make changes/ edits right away 13. I carry my laptop to my session at the Career Management Center so that I can make changes/edits to my resume and cover letter right away 14. I take extensive notes during my session at the Career Management Center 15. I take more material to show the career advisor than asked/ suggested by the career advisor 16. I take the initiative to make appointments and use other services (e.g. practice mock interviews) offered at the Career Management Center even before the career advisor suggests the same 17. I do all the activities/tasks suggested by career advisor before coming to the Career Management Center 	<p>career advisor</p>	<p>my session at the Career Management Center</p> <ol style="list-style-type: none"> 5. I take more material to show the career advisor than asked/ suggested by the career advisor 	<p>asked/ suggested by the career advisor</p>
--	--	-----------------------	--	---

Information Sharing	<ol style="list-style-type: none"> 1. I always respond to the communication from my career advisor 2. The career advisor always responds to my communication. 3. We have great dialogues. 4. I frequently send emails to my career advisor 5. My career advisor emails me frequently 6. S/he provides a lot of feedback 7. There's a lot of two-way communication between me and the career advisor 8. I am always willing to share my information (career ambitions, job preferences, personal constraints etc.) required for the career advisor to help me 9. The career advisor is always willing to share information with me 10. I discuss my personal goals and issues with the career advisor to help him/her better understand my needs and find an internship/job suitable to me 11. The career advisor shares his/her personal information in order to make me feel comfortable 12. We regularly discuss my career goals 13. We regularly discuss my interview skills 14. We regularly discuss my verbal skills 15. We regularly discuss my written skills 16. We regularly discuss my networking skills 17. We regularly discuss professional grooming goals (e.g. how to dress/ sit/ behave during interviews and job internships) 	<ol style="list-style-type: none"> 1. My career advisor and I have great dialogues. 2. My career advisor and I exchange emails frequently 3. There's a lot of two-way communication between me and the career advisor 4. I am always willing to share my information (career ambitions, job preferences, personal constraints etc.) required for the career advisor to help me 5. The career advisor is always willing to share information with me 6. I discuss my personal goals and issues with the career advisor to help him/her better understand my needs and find an internship/job suitable to me 7. We regularly discuss the skills I need (interviewing, verbal, written, networking, professional grooming etc.) 	<ol style="list-style-type: none"> 1. My career advisor and I have productive conversations 2. My career advisor and I exchange emails frequently 3. There is a lot of two-way communication between me and the career advisor 4. I am always willing to share my information (career ambitions, job preferences, personal constraints etc.) required for the career advisor to help me 5. The career advisor is always willing to share information with me 6. I discuss my personal goals and issues with the career advisor to help him/her better understand my needs and find an internship/job suitable to me 7. We regularly discuss the skills I need (interviewing, verbal, written, networking, professional grooming etc.) 	<ol style="list-style-type: none"> 1. My career advisor and I exchange emails frequently 2. There is a lot of two-way communication between me and the career advisor 3. I am always willing to share information (career ambitions, job preferences, personal constraints) required for the career advisor to help me
Role Clarity	<ol style="list-style-type: none"> 1. My sessions at the Career Management Center have made it clear how I should plan my career 2. My sessions at the Career Management Center have made it clear how to develop my resume 3. My sessions at the Career Management Center have made it clear how to write a 	<ol style="list-style-type: none"> 1. My sessions at the Business Career Center have made it clear how to develop my resume 2. My sessions at the Business Career Center have made it clear how to write a cover letter 3. My sessions at the Business Career Center have made it clear how I should 	<ol style="list-style-type: none"> 1. My sessions at the Career Management Center have made it clear how to develop my resume 2. My sessions at the Career Management Center have made it clear how to write a cover letter 	<ol style="list-style-type: none"> 1. My sessions at the Career Management Center have made it clear how to develop my resume 2. My sessions at the Career Management Center have made it clear how I should look for an internship/ job

	<p>cover letter</p> <p>4. My sessions at the Career Management Center have made it clear how I should look for an internship/ a job</p> <p>5. My sessions at the Career Management Center have made it clear how I can develop my career options</p> <p>6. My sessions at the Career Management Center have made it clear how I should behave in an interview</p> <p>7. My sessions at the Career Management Center have made it clear how I should network</p> <p>8. I know exactly what is expected of me during the career advising sessions</p> <p>9. During the career advising sessions, explanation is clear of what has to be done by me</p> <p>10. I feel certain about how to effectively use the e-Recruiting web-link and other career related resources available at the Career Management Center</p> <p>11. I know what is expected of me if I use the e-Recruiting web-link and other career related resources available at the Career Management Center</p> <p>12. I believe there are clear directions available regarding how to use the e-Recruiting web-link and other career related resources available at the Career Management Center</p>	<p>look for an internship/ a job</p> <p>4. My sessions at the Business Career Center have made it clear how I can develop my career options</p> <p>5. My sessions at the Business Career Center have made it clear how I should behave in an interview</p> <p>6. My sessions at the Business Career Center have made it clear how I should network</p> <p>7. I know exactly what is expected of me during the career advising sessions</p> <p>8. During the career advising sessions, there is a clear explanation of what has to be done by me</p> <p>9. I feel certain about how to effectively use the Sun Devil career link and other career related resources available at the Business Career Center</p> <p>10. I know what is expected of me if I use the Sun Devil career link and other career related resources available at the Business Career Center</p> <p>11. I believe there are clear directions available regarding how to use the Sun Devil career link and other career related resources available at the Business Career Center</p>	<p>3. My sessions at the Career Management Center have made it clear how I should look for an internship/ a job</p> <p>4. My sessions at the Career Management Center have made it clear how I can develop my career options</p> <p>5. My sessions at the Career Management Center have made it clear how I should behave in an interview</p> <p>6. My sessions at the Career Management Center have made it clear how I should network</p> <p>7. My sessions at the Career Management Center have made it clear how I should use the E-Recruiting career link and other career related resources at the Career Management Center</p> <p>8. I feel certain about how to effectively use the E-Recruiting career link and other career related resources available at the Career Management Center</p> <p>9. I believe there are clear directions available regarding how to use the E-Recruiting career link and other career related resources available at the Career Management Center</p>	<p>3. My sessions at the Career Management Center have made it clear how I should behave in an interview</p>
--	---	---	---	--

* Instructions for each scale: Please indicate in the space (____) preceding each statement below the strength of your agreement with each statement, utilizing a scale in which **1** means you **strongly disagree** with the statement and **7** means you **strongly agree** with the statement.

TABLE 3B: EXISTING CONSTRUCTS AND THEIR MEASURES

#	Construct	Theoretical Definition	Scales	Source
1	Goal Value	Goal value can be understood in terms of the importance and commitment that consumer attaches to the consumption goal. Goal importance refers to 'degree of energization associated with a specific goal' i.e. 'greater the error sensitivity, the greater the response to threats or deviations from the goal'. Goal commitment is defined as 'how long the individual is willing to strive for a specific goal' (Austin and Vancouver 1996).	Rate on a scale of 0-4 how well or poorly each statement applies to you (0=Not at all true for me and 4=Describes me very well) <ul style="list-style-type: none"> • This goal is valuable to me • This goal is worthwhile • This goal is meaningful to me • This goal is important to me 	GSAB (Karoly and Ruehlman 1995)
2	Perceived Service Quality	The customer's assessment of the overall excellence or superiority of the service (Parasuraman et al. 1988).	<ul style="list-style-type: none"> • I would say service provider provides superior service • I believe the service provider offers excellent service 	Brady and Cronin (2001)
			<ul style="list-style-type: none"> • My doctor at X Clinic is highly trained in his or her specialty • My X Clinic doctor is quite skilled in his/her job. • My doctor at X Clinic treated me with respect. • My doctor at X Clinic provided courteous and friendly service to me. 	Gallan (2008)
3	Assessment of progress towards goals	The pursuit of a previously defined goal (Fishbach and Dhar 2005)	Rate on a scale of 0-4 how well or poorly each statement applies to you (0=Not at all true for me and 4=Describes me very well) <ul style="list-style-type: none"> • I am on a lookout for potential obstacles that might interfere with my progress on this goal • I keep track of my overall progress 	GSAB (Karoly and Ruehlman 1995)

			<p>towards this goal</p> <ul style="list-style-type: none"> • I tend to notice my successes while working towards this goal • I'm aware of my day-to-day behavior as I work towards this goal 	
4	Self Efficacy	People's beliefs about their capabilities to exercise control over their own level of functioning and over events that affect their lives (Bandura 1991)	<p>Rate on a scale of 0-4 how well or poorly each statement applies to you (0=Not at all true for me and 4=Describes me very well)</p> <ul style="list-style-type: none"> • I possess the necessary skills to attain this goal • I have what it takes to reach this goal • I have the necessary knowledge to reach this goal • I have the ability to reach this goal 	GSAB (Karoly and Ruchlman 1995)
5	Customer In-role Performance	In-role performance includes activities that the consumers are traditionally expected to perform (e.g. standing in queue, making payments for the service/good purchased etc.).	<p>Compliance 1 = disagree strongly, 7 = agree strongly)</p> <ul style="list-style-type: none"> • I follow the weight loss directions that my nurse suggests. • I visit the Lindora Clinic as I have been instructed to do. • I use my pedometer as I have been instructed to do. • I apply the skills taught to me by my nurse to help control my environment. • *I do not follow the weight loss directions that my nurse suggests. • I take the prepackaged food supplements as I have been instructed to do. • I calculate my daily intake of carbohydrates as I have been instructed to do. • I keep a daily journal of my weight loss 	Dellande et. al (2004)

			<p>program activities.</p> <ul style="list-style-type: none"> • *I do not determine my daily level of physical activity as I have been instructed to do. <p>*reverse coded</p>	
6	Customer Extra-Role Performance	Based on the definition offered by MacKensie et al.(1998), extra-role performance includes ‘discretionary activities that directly enhance the effective functioning of the organization’. These are activities that reflect aspects such as civic virtue, helping behavior, altruism and courtesy.	<ul style="list-style-type: none"> • Civic Virtue: <ul style="list-style-type: none"> ○ Keeps up with the developments in the company ○ Attends functions that are not required but that help the company image ○ Is willing to risk disapproval in order to express his/her beliefs about what’s best for the company • Sportsmanship: <ul style="list-style-type: none"> ○ Consumes a lot of time complaining about trivial matters ○ Tends to make ‘mountains out of molehills’ (makes problems bigger than they are) ○ Always focuses on what’s wrong with his/her situation rather than the positive side of it • Courtesy <ul style="list-style-type: none"> ○ Respects others people’s rights to common/shared resources (including clerical help, materials etc.) ○ Considers the impact of his/her actions on others ○ “Touches base” with others before initiating actions that 	MacKensie et al. (1991; 1997); Podsakoff et. al (1993)

			<ul style="list-style-type: none"> ○ might affect them ○ Tries to avoid creating problems for the other agents • Altruism: <ul style="list-style-type: none"> ○ Helps orient new agents even though it is not required ○ Is always ready to help or to lend a helping hand to those around him/her ○ Willingly gives of his/her time to help others • Conscientiousness <ul style="list-style-type: none"> ○ Conscientiously follows company regulations and procedures ○ Turns in budgets, sales projections, expense reports etc. earlier than is required ○ Returns phone calls and responds to other messages and requests for information promptly • Overall Evaluation: <ul style="list-style-type: none"> ○ Is one of my best agents ○ All things considered, this manager is outstanding ○ All things considered, this manager performs his/her job the way I like to see it performed 	
6	Information Sharing Behavior	The formal and informal sharing of meaningful and timely information (Wong et al. 2004)	Supplier Communication (Canon and Homburg 2001): Over the past month, how often did you communicate with the career counselor about work-related matters in each of the following	

			<p>ways? Please circle the appropriate response. If a method is not used at all, please circle 9. (The scale choices were once, 2-3 times per month, 1-3 times per week, 4-5 times per week, daily (indicate times per day), and not used.)</p> <ul style="list-style-type: none"> • Scheduled one-to-one meetings (face-to-face) • Impromptu face-to-face meetings • Scheduled one-to-one phone conversations • Impromptu one-to-one phone conversations • Emails <p>Communication Variables (Fischer et al. 1997)</p> <p>Bidirectional</p> <ul style="list-style-type: none"> • I always respond to communication from the career counselor • The career counselor always responds to my communication. • We have great dialogues. • We exchange e-mail frequently • S/he provides a lot of feedback. • There's a lot of two-way communication between me and the career counselor • I am always willing to share my information (career ambitions, job preferences, personal constraints etc.) required for the counselor to help me. • The counselor is always willing to share information with me 	
--	--	--	---	--

			<ul style="list-style-type: none"> • The counselor is willing to share most of his/her information with me 	
7	Role Clarity	<p>‘Understanding the role that must be performed’ (Dellande et al. 2004) or as “the clients understand(ing) their role in terms of the tasks and behaviors that are required...”(Bettencourt et al. 2002, pg.102).</p>	<ul style="list-style-type: none"> • I feel certain about how much authority I have • Clear planned goals and objectives (exist) for my job • (There is) lack of policies and guidelines to help me • I am corrected or rewarded when I don’t really expect it • I know that I have divided my time properly • I know what my responsibilities are • I have to ‘feel my way’ in performing my duties • I feel certain how I will be evaluated for a raise of promotion • I know exactly what is expected of me • I am uncertain as to how my job is linked • I am told how well I am doing my job • Explanation is clear of what has to be done • I have to perform under vague directives or order • I do not know if my work will be acceptable to my boss <p>Meuter et al. (2005) (five items adapted from Rizzo, House, and Lirtzman [1970])</p> <ul style="list-style-type: none"> • I feel certain about how to effectively use the SST. • I am NOT sure how to use the SST 	(Rizzo et al. 1970)

			<p>properly.</p> <ul style="list-style-type: none"> • I know what is expected of me if I use the SST. • The steps in the process of using the SST are clear to me. • I believe there are only vague directions regarding how to use the SST. <p>Dellande et al.(2004) (1 = “Disagree Strongly,” 7 = “Agree Strongly”)</p> <ul style="list-style-type: none"> • My weight-loss program has not made it clear how to keep a diary of my daily food/beverage intake. (reverse coded) • My weight-loss program has made it clear how to determine my daily intake of carbohydrates. • My weight-loss program has made it clear the number of prepackaged food supplements to take each day. • My weight-loss program has made it clear how to determine my daily level of physical activity. • My weight-loss program has not made it clear how to take the prepackaged food supplements. (reverse coded) • My weight-loss program has made it clear how to control my environment. 	
8	Emotions (Covariate)	We define emotions in term of the Consumption Emotion Set (Richins 1997), which captures a wide range of emotions that are typically generated during consumption	<p>Consumption Emotion Set: The authors have used a 4,5 and 6 point scale to collect data.</p> <ul style="list-style-type: none"> • Anger (frustrated, angry, irritated) • Discontent (unfilled, discontented) • Worry (nervous, worried, tense) 	Richins (1997)

			<ul style="list-style-type: none"> • Sadness (depressed, sad, miserable) • Fear (scared, afraid, panicky) • Shame (embarrassed, ashamed, humiliated) • Envy (envious, jealousy) • Loneliness (lonely, homesick) • Romantic love (sexy, romantic, passionate) • Love (loving, sentimental, warm hearted) • Peacefulness (calm, peaceful) • Contentment (contented, fulfilled) • Optimism (optimistic, encouraged, hopeful) • Joy (happy, pleased, joyful) • Excitement (excited, thrilled, enthusiastic) • Surprise (surprised, amazed, astonished) • Other Items (guilty, proud, eager, relieved) 	
--	--	--	---	--

TABLE 4: PRINCIPLE COMPONENT ANALYSIS—PRETEST 1-MBA STUDENTS DATA

Rotated Component Matrix ^a								
	Component							
	1 (EB)	2 (Info Sharing)	3 (Appts)	4 (IR)	5 (CB-Research other sources)	6 (CB)	7 (make appts)	8 (tasks)
IR_4_1 (visit CMC)	.056	.325	.821	.173	-.054	-.012	-.046	.015
IR_4_2 (future appts)	.167	.207	.749	.178	.040	.058	.158	.097
IR_4_3 (do research)	.191	.234	-.144	.100	.332	.690	-.222	.025
IR_4_4 (e-recruiting link)	.232	.261	.222	.798	-.109	-.036	.115	.142
IR_4_5 (read handouts)	.500	.153	.425	.445	.027	.103	-.091	.166
IR_4_6 (career related events)	.135	.116	.303	.688	-.120	.270	.073	.171
IR_4_7 (draft resume)	.018	.247	.098	.219	-.080	.150	.042	.787
IR_4_8 (draft cover letter)	.160	.125	.079	.055	.092	.014	.114	.814
CB_5_1CB (make appts)	.178	-.046	.113	.282	.177	.102	.764	.119
CB_5_2CB (touch-base)	.054	-.031	.830	.222	-.023	.185	.157	.096
CB_5_3CB (tell of discrepancies)	.034	-.048	.222	.328	-.047	.574	.203	.133

CB_5_4CB (do research)	.168	.329	.051	.009	.158	.786	.033	.054
CB_5_5CB (complete homework)	.271	.167	.371	-.150	.051	.648	.234	.027
EB_6_1(make appts)	.195	.023	.113	.043	-.118	.025	.877	.070
EB_6_6 (thank you notes)	.681	-.085	.276	.130	.111	.149	.036	.109
EB_6_7 (read brochures)	.836	.005	.169	.088	.016	.000	.008	-.030
EB_6_8 (research other sources)	.217	.222	-.034	-.075	.695	.260	-.051	-.200
EB_6_9 (e-recruiting)	.237	.215	.199	.796	.213	-.023	.232	.007
EB_6_10 (jobs through other websites)	.022	-.107	.047	.074	.846	-.057	.182	.137
EB_6_11 (jobs through own network)	.159	-.115	-.066	-.020	.869	.189	-.119	.008
EB_6_12 (carry hard copies)	.526	.033	-.157	-.007	.265	.096	.217	.243
EB_6_13 (carry laptop)	.133	.413	.154	-.300	.407	-.074	.044	.358
EB_6_14 (extensive notes)	.670	.185	.099	.162	.239	.151	.298	-.004
EB_6_15 (take more material)	.705	.182	-.125	.241	.032	.268	.221	.086
INFO_7_8	-.153	.797	.073	.008	-.044	.273	-.166	.034
INFO_7_9	.113	.795	.011	.184	.027	.114	.123	.096
INFO_7_10	.153	.724	.267	.224	.022	.081	-.030	.116
INFO_7_11	.101	.649	.253	.175	-.085	.121	.071	.323

Extraction Method: Principal Component Analysis.					
Rotation Method: Varimax with Kaiser Normalization.					
Rotation converged in 8 iterations.					

TABLE 5: PRINCIPLE COMPONENT ANALYSIS-PRETEST 2-
UNDERGRADUATE STUDENT DATA

Rotated Component Matrix ^a						
	Component					
	1	2	3	4	5	6
5.1IR	.196	.814	.159	.000	-.045	.019
5.2IR	.147	.839	.228	.123	.010	.051
5.3IR	-.034	.508	.464	.309	-.009	-.025
5.4IR	.114	.164	.814	-.088	.007	.124
5.5IR	.336	.547	.456	.062	.099	.086
5.6IR	.113	.152	.748	.234	-.032	.183
5.7IR	.036	.000	.302	.180	.055	.815
5.8IR	.122	.186	.098	.103	.080	.857
5.9IR	.190	.104	.748	.088	.330	.133
6.1CB	.156	-.036	.130	.833	.174	.141
6.2CB	.105	.357	.031	.715	.145	.140
6.3CB	.166	.001	.073	.763	.301	.070
6.4CB	.124	.018	.000	.376	.704	-.022
6.5CB	.116	.035	.150	.019	.821	.081
6.6CB	.098	-.031	.020	.213	.785	.063
6.7CB	.465	.497	.036	.098	.116	.227
6.8CB	.389	.337	.112	.212	-.086	.130
7.1EB	.519	.549	-.148	-.122	.003	.231
7.2EB	.587	.208	.230	.335	-.005	-.011
7.3EB	.650	.382	.081	.023	.105	-.023
7.4EB	.808	.081	.126	.120	.248	.067
7.5EB	.857	.045	.135	.122	.141	.050
Extraction Method: Principal Component Analysis.						
Rotation Method: Varimax with Kaiser Normalization.						
Rotation converged in 7 iterations.						

TABLE 6: PRINCIPLE COMPONENT ANALYSIS-PRETEST 2-
UNDERGRADUATE AND MBA STUDENT (STACKED) DATA

Rotated Component Matrix ^a						
	Component					
	1	2	3	4	5	6
5.1IR	.196	.814	.159	.000	-.045	.019
5.2IR	.147	.839	.228	.123	.010	.051
5.3IR	-.034	.508	.464	.309	-.009	-.025
5.4IR	.114	.164	.814	-.088	.007	.124
5.5IR	.336	.547	.456	.062	.099	.086
5.6IR	.113	.152	.748	.234	-.032	.183
5.7IR	.036	.000	.302	.180	.055	.815
5.8IR	.122	.186	.098	.103	.080	.857
5.9IR	.190	.104	.748	.088	.330	.133
6.1CB	.156	-.036	.130	.833	.174	.141
6.2CB	.105	.357	.031	.715	.145	.140
6.3CB	.166	.001	.073	.763	.301	.070
6.4CB	.124	.018	.000	.376	.704	-.022
6.5CB	.116	.035	.150	.019	.821	.081
6.6CB	.098	-.031	.020	.213	.785	.063
6.7CB	.465	.497	.036	.098	.116	.227
6.8CB	.389	.337	.112	.212	-.086	.130
7.1EB	.519	.549	-.148	-.122	.003	.231
7.2EB	.587	.208	.230	.335	-.005	-.011
7.3EB	.650	.382	.081	.023	.105	-.023
7.4EB	.808	.081	.126	.120	.248	.067
7.5EB	.857	.045	.135	.122	.141	.050
Extraction Method: Principal Component Analysis.						
Rotation Method: Varimax with Kaiser Normalization.						
a. Rotation converged in 7 iterations.						

TABLE 7: STUDY 1: PRINCIPLE COMPONENT ANALYSIS

Rotated Component Matrix ^a										
	Component									
	1 (INFO SHARING)	2 (ELECTIVE)	3 (ROLE CLARITY)	4 (INROLE)	5(ROLE CLARITY)	6 (CITIZENSHIP)	7 (INROLE)	8 (CITIZENSHIP)	9(INROLE)	10
IRQ5_1	.172	.072	.238	.133	-.045	-.072	.824	.073	.089	.030
IRQ5_2	.107	.072	.058	.333	.074	.056	.772	.000	.272	-.007
IRQ5_3	-.028	.115	.159	.692	.111	-.088	.089	-.110	.206	.017
IRQ5_4	-.147	-.118	-.024	.666	.307	.231	.310	-.011	-.219	.069
IRQ5_5	.180	-.017	.077	.695	.089	.053	.136	.131	.174	-.093
IRQ5_6	-.032	-.025	.186	.766	.185	-.111	.019	.205	.072	.112
IRQ5_7	.038	-.022	.052	.277	.318	.297	.215	-.184	.638	.142
IRQ5_8	.074	.162	.030	.273	.217	.079	.269	.022	.779	-.080
IRQ5_9	.049	.180	-.139	.412	.272	.102	.277	.356	.196	-.295
CITIQ6_1	.186	.337	.081	-.093	.117	.781	-.012	.216	.056	.056
CITIQ6_2	.249	.323	.162	-.020	.077	.758	.044	-.060	.075	.146
CITIQ6_3	.334	.142	.270	.144	-.008	.495	-.066	.260	.400	.047
CITIQ6_4	.287	.351	.294	.082	.038	.610	-.002	.212	.121	-.011
CITIQ6_5	.151	.185	.026	.218	.080	.259	.283	.689	-.072	-.018

CITIQ6_6	.064	.061	.118	.032	-.023	.060	-.078	.830	-.011	.110
ELEQC7_1	.051	.584	.017	-.155	.295	-.002	.284	.223	.219	.299
ELEQC7_2	.266	.658	.241	-.068	.027	.282	-.051	.101	.059	.001
ELEQC7_3	.175	.762	.142	.040	.035	.252	.026	-.044	-.020	-.162
ELEQC7_4	.372	.459	.067	.074	-.014	.233	.204	.119	-.061	.560
ELEQC7_5	.129	.814	.062	-.050	.124	.218	.181	.087	-.018	.213
INFOQ8_1	.598	.402	.274	.094	.038	.164	.065	-.070	.163	-.003
INFOQ8_2	.460	.602	.308	.308	-.088	.074	-.233	.058	.178	.139
INFOQ8_3	.454	.567	.313	.352	-.065	.131	-.263	-.006	.140	.162
INFOQ8_4	.453	.155	.134	.098	-.006	.297	-.103	.184	.090	.531
INFOQ8_5	.606	.201	.323	-.007	.119	.227	.035	.166	.064	.281
INFOQ8_6	.344	.340	.340	-.020	.039	.369	-.072	.296	.232	.204
INFOQ8_7	.318	.683	.112	.069	.156	.118	.058	.133	.080	.004
INFOQ8_8	.887	.267	.155	.029	.076	.124	.109	.033	.004	.031
INFOQ8_9	.892	.215	.161	-.017	.053	.125	.107	.079	.030	.026
INFOQ8_10	.890	.146	.156	-.042	.137	.178	.133	.082	.015	.047
ROLEQ9_1	.293	.090	.725	.158	.160	.141	.172	-.068	.074	.249
ROLEQ9_2	.321	.243	.595	-.053	.061	-.022	.021	.077	.338	.160
ROLEQ9_3	.127	.177	.785	.116	.310	.042	.166	.180	-.010	.003
ROLEQ9_4	.232	.128	.793	.188	.101	.204	-.047	.049	-.020	.043

ROLEQ9_5	.137	.183	.659	.076	.277	.224	.168	.029	-.065	-.253
ROLEQ9_6	.278	.090	.329	.193	.517	.133	.029	.171	.211	-.192
ROLEQ9_7	.121	.101	.400	.203	.734	.114	.088	-.094	.047	-.049
ROLEQ9_8	-.012	.072	.302	.240	.776	.025	-.028	-.024	.109	-.003
ROLEQ9_9	.083	.088	.006	.098	.835	.011	-.007	.075	.105	.080
Extraction Method: Principal Component Analysis.										
Rotation Method: Varimax with Kaiser Normalization.										
a. Rotation converged in 11 iterations.										

TABLE 8: STUDY 2: PRINCIPLE COMPONENT ANALYSIS

Rotated Component Matrix ^a					
	Component				
	1	2	3	4	5
IRQ5_3	.151	.245	.009	-.136	.661
IRQ5_4	.050	-.223	-.025	.154	.768
IRQ5_5	.087	.204	-.035	.077	.719
IRQ5_6	.180	.172	-.073	-.099	.778
IRQ5_9	.027	-.158	.312	.151	.632
CITIQ6_1	.110	.106	.350	.833	-.038
CITIQ6_2	.198	.181	.315	.758	-.009
CITIQ6_3	.239	.404	.070	.616	.176
CITIQ6_4	.290	.284	.262	.698	.103
ELEQ7_1	.101	.071	.736	.096	.063
ELEQ7_2	.257	.329	.618	.290	-.099
ELEQ7_3	.173	.215	.692	.212	.015
ELEQ7_4	.065	.471	.520	.286	.054
ELEQ7_5	.117	.207	.838	.233	.006
ROLEQ9_1	.769	.310	.079	.151	.152
ROLEQ9_2	.620	.421	.226	.051	-.028
ROLEQ9_3	.857	.064	.199	.086	.209
ROLEQ9_4	.747	.309	.031	.224	.133
ROLEQ9_5	.779	-.058	.158	.221	.135
INFOQ8_1	.344	.517	.347	.240	.050
INFOQ8_2	.243	.779	.370	.153	.149
INFOQ8_3	.247	.773	.338	.184	.179
INFOQ8_4	.104	.624	.056	.432	.008
INFOQ8_5	.402	.478	.244	.352	-.009
Extraction Method: Principal Component Analysis.					
Rotation Method: Varimax with Kaiser Normalization.					

TABLE 9: RELIABILITY ANALYSIS FOR FINAL SCALE

No.	Construct	Cronbach's Alpha	Number of Items
1	In-role Behavior	.769	5
2	Citizenship Behavior	.869	4
3	Elective Behavior	.847	5
4	Information Sharing	.870	5
5	Role Clarity	.874	5

TABLE 10: CORRELATION MATRIX FOR FINAL SCALE

	5.1IR	5.2IR	5.3IR	5.4IR	5.5IR	5.6IR	5.7IR	5.8IR	5.9IR	6.1CB	6.2CB	6.3CB	6.4CB	6.5CB	6.6CB	6.7CB	6.8CB	7.1EB	7.2EB	7.3EB	7.4EB	7.5EB	8.1Inf	8.2Inf	8.3Inf	8.4Inf	8.5Inf	8.6Inf	8.7Inf
5.1IR	1	.588 ^{**}	.303 ^{**}	.399 ^{**}	.462 ^{**}	.364 ^{**}	.213	.179	.336 ^{**}	.096	.345 ^{**}	.230 [†]	.240 [†]	.111	.195	.532 ^{**}	.112	.440 ^{**}	.140	.318 ^{**}	.137	.172	.178	-.153	-.068	-.113	.364 ^{**}	.035	.061
5.2IR		1	.552 ^{**}	.426 ^{**}	.614 ^{**}	.369 ^{**}	.147	.190	.296 ^{**}	.322 ^{**}	.383 ^{**}	.273 [†]	.231 [†]	.203	.156	.409 ^{**}	.272 [†]	.231 [†]	.288 [†]	.216	.036	.119	.288 [†]	.094	-.246 [†]	.175	.122	.307 ^{**}	.131
5.3IR			1	.212	.407 ^{**}	.404 ^{**}	.208	.160	.383 ^{**}	.284 [†]	.335 ^{**}	.280 [†]	.110	.201	.240 [†]	.364 ^{**}	.226 [†]	.147	.580 ^{**}	.202	.198	.163	.284 [†]	.231 [†]	.370 ^{**}	.235 [†]	.121	.255 [†]	.233 [†]
5.4IR				1	.554 ^{**}	.489 ^{**}	.239 [†]	.167	.418 ^{**}	.035	.148	.072	.234 [†]	.310 ^{**}	.050	.242 [†]	.271 [†]	.199	.065	.247 [†]	.062	.162	.058	-.097	-.176	-.103	-.057	-.020	.007
5.5IR					1	.389 ^{**}	.282 [†]	.275 [†]	.454 ^{**}	.229 [†]	.401 ^{**}	.285 [†]	.273 [†]	.432 ^{**}	.247 [†]	.337 ^{**}	.221	.269 [†]	.230 [†]	.418 ^{**}	.234 [†]	.200	.204	.015	.152	.110	-.037	.165	.072
5.6IR						1	.350 ^{**}	.392 ^{**}	.535 ^{**}	.267 [†]	.289 [†]	.359 ^{**}	.247 [†]	.290 [†]	.212	.292 [†]	.192	.115	.368 ^{**}	.265 [†]	.212	.217	.000	.150	.084	-.051	.105	-.033	.121
5.7IR							1	.781 ^{**}	.414 ^{**}	.346 ^{**}	.353 ^{**}	.306 ^{**}	.268 [†]	.281 [†]	.381 ^{**}	.175	.119	.175	.267 [†]	.223	.285 [†]	.144	.321 ^{**}	.170	.158	.321 ^{**}	.310 ^{**}	.158	-.017
5.8IR								1	.343 ^{**}	.382 ^{**}	.379 ^{**}	.335 ^{**}	.260 [†]	.178	.308 ^{**}	.239 ^{**}	.207	.169	.174	.153	.148	.052	.183	.163	.150	.213	.135	.060	-.014

5.9IR		1	.418"	.336"	.351"	.344"	.461"	.463"	.213	.045	.071	.299"	.378"	.334"	.307"	.145	.190	.064	-.131	.059	-.098	-.033
6.1CB		1	.614"	.689"	.485"	.348"	.395"	.367"	.238"	.149	.471"	.290"	.365"	.353"	.093	.259"	.325"	.197	.032	.174	-.013	
6.2CB		1	.628"	.441"	.354"	.363"	.471"	.247	.233"	.313"	.342"	.204	.260"	.107	.107	.212	.178	.129	.099	-.038		
6.3CB		1	.600"	.354"	.370"	.562"	.166	.342"	.403"	.502"	.300"	.299"	-.062	.104	.186	.166	.118	.058	-.136			
6.4CB		1	.571"	.321"	.376"	.157	.604"	.169	.411"	.366"	.450"	-.068	-.008	-.055	.024	.109	-.008	.081				
6.5CB		1	.392"	.220	.301"	.307"	.347"	.390"	.427"	.478"	.042	.160	.023	.068	-.093	-.011	.063					
6.6CB		1	.206	.091	.046	.164	.239"	.427"	.330"	.210	.116	.063	.136	.287"	.145	-.001						

6.7CB		1	.483 ⁺	.507 ⁺	.260 ⁺	.382 ⁺	.290 ⁺	.333 ⁺	.015	-.028	.064	.142	.200	.121	.061
6.8CB		1	.223	.289 ⁺	.015	.214	.233 ⁺	.187	.107	.093	.343 ⁺	-.047	.274 ⁺	.183	
7.1EB		1	.048	.254 ⁺	.345 ⁺	.316 ⁺	-.082	-.297 ⁺	-.239 ⁺	.069	.167	.019	.155		
7.2EB		1	.331 ⁺	.456 ⁺	.385 ⁺	.254 ⁺	.501 ⁺	.513 ⁺	.275 ⁺	.034	.255 ⁺	.260 ⁺			
7.3EB		1	.316 ⁺	.296 ⁺	-.010	.126	.107	.046	-.036	-.073	-.024				
7.4EB		1	.772 ⁺	.175	.234 ⁺	.132	.166	.213	.072	.363 ⁺					
7.5EB		1	.200	.214	.168	.132	.181	.014	.400 ⁺						
8.1Info		1	.448 ⁺	.576 ⁺	.507 ⁺	.523 ⁺	.620 ⁺	.296 ⁺							
8.2Info		1	.777 ⁺	.269 ⁺	.118	.384 ⁺	.277 ⁺								

8.3Inf o		1	.407 ⁺	.181	.468 ⁺	.293 ⁺
8.4Inf o			1	.209	.686 ⁺	.120
8.5Inf o				1	.441 ⁺	.262 ⁺
8.6Inf o					1	.269 ⁺
8.7Inf o						1

TABLE 11: TABLE OF MEANS AND STANDARD DEVIATIONS-CROSS SECTIONAL DATA

	Construct Name	Study 1		Study 2 Wave 1		Study 2 Wave 2		Study 2 Wave 3	
		Mean	Standard Deviation	Mean	Standard Deviation	Mean	Standard Deviation	Mean	Standard Deviation
1	<i>Assessment of Progress towards Goals</i>	5.83	0.85	5.91	1.19	5.69	1.00	5.53	1.24
	IV*: Perceived Service Quality	6.15	1.06	5.62	1.21	5.33	1.30	5.20	1.40
2.	<i>In-role Performance</i>	5.57	1.26	5.51	1.07	5.25	1.22	5.23	1.24
	IV: Assessment of progress towards goals	5.83	0.85	5.91	1.19	5.69	1.01	5.53	1.24
	IV: Perceived Service Quality	6.15	1.06	5.61	1.21	5.32	1.30	5.20	1.40
	IV: Role Clarity	5.89	1.18	5.91	1.00	5.53	1.12	5.47	1.28
	IV: Trust	5.87	1.15	5.68	1.19	5.45	1.17	5.47	1.28
	IV: Positive Emotions	5.41	1.15	5.99	1.07	5.65	1.23	5.68	1.39
	IV: Negative Emotions	2.16	1.57	2.78	2.10	3.05	2.13	2.98	2.26
3.	<i>Extra-role Performance (Citizenship Behavior)</i>	6.17	1.08	5.77	1.12	5.56	1.22	5.72	1.20
	IV: Assessment of progress towards goals	5.83	0.85	5.91	1.19	5.69	1.01	5.53	1.24
	IV: Perceived Service Quality	6.15	1.06	6.62	1.21	5.33	1.30	5.20	1.40
	IV: Role Clarity	5.89	1.18	5.91	1.00	5.53	1.12	5.47	1.28
4.	<i>Extra-role Performance (Elective Behavior)</i>	5.53	1.52	4.70	1.45	4.65	1.43	4.81	1.48
	IV: Assessment of progress towards goals	5.83	0.85	5.91	1.19	5.69	1.01	5.53	1.24
	IV: Perceived Service Quality	6.15	1.06	5.62	1.21	5.33	1.12	5.20	1.40
	IV: Role Clarity	5.89	1.18	5.91	1.00	5.53	1.12	5.47	1.28

5.	<i>Information Sharing</i>	<i>5.57</i>	<i>1.25</i>	<i>5.00</i>	<i>1.41</i>	<i>4.85</i>	<i>1.39</i>	<i>5.10</i>	<i>1.38</i>
	IV: Assessment of progress towards goals	5.83	0.85	5.91	1.19	5.69	1.01	5.53	1.24
	IV: Perceived Service Quality	6.15	1.06	5.62	1.21	5.33	1.30	5.20	1.40

*IV=Independent Variable affecting the construct

TABLE 12: TABLE OF MEANS AND STANDARD DEVIATIONS-
LONGITUDINAL DATA

	Construct Name	Study 2 wave 2 as a function of Study 2 wave 1		Study 2 wave 3 as a function of Study 2 wave 2	
		Mean	Standard Deviation	Mean	Standard Deviation
1.	<i>Perceived Service Quality (t2)</i>	5.47	1.11	5.28	1.36
	IV*: In-role Behavior	5.24	1.24	5.36	1.21
	IV: Extra-role Behavior (Citizenship Behavior)	5.48	1.33	5.67	1.16
	IV: Extra-role Behavior (Elective Behavior)	4.58	1.41	4.88	1.37
	IV: Information Sharing	4.80	1.39	4.93	1.42
2.	<i>Extra-role Behavior- Citizenship Behavior (t2)</i>	5.48	1.33	5.68	1.20
	IV: Assessment of Progress towards Goals	5.87	1.15	5.87	1.15
	IV: Perceived Service Quality	5.76	1.06	5.87	1.15
	IV: Role Clarity	5.97	0.91	5.87	1.15
	IV: Trust	5.85	1.03	5.87	1.15
	IV: Positive Emotions	6.04	0.93	5.87	1.15
	IV: Negative Emotions	2.54	1.97	5.87	1.15
3.	<i>Extra-role Behavior- Elective Behavior (t2)</i>	4.58	1.41	4.78	1.40
	IV: Assessment of Progress towards Goals	5.87	1.15	5.87	1.15
	IV: Perceived Service Quality	5.76	1.06	5.87	1.15
	IV: Role Clarity	5.97	0.91	5.87	1.15
	IV: Trust	5.85	1.03	5.87	1.15
	IV: Positive Emotions	6.04	0.93	5.87	1.15
	IV: Negative Emotions	2.54	1.97	5.87	1.15
4.	<i>Information Sharing (t2)</i>	4.80	1.39	5.10	1.35
	IV: Assessment of Progress towards Goals	5.87	1.15	5.52	1.06
	IV: Perceived Service Quality	5.76	1.06	5.28	1.33

* IV=Independent Variable affecting the construct

Figure 1: Overarching Theoretical Model

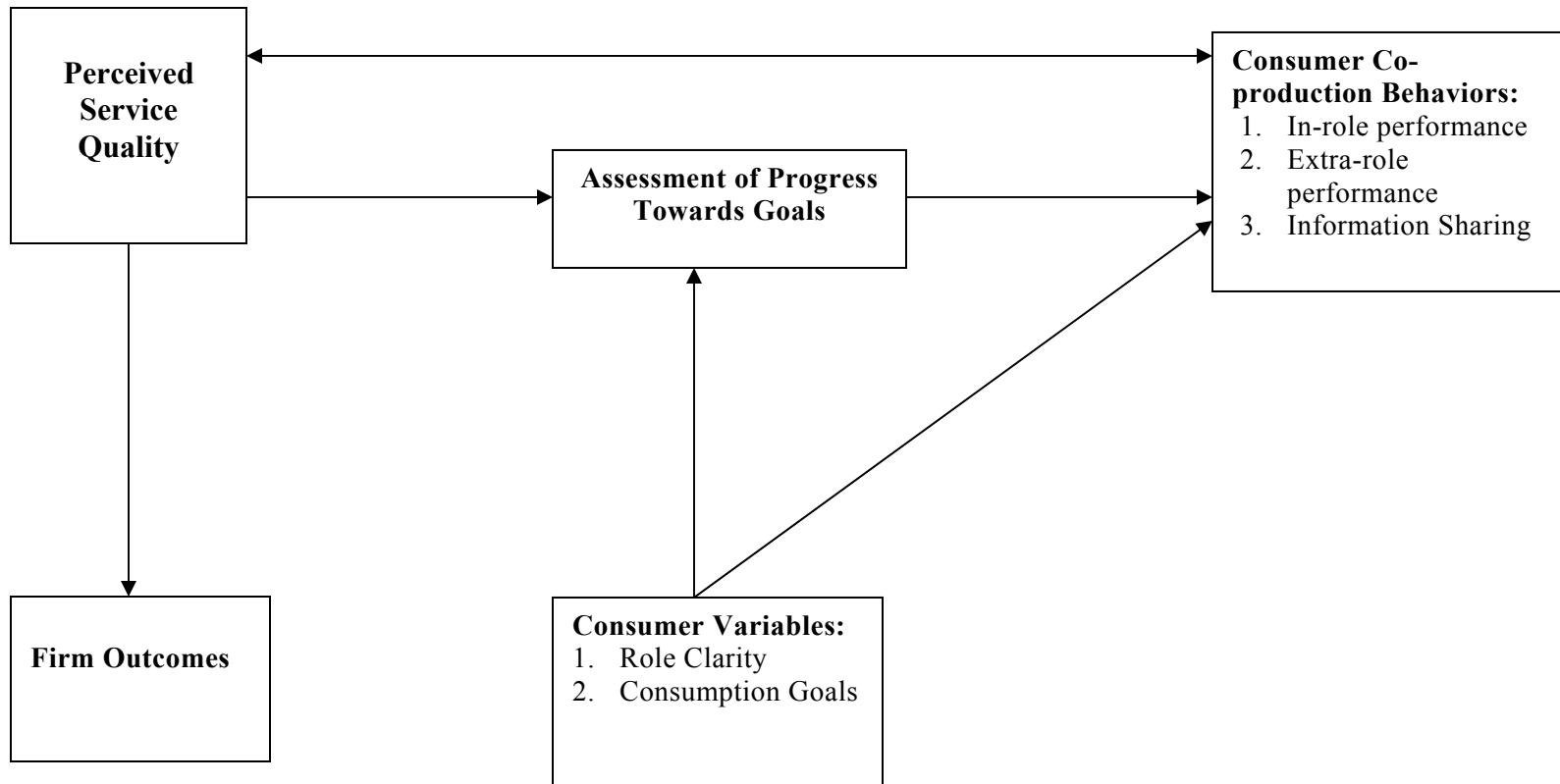
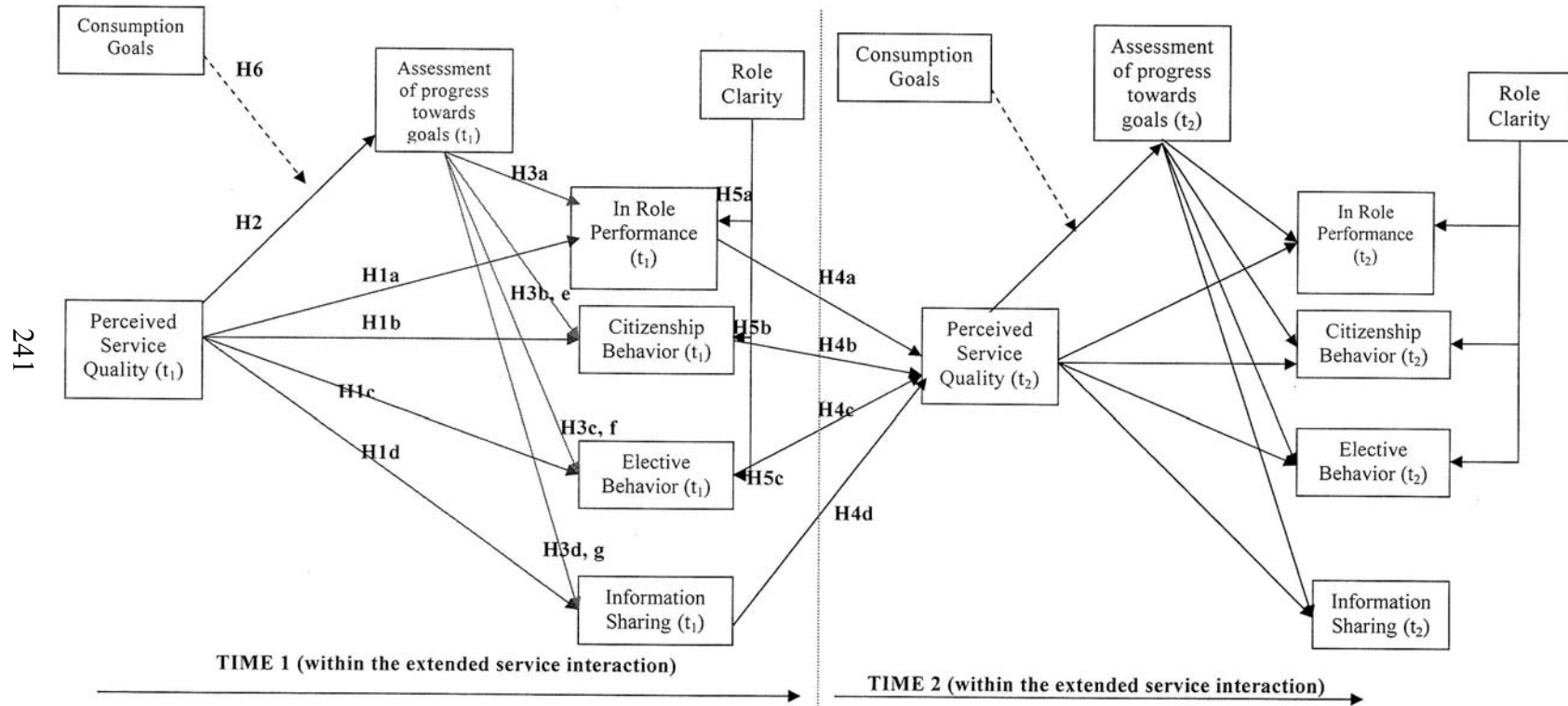


FIGURE 2 – CUSTOMER CO-PRODUCTION BEHAVIORS DURING EXTENDED SERVICE INTERACTIONS¹



241

¹ Covariates to be tested: Emotions, and Trust between the consumer and the service provider. Though not depicted on the diagram, it is proposed that service quality (t1) will influence customer participation behaviors and assessment of progress towards goals in t2; assessment of progress towards goals will influence perceived service quality and customer participation behaviors in t2.