

THE DARK SIDE OF TRUST AND MECHANISMS  
TO MANAGE IT

By  
Sanjukta Kusari

Dissertation  
Submitted to the Faculty of the  
Graduate School of Vanderbilt University  
in partial fulfillment of the requirements

for the degree of  
DOCTOR OF PHILOSOPHY

in  
Management

May, 2010

Nashville, Tennessee

Approved:

Professor Steve Hoeffler

Professor Dawn Iacobucci

Professor Jennifer Escalas

Professor Steve Posavac

Professor Jagdip Singh

Copyright © 2010 by Sanjukta Kusari

All Rights Reserved

To,  
my amazing son, Samir, with hope  
my infinitely supportive husband, Srin, with love  
and my ever-encouraging and optimistic mom, with gratitude.

## ACKNOWLEDGEMENTS

It gives me great pleasure to acknowledge the help and encouragement that others have provided me in my doctoral journey. First and foremost, I would like to thank my chair and advisor, Prof. Steve Hoeffler- his support and encouragement was priceless. I could never have reached this stage, if not for him. He not only gave me research support, but also gave me guidance and structure, at the time I was at a cross-road, and for that, I will forever be indebted to him.

I am also thankful to Prof. Dawn Iacobucci, who has been simply amazing with her boundless support and encouragement. She offered to read early drafts of this manuscript, and helped me with all the analysis, providing me with invaluable inputs and suggestions all along, and for that I am forever grateful.

I would also like to express my heartfelt gratitude to Prof. Jagdip Singh, my mentor and teacher, who not only taught me how to do research but has stood by me through difficult times and always pushed me to get the better of adversities.

I would like to give special thanks to Profs. Jenny Escalas and Steve Posavac, for always finding the time to give me advice and encouragement, despite their busy schedules.

Special thanks to my friend and dissertation sister, Adrienne, for her steadfast support and belief in me, and for egging me on when I was down.

Finally, I owe a special debt to my family- my parents and especially, my mom, who taught me that I could do anything if I believed in myself; my brother who supported my decision to embark on this long journey that is Ph.D., my son, Samir, for understanding and not being upset with me, for all those times I couldn't pay attention to

him, especially in these last few months. I would especially like to thank my wonderful husband, Srinu, for his never-ending patience, support, encouragement, and love. I could not have asked for a better partner in life!

And last but not the least, I thank God for always looking after me, for ironing out all obstacles in my path, and for making it possible for me to get here today.

## TABLE OF CONTENTS

	Page
DEDICATION .....	iii
ACKNOWLEDGEMENTS .....	iv
LIST OF FIGURES .....	viii
LIST OF TABLES .....	ix
 Chapter	
I INTRODUCTION .....	1
II LITERATURE REVIEW.....	7
Trust Defined.....	7
Why is Trust Important? .....	10
Multilevel and Multidisciplinary Trust .....	13
Trust, Trustworthiness and the Basis of Trust .....	16
Why am I Studying Trust? .....	20
Dark Trust in Relationship Marketing .....	20
Optimal Trust .....	24
Using the Lens of Distrust .....	26
III CONCEPTUAL MODEL AND HYPOTHESES .....	34
Antecedents to Trust .....	35
Curvilinear Mechanisms and Multidimensional Trust.....	39
Moderating Effects of Monitoring and Perceived Supplier Relationship Orientation on Performance Outcomes.....	46
Relationship Lifecycle as an Overall Moderator.....	51
Impact of Relationship Lifecycle on Relationships Moderated by Monitoring.....	53
Impact of Relationship Lifecycle on Relationships Moderated by Perceived Supplier Relationship Orientation.....	55
IV PILOT STUDY.....	57
Research Activity.....	58
Interview Guide.....	58
Data Analysis and Interpretation.....	59
Field Study Findings.....	60

V	STUDY 1: TEST OF THE CONCEPTUAL MODEL.....	66
	Empirical Context and Data Collection.....	66
	Procedure.....	67
	Sample Characteristics.....	68
	Questionnaire Development and Measures.....	69
	Measure Validation.....	72
	Hypotheses Tests and Results.....	74
	Antecedents to Trust.....	74
	Curvilinear Mechanisms and Multidimensional Trust.....	75
	Moderating Effects.....	76
	Discussion.....	77
VI	STUDY 2: TEST OF THE EXTENDED CONCEPTUAL MODEL.....	81
	Empirical Context and Data Collection.....	81
	Procedure.....	82
	Sample Characteristics.....	82
	Questionnaire Development and Measures.....	83
	Measure Validation.....	85
	Hypotheses Test and Results.....	87
	Antecedents to Cognitive and Affective Trust .....	88
	Curvilinear Mechanisms and Multidimensional Trust .....	91
	Moderating Effects of Relationship Lifecycle.....	92
	Discussion .....	97
VII	GENERAL DISCUSSION AND IMPLICATIONS.....	104
	Significance of the “Dark Side” of Trust .....	105
	Antecedents to Trust.....	106
	Curvilinear Mechanisms and Multidimensional Trust.....	109
	Impact of Moderating Mechanisms and Relationship Lifecycle.....	111
	Implications for Management.....	116
	Limitations and Future Research Directions.....	117
	Appendix	
	A. INTERVIEW SCRIPT (Pilot Study).....	145
	B. SAMPLE TRANSCRIPT (Pilot Study).....	149
	C. MEASUREMENT ITEMS FOR STUDY CONSTRUCTS (Study 1).....	160
	D. EMAIL AND BRIEF SURVEY SENT BY eLAB TO CONSUMER PANEL.....	163
	E. MEASUREMENT ITEMS FOR STUDY CONSTRUCTS (Study 2).....	164
	REFERENCES.....	168

## LIST OF FIGURES

Figure	Page
1. Combined Trust/ Distrust Model (Lewicki, Tomlinson and Gillespie 2006).....	120
2. Conceptual Model.....	121
3. Influence of Trust on Supplier Performance for Different Levels of Monitoring (Study 1).....	122
4. Quadratic Effects of Cognitive/ Affective Trust on Performance and Satisfaction (Study 2).....	123
5. Quadratic Effects of Cognitive/ Affective Trust on Switching Intentions and Share of Wallet (Study 2).....	124
6. Quadratic Effects of Cognitive/ Affective Trust on Promoter Score(Study 2).....	125
7. Cognitive/Affective Trust by Monitoring Interaction on Satisfaction in the Build-up Phase (Study 2).....	126
8. Cognitive/Affective Trust by Monitoring Interaction on Promoter Score in the Build-up Phase (Study 2).....	127
9. Cognitive Trust by Monitoring Interaction on Satisfaction and Share of Wallet in the Decline Phase(Study 2).....	128
10. Affective Trust by Monitoring Interaction on Share of Wallet in the Maturity Phase (Study 2).....	129
11. Cognitive Trust by Perceived Supplier Relationship Orientation Interaction on Share of Wallet in the Decline Phase(Study 2).....	130
12. Affective Trust by Perceived Supplier Relationship Orientation Interaction on Performance and Satisfaction in the Decline Phase (Study 2).....	131



## LIST OF TABLES

Table		Page
1. Characteristics of Respondents(Study 1).....		132
2. Estimated Factor Loadings and Measurement Properties for Study Constructs (Study 1).....		133
3. Descriptive Statistics and Correlation Matrix (Study 1).....		134
4. Estimated Coefficients for the Various Relationships Proposed in the Model (Study 1).....		135
5. Characteristics of Respondents(Study 2).....		137
6. Estimated Factor Loadings and Measurement Properties for Study Constructs (Study 2) .....		138
7. Descriptive Statistics and Correlation Matrix (Study 2).....		139
8. Antecedents to Cognitive and Affective Trust(Study 2).....		140
9. Mediating Influence of Cognitive and Affective Trust on Outcome Variables (Study 2).....		141
10. Estimated Coefficients for Hypothesized Quadratic Relationships between Cognitive/ Affective Trust and Outcomes (Study 2).....		142
11. Estimated Coefficients for Moderating Relationships: Cognitive/Affective Trust X Monitoring X Relationship Lifecycle(Study 2).....		143
12. Estimated Coefficients for Moderating Relationships: Cognitive/Affective Trust X Perceived Supplier Relationship Orientation X Relationship Lifecycle (Study 2).....		144

## CHAPTER I

### INTRODUCTION

*Every truth has two sides. It is well to look at both sides before we commit ourselves to either.*

**Aesop**

Much of today's business environment is characterized by relational exchanges. These relationships can take many forms: relationships between companies and their customers, companies and their employees, or companies in business with other companies, like that of a buyer- supplier, manufacturer- distributor, wholesaler-retailer and so on (Morgan and Hunt 1994). These are called "relational" because of the intent to continue the relationship into the future, that is, the parties involved are willing to invest in long term relationships in the hope of maximizing mutual benefits over a period of time, even if it implies sacrificing profits in the short-term (Crosby, Evans and Cowles 1990). These kind of collaborative relationships represent a source of competitive advantage and consequently, there has been growing acknowledgement among scholars and marketers about the need to manage inter-firm relationships strategically (Dwyer, Schurr and Oh 1987; Weitz and Jap 1995; Morgan and Hunt 1994).

This notion is true in the realm of buyer-supplier relationships as well. It is vital to improve the efficiency, effectiveness and productivity of working relationships in order to be successful. Consequently, an increasing number of manufacturing firms are moving away from supply decisions based primarily upon price, and relying on a decreased number of suppliers, trying to forge closer and long-term relationships with

them (Kotabe, Martin and Domoto 2003, Jeffries and Reed 2000). In this context, researchers have studied a plethora of factors that have been used to model relational exchanges. Some of these factors are shared values (Morgan and Hunt 1994, Wilson 1995), trust (Moorman, Zaltman and Deshpande 1992, Anderson and Weitz 1989), commitment (Dwyer, Schurr and Oh 1987, Moorman et al 1992), cooperation (Anderson and Narus 1990, Morgan and Hunt 1994), interdependence and power (Anderson and Narus 1984, Ganesan 1994). Among these factors, trust has assumed a central role in the success of long-term relationships in business-to-business marketing contexts (Doney and Cannon 1997; Morgan and Hunt 1994; Anderson and Narus 1990; Zaheer, McEvily and Perrone 1998). In fact, the commitment-trust theory of relationship marketing (Morgan and Hunt 1994) has served as the default model of relationship research in the last fifteen years.

The traditional rational model assumes that arms-length exchanges often involve significant transaction costs associated with specifying contract terms, monitoring the performance of the other party, and otherwise protecting oneself against breach or other opportunistic behavior by the other party (Dwyer, Schurr and Oh 1987). The trust literature suggests that this model wrongfully ignores the essential role of trust for a healthy, vibrant relationship (Morgan and Hunt 1994; Mayer, Davis and Schoorman 1995). Trust can substantially reduce the inefficiencies associated with agency relationships, it permits transactions to go forward on the basis of a handshake rather than a complex formal contract, and moreover it reduces the need to expend resources on constant monitoring of employees and business partners. Some of its other myriad benefits are a positive

impact on cooperation, expectations of continuity, future purchase intentions, customer loyalty and commitment (Anderson and Weitz 1989; Doney and Cannon 1997; Anderson and Narus 1990; Crosby, Evans and Cowles 1990; Jap and Ganesan 2000).

However, recent studies in the relationship marketing area, including a meta-analysis based on more than 38,000 relationships, suggest that trust and commitment *do not* mediate all the paths to performance outcomes, implying that there are other mechanisms that play a vital role in this context (Palmatier et al. 2009; Palmatier et al. 2007; Jap and Anderson 2003). In fact, while trust has a significant impact on relational outcomes that are attitudinal and perceptual (like loyalty, cooperation, and future purchase intentions), there *is little* empirical support in extant literature that demonstrate its significant positive effects on objective performance outcomes like customer retention, firm profitability, sales performance and sales volumes (Dirks and Ferrin 2001). Further, there is the growing thought that high levels of trust may actually be detrimental to a relationship because it may result in increased opportunism, higher expectations, increased dissatisfaction and less objectivity (Anderson and Jap 2005, Moorman, Zaltman and Deshpande 1992).

According to Anderson and Jap (1995, p. 75), “relationships that appear to be doing well are often the most vulnerable to the forces of destruction that are quietly building beneath the surface of the relationship.” This suggests that while trust has a sunny side, it is a double-edged sword in that it carries the seed of destruction within. If there is too little, then the ability to enjoy relational rents and payoffs is curtailed, but if there is too much, it may breed complacency and sub-optimal outcomes. I refer to this

phenomenon as the “dark” side of trust. Scholars have previously overlooked the problem of optimizing trust because they have mostly focused on its positive consequences. Most importantly, scholars fail to appreciate the routine co-existence of trust and distrust in relationships by incorrectly assuming that trust and distrust are two ends of a single attitudinal spectrum (Lewicki, McAllister and Bies 1998). While they correctly point out that trust can be fragile, they often tend to overplay the significance of this fact by assuming that the introduction of any element of distrust in a relationship tends to undermine all the trust in that relationship. The problem with this assumption is that people routinely trust one another in some contexts but not in other contexts. Therefore, it is possible to compartmentalize the areas of trust and distrust, and continue relationships with contextual trust.

In this research, I employ the useful distinction between trust and distrust in understanding its joint impact on buyer- supplier performance outcomes. Past research has investigated the role of various relational safeguards such as relationship specific investments, explicit contracts and relational norms in influencing relationship satisfaction (Jap and Ganesan 2000; Jap and Anderson 2003). However, few studies have considered the role of monitoring mechanisms in combination with trust mechanisms in mitigating the onset of the dark side of trust in buyer- supplier relationships. In this study, I use monitoring mechanisms to reflect the distrust that the buyer has in the exchange relationship instead of measuring the buyer’s distrust directly. That is, if I distrust you in some aspect, I will monitor and verify your actions and behaviors to protect myself against potential opportunistic behavior that you might engage in, in the future. Accordingly, I propose that trust may be optimized by

combining it with monitoring mechanisms to enhance the range of its functionality (“trust but verify”). I also propose that the buyer’s perception of the supplier’s relationship orientation moderates the effect of trust on performance outcomes. I test out these hypotheses by using a multidimensional conceptualization of trust, that is, I examine how monitoring and perceived supplier relationship orientation interact with cognition-based and affect-based trust to influence supplier performance outcomes.

Finally, several researchers have suggested that relationships go through different phases characterized by distinct behaviors, orientations and outcomes (Dwyer, Schurr and Oh 1987; Jap and Ganesan 2000). I examine this notion through the buyer-supplier relationship lifecycle by proposing that the efficacy of the combined trust-monitoring mechanism is contingent on the phase of the relationship lifecycle (i.e. exploration, build-up, maturity and decline).

The purpose of my dissertation is three-fold. My first objective is to investigate the notion of the dark side of trust, and advance an understanding of when and how it presents itself in buyer-supplier relationships. To this end, I conducted in-depth interviews with managers engaged in buyer roles to explore the dysfunctional effects of high trust levels. Second, I empirically examine the incremental influence of trust on performance outcomes by modeling it through curvilinear mechanisms, and use a multidimensional conceptualization of trust to investigate which dimension of trust (i.e. cognition-based trust or affect-based trust) is more vulnerable to the dark side of trust. Third, I explore moderating conditions that enhance the effectiveness of cognitive and affective trust on performance outcomes across different phases of the buyer-supplier relationship lifecycle.

My research suggests that high levels of trust are associated with potential negative consequences by making relational partners vulnerable and exposing them to opportunism. Additionally, my study provides empirical evidence to support: 1) the differential impact of cognitive and affective trust on performance outcomes, 2) the curvilinearities associated with the influence of multidimensional trust on outcomes, and 3) the beneficial moderating effects of monitoring mechanisms as it interacts distinctly with cognitive trust and affective trust, contingent on a specific phase of the buyer-supplier relationship lifecycle. Therefore, my contribution to extant research is to capture the dark side of trust in buyer-supplier relationships and integrate this within the existing trust framework. Moreover, I offer preliminary prescriptive advice for managing and mitigating the dark side of trust in ongoing relational exchanges.

The rest of the dissertation is organized as follows. In the next chapter (chapter 2), I discuss the background literature on trust and the notion of the "dark" side of trust. Then I present my conceptual framework and research hypotheses in chapter 3. This is followed by the pilot (qualitative) study in chapter 4 that identifies different facets of the dark side of trust. The subsequent chapters outline studies 1 (chapter 5) and 2 (chapter 6), which describe the methods and results of hypotheses-testing. Finally, in chapter 7, I discuss the implications of my study and conclude by outlining study limitations and an agenda for further research.

## CHAPTER II

### LITERATURE REVIEW

#### **Trust Defined**

Functioning societies rely heavily on trust among members (Fukuyama 1998), and it is natural to expect the same to be true in marketing communities. Trust is an essential component of human relationships and a fundamental building block of healthy societies. It has been the subject of extensive discussion across a variety of disciplines including sociology, psychology, philosophy, law, economics, political science, medicine and management (Smith and Barclay 1997; Morgan and Hunt 1994; Lewis and Weigert 1985; Mayer, Davis and Schoorman 1995; Williamson 1993). However, despite its importance, it is not easy to define it with precision. In their interdisciplinary survey of research on trust, Rousseau, Sitkin, Burt and Camerer (1998) surmised that although definitions of trust vary greatly across scholarly efforts, scholars across different disciplines seemed to fundamentally agree on the meaning of trust, and offered the following general definition- “trust is a psychological state comprising the intention to accept vulnerability based upon positive expectations of the intentions or behavior of another” (p. 395). Another widely cited definition of trust comes from Mayer, Davis and Schoorman’s (1995) work on this topic. They define trust as “the willingness of a party to be vulnerable to the actions of another party based on the expectation that the other will perform a particular action important to the trustor, irrespective of the ability to monitor or



control that other party” (Mayer et al. 1995; p. 712). In the same vein, marketing academicians such as Moorman, Deshpande and Zaltman (1993) define trust as “a willingness to rely on an exchange partner in whom one has confidence” (p. 82).

Note that the critical component in all the above definitions is the “willingness to be vulnerable” which implies that, 1) the trusting party (trustor) is willing to take risk and be dependent on the actions and decisions of another party (trustee), and 2) taking risk means there is something of importance to be lost (Johnson-George and Swap 1982; Zand 1972). Thus trust entails some risk or uncertainty (McAllister 1995; Doney and Cannon 1997; Mayer et al. 1995; Moorman et al. 1992). The second notable component in these definitions is the expectation of cooperation or benevolence. Trust is based on positive expectations regarding the trustee’s intentions, motivations and behavior, or in other words, the trustor believes that the trustee is willing and able to perform that behavior (Moorman et al. 1992; Mayer et al. 1995).

The above definitions of trust also reflect the conditions that are deemed necessary for trust to exist. The first condition is risk, as trust would be unnecessary if actions could be undertaken with complete certainty and no risk (Rousseau et al. 1998; Moorman, Zaltman and Deshpande 1992). Moreover there is a reciprocal relationship between trust and risk as risk creates an opportunity for trust, which leads to risk taking, which further affirms the feeling of trust when the expected behaviors takes place (Mayer et al. 1995, Rousseau et al. 1998). The second necessary condition for trust to arise is interdependence, where the trustor depends on the trustee to do something of importance to him/ her. Inherent in these definitions is the norm of reciprocity according to which people support a social exchange partner in proportion to the perceived benefits

received from that partner (Gouldner 1960). Other researchers have also suggested that trust is a dynamic concept that may be associated with reciprocal behaviors or actions (Houston and Gassenheimer 1987; Palmatier et al. 2009).

These characteristics of trust also help to differentiate it from other terms that are often confused with it such as cooperation, confidence and predictability. Mayer et al (1995) argue that cooperation is distinct from trust because it may be brought about by external mechanisms (for e.g. pressure by a manager on the employee to work with another colleague) and it doesn't include vulnerability or risk as a characteristic. Similarly, the constructs of confidence and predictability also have missing in them the willingness to take risk in the relationship and be vulnerable (Luhmann 1988; Lewis and Weigert 1985).

Alternatively, trust has been defined as a set of shared expectations among those involved in an exchange (Macaulay 1963, Zucker 1986). This places the focus of trust in relationships between two individuals, groups or institutions, whereas the previous definitions (Mayer et al 1998; Rousseau et al 1998; McAllister 1995) conceptualize trust as a psychological state and locate trust in the individual. My working definition of trust for my dissertation is drawn from Rousseau et al's (1998) work which I adapt to the buyer-supplier context:

*Trust is the confidence of the buyer in the supplier, based on the expectation that the supplier will act in the buyer's interests and not behave in a way that is detrimental to the buyer's interests, regardless of the buyer's ability to monitor such behavior.*

## **Why is Trust Important?**

Trust is viewed as an important concept by academic researchers, business practitioners and consultants alike, and there seems to be widespread agreement on its importance in human society. For example, Blau (1964) described trust as “essential for stable social relationships” (p. 99), while according to Zucker (1986), “trust is vital for the maintenance of cooperation in society and necessary as grounds for even the most routine everyday transactions” (p. 56). Gambetta (1988) referred to trust as an essential lubricant of social interaction. Trust constitutes an important source of social capital within social systems (Fukuyama 1996), which manifests itself in “spontaneous sociability (that) refers to the myriad forms of cooperative, altruistic and extra-role behavior in which members of a social community engage, that enhance collective well-being and further the attainment of collective goals” (Kramer 1999, p. 583). McEvily and his colleagues (2003) referred to trust as an “organizing principle,” such that trust serves as a decision heuristic by conserving cognitive resources and simplifying the interpretation of information (p. 93).

Within organizations, trust provides a mechanism for effective functioning, cohesion and collaboration especially when it comes to organizations in this age that revolve around a diverse work force, more participative management styles and self-directed work teams (Mayer et al. 1995). Moreover, research has shown that there is a positive relation between trust and voluntary deference within hierarchical relationships in organizations (Tyler 1994). For example, individuals are more likely to accept outcomes even if they are unfavorable, when they have trust in the organizational authorities (Tyler 1994). Trust has also been associated with superior group processes

(e.g. higher levels of group cooperation and performance), organizational citizenship behavior, decision making, negotiation processes, conflict management (McAllister 1995; Zand 1972; Podsakoff, MacKenzie, Moorman and Fetter 1990; Dirks 1999) as well as reduced transaction costs and opportunism among transacting parties (Williamson 1993; Deutsch 1958).

In the same vein, trust is inextricably woven into the fabric of marketing. It has been identified as one of the cornerstones of relationship marketing (Morgan and Hunt 1994; Moorman et al. 1992). Morgan and Hunt (1994) identified trust along with commitment as the key to cooperative behaviors essential for successful alliances. Likewise, Das and Teng (1998, p. 492) proposed that a certain minimum level of trust was 'indispensable' for any strategic alliance to take place implying that a certain amount of trust becomes necessary for the relationship to be successful. In the sales management literature, salesperson's trust in the sales manager was found to be related to higher job satisfaction and overall performance, higher commitment to the organization and lower role conflict (Rich 1997; Lagace 1991; Brashear et al. 2003). Swan, Bowers and Richardson (1998) conducted a comprehensive literature review and concluded in their meta-analysis that trust has a significant influence on the development of positive customer attitudes, intentions and behavior.

Similarly, the centrality of trust in developing long-term relationships has been emphasized repeatedly in the marketing literature (Dwyer, Schurr and Oh 1987; Anderson and Weitz 1989; Morgan and Hunt 1994). It has been suggested that trust is the strongest governance mechanism in developing collaborative and effective relationships (Dyer and Singh 1998; Morgan and Hunt 1994). The primary argument for

this is that high levels of trust reduce reliance on formal control mechanisms which subsequently reduces transaction costs as it may be difficult to cover all contingencies in a formal contract for sustained cooperation (Noteboom, Berger and Noorderhaven 1997). In their study of customer-supplier relationships, Selnes and Sallis (2003) found that relational trust was positively associated with relational learning as effective learning between the two partners is dependent on the trust environment within the relationship domain.

Research also indicates that the presence of relational elements like trust, commitment, and relational norms enhance performance outcomes and long-term orientation in buyer-seller relationships (Noordewier, John and Nevin 1990; Lusch and Brown 1996; Anderson and Weitz 1989; Smith and Barclay 1997). According to commitment-trust theory (Morgan and Hunt 1994), commitment and trust have a positive influence on cooperation, acquiescence, functional conflict, reduced uncertainty and decreased propensity to leave the relationship, all of which contribute to overall relationship performance. The emphasis on trust in relational contexts lies in its focus on perception of a fair division of the pie of resources in the future (Jap 1999) as well as the confidence that short term inequities will be resolved over the long term (Ganesan 1994; Crosby, Evans and Cowles 1990). Partners seek predictable behavior from their relational partner so that there is some assurance and certainty about their future behaviors. This is especially true for buyers because there is much uncertainty about how their sellers will perform in the future with respect to different aspects of the exchange, such as product quality and consistency, timeliness of delivery, value received, confidentiality of information, information about future products, and so on.

Trust in the supplier helps the buyer to manage this uncertainty by believing that the supplier will act in the buyer's interest, meet buyer expectations and increase exchange efficiency (Crosby, Evans and Cowles 1990; Doney and Cannon 1997).

In summary, the scholarly volume of work applauds the value of trust in the marketing discipline, because of its myriad benefits and significant influence in enhancing relationship effectiveness between exchange partners. In the next section, I discuss trust in more detail, with special focus on the different frameworks that have been used in various disciplines to describe trust.

### **Multilevel and Multidisciplinary Trust**

Trust has been studied across various levels of analysis, therefore it is important to distinguish between *interpersonal trust*, which is the trust that exists between two individuals in separate organizations (Moorman, Deshpande and Zaltman 1993; Doney and Cannon 1997) and *organizational trust* which is the trust that exists between an individual and partner organization (Ganesan and Hess 1997; Anderson and Weitz 1989). For example, trust between two colleagues in an organization is interpersonal trust while trust between a buyer and vendor organization is organizational trust. In this dissertation, I am concerned primarily with trust as an individual-level, interpersonal trust between the buyer and supplier.

Economists like Shapiro, Sheppard and Cheraskin (1992) used a transactional framework to describe trust within a business relationship. The first stage, they suggested is *deterrence-based* trust, based on the prediction that people will do what they say they are going to do in order to avoid the negative consequences of not doing it.

This type of trust is deterrence-based because costs of breaching trust or potential punishments outweigh potential gains from trustee defection. The second is *knowledge-based* trust, which is predicated on the ability to know and understand the other party well enough to predict his or her behavior. Repeated interactions and multifaceted interactions enhance knowledge about the other individual, increasing predictability. The last stage, *identification based* trust occurs when the other party's preferences are internalized so that one party can make decisions in the other's interest.

There has been some criticism of this approach as some researchers have questioned if deterrence-based trust is really based on trust at all (Rousseau et al. 1998, Mayer et al. 1995), because it is more fear-based than based on positive intentions of the other party. For example, external mechanisms or institutional safeguards may be used to ensure that two parties cooperate with each other without necessarily trusting one another, like an employee who may appear to cooperate with a company initiative only because she works under a powerful boss who is able to punish the employee for uncooperative behavior.

Lewicki and Bunker (1995) enhanced Shapiro et al's (1992) work by suggesting that trust is not just deterrence based but also considers the benefits to be gained from a relationship. They called it *calculus* trust where individuals make rational trust choices based on conscious calculation of the costs and benefits (Coleman 1990; Williamson 1993). Trust is engendered when the trustor perceives that the trustee will perform a beneficial action, and this perception is based on credible information regarding the trustee's intentions or competence (Rousseau et al.1998). Hardin (1991) further offered the concept of *encapsulated* trust and argued that it is not only knowledge that is

important for trust but also the incentives of the trustee to honor that trust. According to Hardin, “you can more confidently trust me if you know that my own interest will induce me to live up to your expectations.... your trust then encapsulates my interests” (Hardin 1991, p. 189). Rational choice theory however has been critiqued by many researchers mainly because they have concerns about making trust decisions based on conscious calculations and purely cognitive and instrumental capacities as they do not take into account the influence of emotions and social forces (Granovetter 1985; Kramer 1999; Rousseau et al. 1998).

Sociologists on the other hand, define trust as a more general attitude or expectancy about other people and the social systems in which they are embedded, for example, networks and governance systems (Luhmann 1988; Granovetter 1985). Also referred to as *institution-based* trust, the purpose of trust then is to reduce uncertainty in institutionalized modes of interaction (Fukuyama 1996). Trust forms as obligations and expectations are fulfilled over time. However there are conflicting perspectives on this approach too, as researchers have divergent views on whether institutional factors serve as basis for trust (Gulati 1995; Fukuyama 1996) or sanctions and controls that give rise to rigidity and high levels of formalization (Sitkin and Roth 1993; Zucker 1986).

In this sense, a relational model of trust is more acceptable because it “incorporates more systematically the social and relational underpinnings of trust-related choice” (Kramer 1999, p.573). Relational trust is based on repeated interactions between the trustor and trustee, and experience from within the relationship is used to make trust judgments regarding the reliability and dependability of the trustee along with positive expectations about his or her intentions. As the parties enter into longer-term



relationships over time, emotional attachments develop between the two parties, thus developing initial arms-length transactions into relationship exchanges that are more stable and resilient (Crosby, Cowles and Evans 1990, Jap 1999). An outcome of relational trust often is that the two parties bring expanded resources to the exchange, and moreover, develop a shared identity such that they think of the other party as “us” instead of “them” (Rousseau et al. 1998, p. 400).

In my dissertation, I adopt the *relational view* of interpersonal trust, which considers the social and contextual nature of the exchange when forming (the buyer’s) expectations about the behavior of the exchange partner (supplier). In other words, trust judgments and decisions include a social and relational orientation toward others, along with calculative and instrumental considerations.

### **Trust, Trustworthiness and the Bases of Trust**

Trust and trustworthiness are two related but distinct concepts. Specifically, trust judgments reflect willingness to accept vulnerability in the face of uncertainty (Moorman et al. 1992; Doney and Cannon 1997) while trustworthiness is reflected in the behavioral performance of trustee such that it demonstrates an intention to protect the interests of the trustor (Anderson and Narus 1990; Smith and Barclay 1997). A trustor’s trust judgments about the positive expectations concerning the trustee’s future behavior and actions is based on the extent to which the trustee has engaged in trustworthy behaviors/practices in past exchanges. Thus trustworthiness implies “being worthy of having trust placed in one” (McEvily, Perrone and Zaheer 2003, p. 93).

Prior research has sought to identify relevant dimensions to represent the concept of trustworthiness. Mayer and his colleagues (1995) suggested that perceptions of *ability, benevolence and integrity* of the trustee underlie interpersonal trust, where ability refers to the skills and expertise of the trustee, benevolence refers to the perception of the positive orientation of the trustee toward the trustor and integrity refers to the sense of justice and adherence to principals by the trustee. This is similar to Ganesan and Hess's (1997) dimensions of trust, (1) *credibility*, which is based on the extent to which the buyer believes that the supplier is competent and has the required expertise to perform the job effectively and reliably, and (2) *benevolence*, which is based on the extent to which the buyer believes that the supplier demonstrates genuine care and concern and will not take any actions that will be harmful to the buyer (Ganesan and Hess 1997; Doney and Cannon 1997). Other researchers have also examined trust as a belief about whether a partner is dependable (Dirks 1999; Rempel et al. 1985), reliable (Moorman et al. 1993), able and competent (Sirdeshmukh, Singh and Sabol 2002), has problem solving skills (Sirdeshmukh et al. 2002), cares for your interest and behaves with faith (Doney and Cannon 1997), and has fairness and integrity (Mayer et al. 1995).

A somewhat different view approaches trust as comprising of *cognitive, affective* and *behavioral* sub-factors (Johnson and Grayson 2005; McAllister 1995; Lewicki et al. 2006). One of the most widely cited articles on this topic, McAllister (1995) empirically identified cognition and affect-based trust as separate constructs where the cognitive dimension reflects technical competency and is based on the other party's predictability, dependability, fairness and past. It arises from accumulated knowledge about the exchange partner and allows one to make predictions regarding the other's behaviors.

Hence cognition-based trust relies on a rational evaluation of another's ability to carry out obligations which serves as evidence of his/her trustworthiness (Johnson and Grayson 2005). As Lewis and Weigert (1985, p. 970) stated, "we cognitively choose whom we will trust in which respects and under which circumstances, and we base the choice on what we take to be good reasons, constituting evidence of trustworthiness."

Affect-based trust however, is rooted in emotional attachment and care and concern for the other party's welfare such that there is an intrinsic value to the relationship and the belief that the other party reciprocates the same feeling (McAllister 1995). Thus emotional bonds between two parties develop as frequent, longer-term interaction leads to the formation of attachments, providing the foundation for affect-based trust between the parties. As emotional connections deepen, trust may go beyond a level that is justified by knowledge and experience (Johnson and Grayson 2005). Finally, the behavioral component is demonstrated by the action taken (i.e. trusting behavior), based on the expectation that the trustee will honor trust, as a result of cognitive and emotional evaluations (Lewis and Weigert 1985). However, since behavioral trust is the medium for showing trust, trust is generally conceptualized as cognitive and/or affective trust. Yet in reality, these three sub-factors are not mutually exclusive, and each is needed to develop and support the overall experience of trust (Lewicki et al. 2006). In this dissertation, I have focused on the *cognitive and affective* underpinnings of relational trust.

Kramer (1999) summarized six broad categories that explain the influence of psychological, social and organizational factors on an individual's expectations regarding another individual's trustworthiness and consequently his

or her decision to trust that person. The first category is *dispositional* trust which refers to individual differences in the propensity to trust others. This depends on the individual's early trust related experiences which go on to form their general beliefs about people (Rotter 1971). *History-based* trust theorists propose that trust develops over time as one accumulates firsthand knowledge through experience with the other person (Lewicki and Bunker 1995). Further, interactional history becomes the basis for setting a-priori expectations about others' behaviors and then updating these expectations depending on whether they were upheld or invalidated.

Since it is often difficult to obtain knowledge about others' interaction history, *third parties* become important conduits of trust (Burt and Knez 1995). Thus "second-hand knowledge" is often used to make assessment of others' trustworthiness although it may not always be reliable since third parties often spread incomplete and skewed information (Kramer 1999). *Category based* trust refers to trust judgments based on an individual's membership in a social or organizational category such that shared membership causes an individual to extend trust to other members who are in the same group (Kramer 1999). Finally, *role-based* trust and *rule-based* trust depend on roles and rules respectively, to reduce risk and uncertainty and subsequently form trust judgments about an individual.

However the primary way in which interpersonal trust tends to develop is through repeated, positive interactions, regardless of the level of presumptive trust that an individual may have or the extent to which categories, third parties, roles or rules may influence trust perceptions (Shapiro, Sheppard and Cherashkin 1992). Therefore, the

conceptualization of trust in my dissertation is based on the influence of past and ongoing experience with the exchange partner, on subsequent trust judgments.

### **Why am I studying Trust?**

In spite of the scholarly volume of work that underscore the importance of trust in marketing relationships, there are growing concerns about its importance on relationship performance outcomes (Grayson and Ambler 1999; Anderson and Jap 2005; Palmatier et al 2006). Although there has been considerable research that provides support for the value of trust in relationship marketing, and that trust is inherently “good” and “desirable,” there is growing acknowledgement that too much trust between the buyer and seller can be detrimental, and that long term relationships with trusted sellers can be jeopardized by dishonest and opportunistic behaviors (Anderson and Jap 2005, Grayson and Ambler 1999, McAllister 1997). According to Anderson and Jap (2005, p. 75), “partners grow increasingly dissatisfied as the relationship persists... over time as each party learns what the other knows, the relationship becomes unstable and vulnerable.” They refer to this phenomenon as the *dark side* of close relationships. Scholars from other disciplines have also noted that trust by itself doesn’t guarantee trustworthy behavior and that it may lead to even greater problems than if it were not present at all (Granovetter 1985; McEvily, Perrone and Zaheer 2003).

### **Dark Trust in Relationship Marketing**

Extant research has not consistently supported a link between trust and economic outcomes of exchange relationships. In a review of empirical literature on the

effects of interpersonal trust spanning 40 years, Dirks and Ferrin (2001) found that while trust has fairly consistent significant effects on attitudinal and perceptual outcomes, its effects on behaviors and performance outcomes are weaker. For example, Dirks (1999) found that trust did not have a main effect on performance; instead it moderated the impact of motivation on group performance and processes. Similarly, trust in the salesperson was found to be unrelated to purchase choice, instead it was product performance that was found to drive the actual purchase decision (Doney and Canon 1997; Crosby and Stephens 1987).

Other studies in the channels literature have also found that trust mostly influences attitudinal outcomes but not performance outcomes (Hewett & Bearden 2001; Aulakh, Kotabe and Sahay 1996). For example, Lusch and Brown (1996) examined performance in terms of the efficiency and productivity in wholesaler-distributor relationships and found that it was not significantly related with relational behavior. Moreover, Palmatier et al (2006) conducted a meta-analysis of factors that influence the effectiveness of relationship marketing and discovered that relational mediators like trust and commitment had the least impact on seller objective performance as compared to other outcomes (like expectations of continuity, word of mouth, customer loyalty and cooperation).

In a different context (i.e. study of relationships between managers and market researchers), Moorman et al (1992) found that long term relationship variables (like trust and commitment) did not lead to increased utilization of market research services. Instead the effects of trust were achieved indirectly (i.e. mediator effect) as a determinant of relationship processes (such as quality of the interaction and researcher involvement

levels). The authors suggested that this limited effect may be explained by the proposition that high levels of relational variables like trust and commitment foster relational dynamics associated with dark constructs like opportunism, loss of objectivity, rising expectations, stale thinking and even boredom, all of which dampen the positive effect of relational variables. Grayson and Ambler (1999) tested these propositions among relationships between advertising agencies and their clients, and also found that trust and commitment didn't have a significant direct effect on the use of marketing services. However, they did not find any empirical support for the hypothesis that dark side constructs mediate the relationship between trust and advertising use (Grayson and Ambler 1999).

In the same vein, Selnes and Sallis (2003) caution researchers about the hidden costs of high levels of trust. They found that trust moderated the positive effect of learning on performance within a relationship such that as trust grows in a relationship, the effect of relationship learning on performance has diminishing marginal returns on increased performance. The authors suggest the following reasons for such a finding: 1) the benefits of functional/constructive conflict is lost in conditions of higher trust, 2) negative information is not exchanged for fear of risking friendship, 3) explicit control mechanisms to safeguard against opportunistic behavior are relaxed, and 4) group thinking can hinder creative processes. Therefore, according to Lewis and Weigert (1985, p. 969), "even though trust is functionally necessary for the continuance of harmonious social relationships, its actual continuance in any particular social bond is always problematic."

It has also been suggested that the influence of trust decreases as the relationship progresses, that is, as members build interaction history and deepen knowledge of each other, trust becomes less effective in reducing uncertainty, so that direct experience and concrete information (sources of tangible assurance) become more powerful in influencing outcomes (Narayandas and Rangan 2004). Dwyer, Schurr and Oh (1987) have also claimed that trust is an important factor early in the relationship and essential condition for a relationship to progress to subsequent committed stages of development. In the Palmatier et al study (2006), the authors found that the influence of relationship duration on relational variables like trust and commitment was the least, which suggests that trust doesn't necessarily increase as the buyer-seller relationship grows. Similarly, Grayson and Ambler (1999) also found that trust was influential only in shorter relationships.

The above studies demonstrate that excessive reliance on trust can have counterintuitive effects by inducing rigidities and erecting barriers to creativity and innovation (Nooteboom 2002). While I *do not* intend to suggest that trust is not beneficial, I propose that too much trust may have a downside as it can lead to errors of judgment by ignoring evidence that falsifies previous beliefs about the trustee's trustworthiness, because of the human nature to ignore evidence that contradicts our beliefs (Lewicki et al. 1998; Langfred 2004). For example, in high trust relationships, parties may avoid negative information for the fear of risking "friendship" within the relationship, whereas it is important to address these aspects if high performance is the objective of the relationship. The heuristic quality of trust also contributes to its downside. Although using rules of thumb about trust to assess others' trustworthiness often works, it may



also lead to biased, over-confident, rash decisions and flawed evaluations (McEvily, Perrone and Zaheer 2003). For example, a customer might not question its trusted supplier even if the supplier's performance is not up to the mark, despite the absence of an opportunistic intent. Further, parties may relax explicit control mechanisms against opportunistic behavior in high trust relationships, which they would otherwise use to reduce the level of risk and uncertainty. Reduced monitoring also implies less questioning of the status quo and subsequently, less opportunity for learning (Selnes and Sallis 2003).

In summary, trust is a risky proposition. It may have potential unintended consequences. For example, trust can expose firms to risks of betrayal and deception, and firms can manipulate and abuse trust relationships, all of which makes it important for researchers to acknowledge the limitations and possible negative consequences of trust along with its myriad benefits.

### **Optimal Trust**

According to McEvily, Perrone and Zaheer (2003, p. 92), "trust indubitably has a down side which has been little researched." Granovetter (1985, p. 491) also argued that, "deeper exchanges create enhanced opportunities for malfeasance,.... (a) person's trust in you results in a position far more vulnerable than that of a stranger." The notion of "dark" side of trust implies that it is possible to both over and under-invest in trust; therefore steps should be taken to avoid such a pitfall because firms that invest in building too much trust may be misallocating resources that could have potential detrimental consequences on the firm's performance. Similarly, under- investing in trust

could result in missing out on creating important organizational capabilities (Selnes and Sallis 2003). Further, according to Wicks, Berman and Jones (1999, p. 101), "...people can trust foolishly, (that) excessive trusting can be culpable and "saintly trust" (i.e. trust without suspicion) can be dangerous and exacerbate abusive behavior." Trust norms disarm the protection that individuals would otherwise surround themselves with, and thus increase opportunities for abuse of fiduciary relationships (McAllister 1997). Over-trusting or trusting blindly may also lead to idealization of the relationship partner as feelings of obligation and friendship become more important than economic considerations, and consequently cause the trustor (buyer) to overlook some of the trustee's (supplier's) faults (Uzzi 1997).

Wicks, Berman and Jones (1999) offer the notion of an "*optimal level*" of trust, where they position optimal trust alongside Aristotle's work which focuses on finding the "golden mean" between excess and deficiency in human conduct (p. 102).

Translated into the context of trust, this implies that while one should have an ongoing commitment to trust, trust judgments about others should be taken carefully and wisely. This idea was demonstrated by Axelrod's (1984) computer simulation game in which the winning strategy was "tit for tat" such that players imitated actions of the opponent in previous play. An important finding of this study was that although trust is desirable, it needs to be tempered by a willingness to punish uncooperative behavior. Wicks et al. (1999, p. 103) offer the following definition for optimal trust:

*"Optimal trust exists when one creates (and maintains) prudent economic relationships biased by a willingness to trust. That is, agents need to have stable and ongoing commitments to trust so that they share affect-based belief in moral character sufficient to make a leap of faith but they should also exercise care in determining whom to trust, to what extent and in what capacity."*

Other researchers, for example, Atkinson and Butcher (2003) have likened this concept to that of a delicate balancing act in managerial relationships: “neither friends, nor strangers” (p. 297). These authors argue for a middle ground in trust, where there is “neither complete lack of trust nor total trust, or very high levels of affective attachment, nor enduring social reliance, nor destructive mistrust and betrayal” (Atkinson and Butcher 2003, p. 297). Such a balanced trust, the authors maintain, is what leads to favorable outcomes for organizations. Further, Uzzi (1997) conducted an ethnographic study in the New York City apparel industry and found that embeddedness provides benefits up to a threshold beyond which it can derail economic performance by making firms vulnerable to external forces and insulating them from information from outside networks. Similar to the notion of optimal trust, he further proposed that the optimal network structure is one which integrates arm’s length exchanges with embedded ties.

In summary, the concept of optimal trust suggests a *balanced approach* towards trust, which avoids extreme positions by emphasizing neither “too much” nor “not enough” trust. The purpose of my dissertation is to study conditions under which the optimality of trust can be achieved. That is, to explore additional mechanisms that curb the dysfunctional effects of trust and enhance its influence on performance outcomes. The next section discusses the theoretical approach I have adopted for this purpose.

### **Using the Lens of Distrust**

Management researchers have suggested that *distrust* may be a useful lens to explore the trade-offs that exist within trust (Kramer 1999, Lewicki et al. 1998). Distrust

has been defined as the “confident negative expectations regarding another’s conduct that manifest themselves in fear, vigilance or suspicion” (Lewicki et al. 1998, p. 439). The definition implies that distrust is the lack of confidence in another individual or party, and the concern that the other party will not care about the trustor’s interests and welfare, and may take actions that will harm the trustor. Although trust is assumed to be inherently good and distrust inherently bad in traditional approaches, there is growing discussion on the notion that some level of distrust may be healthy in certain situations. There is some debate on whether trust and distrust are unidimensional constructs, that is, they lie on opposite ends of the continuum (Rousseau et al. 1998), but more recent work on the relationship between trust and distrust calls this simplistic view into question (Sitkin and Roth 1993; Lewicki, Tomlinson and Gillespie 2006). This approach views them as dimensionally distinct constructs where trust involves positive expectations about things hoped for and distrust involves positive expectations about things feared.

These authors suggest relationships are typically complex and multifaceted as each facet represents an interaction that provides us with information about the other. According to Lewicki et al. (2006, p. 1003), “across the spectrum of different facets within a complex relationship, ambivalence or complex trust (some combined level of trust and distrust) toward another is probably more common than simple trust or simple distrust.” Thus parties in these relationships are capable of maintaining *simultaneous feelings of trust and distrust* about each other since they are related to different experiences and contexts with the other party. As an example in interpersonal relationships, I may trust the day care worker to take care of my baby in terms of attending to his needs and seeing to it that he doesn’t come to any harm, but at the same

time, I don't trust her to teach developmental activities to him. This kind of complex trust is even more prevalent in relational transactions where a buyer may trust his or her supplier to deliver quality products on time but is not so sure about the supplier keeping company specific information confidential.

Lewicki et al. (1998) offer a framework for understanding the complex model of trust and distrust, which illustrates the different types of relationships under conditions of high and low trust and distrust. In this framework, low trust is not equivalent to high distrust, and low distrust is not the equivalent of high trust. Rather, as illustrated in Figure 1, all relationships are characterized as being high or low in trust and, separately, high or low in distrust. A high trust relationship is characterized by hope, faith, confidence, assurance, and initiative. Conversely, low trust is accompanied by a lack of hope faith, confidence, assurance, and initiative. High distrust, in contrast, is characterized by fear, skepticism, cynicism, wariness, watchfulness, and vigilance. Low distrust, however, is typically characterized by an absence of these features.

\*\*\*\*\* Insert Figure 1 about here \*\*\*\*\*

Relationships tend to start in Cell 1 where the parties have limited information about one another and limited interdependence. Here, the parties have little reason to form generalized conclusions about whether trusting or distrusting the other is appropriate. Situational variables and individual propensities to trust will play a relatively large role in the individual's trust decisions. Over time and with consistent repeat interactions, the relationship should gravitate toward one of the other cells. If the interactions are generally positive over time, then the relationship can evolve into one of

low distrust and high trust as described in Cell 2. Individuals in a Cell 2 relationship often seek out new ways to interact with one another and resolve problems as they arise. If instead the parties' interactions are generally negative over time, then their relationship likely gravitates to Cell 3, which is characterized by low trust and high distrust. Here individuals attempt to limit their interactions and, when they do interact, they devote considerable resources to monitoring one another and protecting themselves against exploitation by the other (Lewicki et al. 2006).

Of particular relevance to my dissertation is cell 4, which describes a high trust-high distrust situation characterized by vigilance and continual monitoring. These parties have high confidence in one another with regard to certain aspects of their relationship and yet have reason to be wary of one another in other respects. In these relationships, the individuals have both shared and separate, conflicting goals. With regard to their shared goals, trust is reflexive; however, when their goals conflict, monitoring and vigilance are common. The co-existence of trust and distrust can stem from several causes, including differing motives for behavior, the co-existence of strengths and weaknesses in talents/skills, and differing cost benefit structures of varying contexts. For example, a buyer might trust a supplier to deliver quality products on time but at the same time is doubtful whether the supplier is giving them a competitive price and hence feels the need to verify prices before placing the order.

According to Lewis and Weigert (1985, p. 969), "distrust may be functional in complex interpersonal and institutional relationships as it reduces complexity by dictating a course of action based on suspicion, monitoring and activation of institutional safeguards." On a similar note, Atkinson and Butcher (2003, p. 286) have

argued that “there is an emerging role for distrust in creating organizational change and “healthy” intra-organizational competition.” Other researchers have also suggested that a healthy dose of trust and distrust is productive because it allows the partners to reap the benefits from both and to compensate for the weaknesses associated with them individually (Langfred 2004; Shapiro 1987; Sitkin and Roth 1993). Further, Lewicki et al. (1998) contend that “over-generalized” trust can lead to under-monitoring of trusted employees that lead to possible deception, fraud and embezzlement, and that “increases in distrust can serve the purposes of enabling the emergence of greater trust in social systems” (p. 451). The authors provide rationale for this by arguing that distrust gives rise to questioning and differences in perspective that may be essential for effective group functioning. Also, a certain amount of distrust allows us to set boundaries around another’s behavior in a way that limits their freedom and yet permits functional interaction. Further, the new perspective recognizes that trust is valuable so far as it is appropriate to the context and that a healthy amount of distrust can protect against the risk of exploitation. However, excessive distrust is probably as dysfunctional as excessive trust.

Based on the premise that the simultaneous existence of trust and distrust in a relationship is healthy and productive, I propose that a “*trust but verify*” approach is more beneficial for performance outcomes than relying on trust mechanisms alone. The purpose of my dissertation therefore is to provide empirical support for this proposition. In this regard, I use *monitoring mechanisms* to reflect the manifestation of distrust in a relationship, instead of directly capturing the distrust levels that the buyer has in the supplier. Distrust is associated with negative connotations like fear and suspicion, along

with the expectation that the other party may engage in behaviors that are detrimental to our interests. In such a scenario, when we distrust someone, one of the ways in which we protect ourselves is by tracking and monitoring their actions to ensure that they are delivering on their commitments and not engaging in behaviors that can harm us. Further, although it may be difficult for buyers to openly admit or articulate feelings of distrust they hold for their suppliers, their monitoring behaviors offer a more tangible route to observe the distrust they have for their suppliers.

This premise can be illustrated simply by the example of a farmer's market where farmers sell fresh produce by means of unattended produce stands by the roadside (McAllister 1997). Imagine that there is a cash box on the table and customers are expected to put money in exchange for the vegetables. However, the box has a small slit, and is attached to the table, so no one can take any money out. Thus the slit in the box and the fact that the box is attached to the table, serve as a monitoring mechanism to curb potential opportunistic behaviors. At the same time, the fact that the cash box is by itself and the produce stands are unattended shows that the farmers trust people not to take advantage of them and take off with the vegetables without paying for them. Therefore by combining trust with distrust (manifested in monitoring and vigilance behaviors); trust's effectiveness may be enhanced so that it will engender a positive impact on performance outcomes.

The concept of optimal trust has been examined in different contexts in a similar fashion (i.e. that something considered "beneficial" or "harmful" can be productive when it is present in moderation, but detrimental in extreme conditions). For example, researchers who study group dynamics and conflict have also noted that too much or too



little conflict in a group is dysfunctional (Cloke and Goldsmith 2000; Dirks 1999). Further functional conflicts are considered healthy in exchange relationships because they allow for exchange of differing views and perspectives between buyers and sellers (Anderson and Narus 1990). Similarly, in an online purchase context, Gefen and Pavlou (2006) suggest that buyer's trust will have a lesser influence on perceived risk from the community of sellers as the perceived regulatory effectiveness of online market places increases.

Shapiro (1987) also referred to the need for controls in a social exchange (and institutional) setting so that the "trusted" do not behave opportunistically, although controls may also reduce trust in the relationship. She suggested the use of social controls as "guardians" of trust to punish trust abuse through a "supporting social-control framework of procedural norms, organizational forms and social-control specialists which institutionalize distrust" (Shapiro 1987, p. 635). However she also noted that trust is a "self-defeating prophecy" (p. 650) because creating guardians of trust and impediments to abuse, undermines the very purpose of trust. Thus it becomes a case of choosing between Type 1 and Type 2 error, where the choice is between setting constraints so narrowly that desirable behavior is discouraged or so flexible that abusive behavior is tolerated.

In summary, although excessive trust and excessive distrust by themselves can have negative consequences, the functional coexistence of trust and distrust can be productive for buyer- seller relationships. A certain level of distrust not only prevents us from being blind to clues of another's untrustworthiness, but also prevents excessive group cohesion that can preclude sound decision-making. This

suggests that lack of monitoring can be naïve regardless of levels of trust. Buyer trust in the supplier has to be in tandem with a monitoring or regulatory mechanism that sets boundaries around the supplier's behaviors and activities to protect the buyer against potential opportunistic behaviors and yet permits functional interaction with the supplier. This underscores the concept of "guarded" trust or "informed" trust.

## CHAPTER III

### CONCEPTUAL MODEL AND HYPOTHESES

The conceptual model guiding this dissertation has been depicted in Figure 2. This model is tested empirically in two studies. The main difference between studies 1 and 2 is that study 1 includes trust as an overall construct whereas study 2 takes into account the multi-dimensional nature of trust, and therefore incorporates cognitive trust and affective trust in hypotheses testing. While cognitive and affective trust are certainly correlated because although they tap into the rational and emotional aspects of the relationship respectively, there is still some overlap in the overall feelings of trust toward the supplier. However, empirically, I was able to distinguish between these two dimensions and examine their different influences on the proposed relationships. Study 2 also has an added layer of complexity in that it tests the impact of relationship lifecycle on the proposed moderated relationships. Further, study 2 incorporates two additional outcomes: satisfaction and promoter score. The left hand side of the model in figure 2 tests the impact of antecedents on overall trust (and multidimensional trust in study 2) as a replication. The right hand side of the model hypothesizes and tests the moderating influence of monitoring mechanisms and perceived supplier relationship orientation (and relationship lifecycle as an overall moderator in study 3) on the trust-outcomes relationship. In the following sections, I define each of the constructs and describe their expected effects.

\*\*\*\*\* Insert Figure 2 about here \*\*\*\*\*

## **Antecedents to Trust**

In delineating the antecedents to trust, I replicate Palmatier, Dant and Grewal's (2007) work on inter-organizational relationship performance in a comparable context. The purpose of this replication is to control for the effects of the antecedents to trust so as to allow unique relationships between trust and outcomes to emerge. Further, beyond replicating Palmatier et al's (2007) work, I also test the impact of the antecedents on multidimensional trust. Based on extant literature and various theoretical perspectives (for example, social exchange theory, transaction cost economics and contract law and relational exchange theory), Palmatier et al. (2007) developed a model which focuses on commitment-trust perspective (Morgan and Hunt 1994) as being key performance drivers in B2B exchanges. This perspective is built on social-exchange theory (Blau 1964) and maintains that commitment and trust are focal constructs for building strong buyer- supplier relationships, and positively influence financial and relational performance. It is important to note that parties are expected to reciprocate favors and benefits (Gouldner 1960) they have received in the past, in order to maintain relationship continuity as that "serves as a "starting mechanism" of social interaction" (Blau 1964, p. 92). Consequently, buyers are more likely to reciprocate supplier's trustworthiness by behaving positively toward them.

Based on transaction cost economics, *relationship-specific investments* (RSIs) of both buyers and suppliers are posited to be positively associated with trust. RSIs are investments, assets or human resources that are specific to a particular relationship and cause the partners to act with restraint in the relationship (Anderson and Weitz 1992). They are also called transaction-specific assets, as it is not possible to redeploy

them in other relationships; therefore if the relationship doesn't continue, they prove to be sunk costs for their owners (Jap and Ganesan 2000). RSIs commit the parties to maintain relationships in conventional channels for fear of potential economic loss (Williamson 1993). Some examples of idiosyncratic investments are specialized facilities/equipment, exclusive training or dedicating personnel to a particular buyer and so on. For example, a computer manufacturer may invest in specialized build lines (with skilled workers) in accordance with its supplier's products. If this relationship is terminated in the future, the manufacturer will not be able to salvage the resources related to this investment as she or he cannot redeploy it in another relationship.

Mutual idiosyncratic investments pose as exit barriers and create self-enforcing contracts or "mutual hostages" for both the parties involved as they would both suffer adverse consequences if they were to terminate the relationship (Anderson and Jap 2005). Additionally, they provide signals regarding the other party's commitment to the relationship and act as safeguards against opportunism as it would be against the interest of the partner which has made the idiosyncratic investment (Ganesan 1994). Hence buyer RSIs affect trust in suppliers positively, because they make switching unviable and consequently increase the buyer's desire to maintain the relationship. Further, it has a similar (positive) effect even when it is tested separately on cognitive and affective trust, because of the increased importance of the relationship to the buyer, and consequently, increased willingness to rely on the supplier's competence and benevolence (Johnson and Grayson 2005). Supplier RSIs also influence buyer trust positively because it signals that the supplier cares about the relationship and is

committing to it by investing in relationship-specific assets (Anderson and Weitz 1989). However, I propose that this effect is stronger for affective trust as compared to cognitive trust, because supplier RSIs demonstrate the level of care and concern the supplier has for the overall relationship. Thus:

*H1a: Buyer RSIs are positively associated with trust in a supplier.*

*H1b: Buyer RSIs are positively associated with cognitive and affective trust in a supplier*

*H2a: Supplier RS's are positively associated with trust in a supplier.*

*H2b: Supplier RSIs have a stronger impact on affective trust as compared to cognitive trust in a supplier.*

*Supplier opportunistic behaviors*, on the other hand, are posited to negatively influence trust. Opportunism has been defined by Williamson (1975, p.6) as “self-interest seeking with guile” and may manifest itself through deliberate misrepresentations during relationship initiation, as well as various forms of violations over the course of the relationship (Williamson 1975). Opportunistic behaviors can also arise because of disproportionate commitment structures in exchange relationships (Gundlach, Achrol and Mentzer 1995). For example, the buyer may disclose some confidential information regarding its manufacturing processes that the supplier later expropriates to its competitors. Opportunistic behaviors indicate to the buyer that the supplier is not interested in the buyer’s welfare and may undertake activities that will be detrimental to the buyer’s interests and the exchange on the whole, thus undermining buyer trust in the supplier (Palmatier et al. 2007). As a result, supplier opportunism can erode the long term gains potentially accruing to both partners in the relationship. Further, I propose that it has a stronger impact on affective trust as compared to

cognitive trust because it leads the buyer to feel emotionally betrayed by the supplier's opportunistic behaviors.

*H3a: Supplier opportunistic behaviors are negatively associated with trust in a supplier.*

*H3b: Supplier opportunistic behaviors have a stronger (negative) impact on affective trust as compared to cognitive trust in a supplier.*

*Relational norms* have been described as a shared set of implicit principles put in place to coordinate activities performed by the partners and govern their relationship. It has been suggested that norms are more effective in the later stages of a relationship as they prescribe behaviors to enhance relationship effectiveness (Heide and John 1992) and curtail opportunistic behaviors (Weitz and Jap 1995). Different norms that govern relationships can take several forms including: long-term orientation norm (extent of trade-off between long and short term profit opportunities), solidarity norm (partners' belief in the importance of the relationship), mutuality norm (sharing of costs and benefits among partners), fairness norm (degree to which partner's interests are considered), and flexibility norm (being adaptable to changing conditions) (Lusch and Brown 1996; Cannon, Achrol and Gundlach 2000). Thus these norms "regulate and guide the standards of trade and conduct" (Gundlach, Achrol and Mentzer 1995, p.81) and help to develop long term trusting relationships (Siguaw, Simpson and Baker 1998). Based on Palmatier et al's (2007) work, I focus on relational norms as a composite index of solidarity, mutuality and flexibility norms, and further hypothesize that relational norms have a stronger impact on cognitive trust as norms refer to a more cognitive than affective evaluation process involving specific implicit rules and principles in governing buyer-supplier relationships. Therefore:

*H4a: Relational norms are positively associated with trust in a supplier.*  
*H4b: Relational norms have a stronger impact on cognitive trust as compared to affective trust in a supplier.*

Last, *dependence asymmetry* is hypothesized to have a negative impact on trust. It refers to the imbalance between partners' dependence and consequently, each partner's ability to influence the other (Gundlach, Achrol and Mentzer 1995). When there is dependence asymmetry, the more powerful (less dependent) partner may attempt to exploit its advantage by making uneconomic demands, so that the less powerful (more dependent) partner will become dissatisfied with the relationship. Moreover, it promotes the coercive use of power and undermines trust in the relationship. Therefore when one party possesses leverage over the other, the weaker or more dependent party becomes distrustful, diminishing the level of trust in the relationship (Anderson and Weitz 1989). Research suggests that relationships that are more balanced in terms of dependence and power, are more stable (Lusch and Brown 1996; Anderson and Narus 1990; Anderson and Weitz 1989). Moreover, I anticipate that this effect is inclusive as to impact both cognitive and affective trust because it undermines both competence and benevolence expectations in the partner.

*H5a: Dependence asymmetry is negatively associated with trust in a supplier.*  
*H5b: Dependence asymmetry is negatively associated with cognitive and affective trust in a supplier.*

### **Curvilinear Mechanisms and Multidimensional Trust**

Although trust has traditionally been regarded as a benefit to relationship marketing, too much trust can be damaging because trust creates blindness. Therefore, over generalized trust may set the stage for highly trusted yet under-monitored



individuals to exploit trust relationships (Granovetter 1985). At the same time, trust is perceived to be a starting point for relationships because individuals seek predictable and obligatory behavior on the part of their relational partner so that a relatively high degree of certainty is attached to desirable outcomes. Buyer trust is particularly important where risk and uncertainty are inherent and there is potential for inconsistent performance in meeting buyer expectations. This suggests that while overall trust has positive effects in the short run, its beneficial effects get eroded after a point. I examine the impact of trust on performance outcomes through a curvilinear approach (i.e. by studying its linear and quadratic effects on outcomes), in order to capture this mechanism more completely. Although trust research has mostly focused on studying linear relationships (for exceptions, see Sirdeshmukh, Singh and Sabol 2002; Agustin and Singh 2005), I propose that the curvilinearities depict the decreasing incremental effects of overall trust on outcomes, such that with higher levels of trust, a unit change has an increasingly smaller effect on performance outcomes, thus providing support for the notion of optimal trust.

I draw support for this proposition from Herzberg's (1966) dual factor motivation theory according to which individual needs can be categorized into two dimensions: (a) basic, hygiene needs and, (b) higher-order, motivator needs. The basic, hygiene needs are lower order needs that need to be fulfilled, and the extent to which these needs remain unfulfilled causes dissatisfaction in the individual. The motivator factors on the other hand, are higher level psychological needs, the gratification of which leads to satisfaction. Thus, once the hygiene needs have been fulfilled, individuals start the pursuit of the higher order motivator needs, but any increase in the hygiene needs beyond

the fulfillment point will not have any incremental effects on satisfaction (Agustin and Singh 2005).

Drawing from the above, I propose that trust will act as a basic, lower order hygiene need such that mutual trust judgments will cause the partners (i.e. buyers and suppliers) to continue their relationship with each other. If for some reason, this trust is shaken or betrayed, then the relationship will be interrupted as it will cause dissatisfaction with the partner and cause them to think twice about continuing the relationship. It is also important to note that negative performance on trust will produce greater dissatisfaction with the outcomes, as compared to satisfaction with outcomes in the case of positive performance. As a result, increase in trust levels after a point (the fulfillment point) will not be sufficient to spur performance outcomes, and will instead have a decreasing incremental effect, suggesting that trust is a necessary but not sufficient condition.

Doney and Cannon (1997) highlight this point in their paper when they state that trust is an “order qualifier” not an “order winner” (p. 46), implying that while trust is a pre-requisite for a supplier to be included in the buyer’s consideration set, it is actually the price and product quality (and not trust) that drives supplier choice. Thus trust is similar to a hygiene need, and if this need is not fulfilled, the supplier in question won’t even be considered. Over and beyond this, price and product quality are the motivating factors so that high scores on these motivators will drive the buyer to make a supplier choice. Interestingly, Agustin and Singh (2005) demonstrated that trust has a positive and significant main effect and incremental effect on loyalty intentions. However loyalty intentions are a more subjective assessment as compared

to performance outcomes because they are partially based on affect and emotions, and are attitudinal in nature. Since trust has an affective component, and focuses on expectations of the supplier's reliability and benevolence in future interactions, it is likely that trust will serve as a higher-order need, the fulfillment of which is necessary for loyalty intentions to arise (Agustin and Singh 2005; Garbarino and Johnson 1999) thus explaining the positive relationship (main and increasing incremental effect) between trust and loyalty intentions.

However, trust serves as an "order qualifier" or hygiene need in the context of performance outcomes; therefore I propose a decreasing incremental effect of overall trust on supplier performance outcomes. In this study, I considered both attitudinal/perceptual outcomes such as supplier performance and satisfaction, and objective/behavioral outcomes such as share of wallet (extent to which the supplier achieves sales penetration with the buyer), promoter score (likelihood of the buyer recommending a specific supplier to friends/colleagues), and propensity to switch (buyer's reported likelihood to switch suppliers in the future). Thus:

*H6: Trust in a supplier has a decreasing incremental effect such that it has (a) a positive (negative) linear effect and (b) negative quadratic effect on supplier performance and share of wallet (propensity to switch).*

Further, I examine this effect on multidimensional trust, namely *cognitive* and *affective* trust. Trust decisions in economic exchanges are assumed to be cognitive in nature and hence consciously motivated. It is likely that buyer-supplier relationships will have a dominant influence on cognitive attributions since they are more embedded in economic exchanges than social exchanges. However, trusting behaviors often operate at a subconscious level so that the emotional element contributes to trust judgments as well.

It is likely that this affective component grows stronger as the relationship progresses as a result of repeated satisfactory interactions, because affect based trust is typically vested in others only after a certain level of cognition-based trust is established (McAllister 1995; Lewicki and Bunker 1995). Once baseline expectations about the other party's reliability and competence are met, beliefs about the partner's motives, mutual support and personal commitments to one another assume a more important role for high performance collaborations (Johnson and Grayson 2005; McAllister 1995). Therefore buyer-supplier relationships are driven by cognitive as well as emotional considerations. Although these two dimensions are likely to be correlated (because of an overlap in the overall trust beliefs), I isolate them to examine the differences in their curvilinear impact on performance outcomes.

I propose that cognitive trust is positively related to performance outcomes like performance, satisfaction, share of wallet and promoter score, and negatively related to buyer's switching intentions (since it increases long term orientation towards the supplier and decreases thoughts of switching to alternate suppliers). Performance assessment is associated with a cognitive evaluation process of the economic benefits realized from the relationship. Since cognition based trust reflects technical competency and a fiduciary obligation to perform, it drives performance outcomes (Johnson and Grayson 2005; Singh and Sirdeshmukh 2000). Johnson and Grayson (2005) have also provided empirical support for this reasoning. They conducted a study in the context of financial services and found that cognitive trust was positively associated with sales effectiveness and anticipated future interactions.

Further, I propose that cognitive trust has a positive quadratic effect on performance outcomes, that is, a unit change in cognitive trust has an incremental effect on performance outcomes. To the extent that economic outcomes of exchange relationships are based on knowledge about a partner's future actions, these actions and behaviors are more accurately determined by a rational assessment/evaluation of the partner's trustworthiness as cognitive trust increases (which demonstrate the buyer's willingness to rely on the supplier's competence, expertise and reliability). Therefore, based on the hygiene-motivator need theory, cognitive trust has a motivator effect, which corresponds to an incrementally increasing effect (beyond a significant main effect) on performance outcomes (Agustin and Singh 2005; Johnson and Grayson 2005). Hence:

*H7a: Cognitive trust in a supplier is positively (negatively) associated with supplier performance, satisfaction, share of wallet and promoter score (switching intentions).*

*H7b: Cognitive trust in a supplier has an increasing incremental effect/ positive quadratic effect on performance, satisfaction, share of wallet, promoter score, and switching intentions.*

Affective trust, on the other hand, is based on emotional factors and is related to the degree to which the partner identifies with the supplier. Since affective trust is based on benevolent beliefs of partners after the initial hurdles of establishing trust (i.e. cognitive trust) are crossed, it demonstrates going beyond purely egocentric motives, and is thus more resilient and less susceptible to changes unless something drastic takes place (Johnson and Grayson 2005). This leads to reliance on the partner based on emotions engendered by the partner's level of care and concern which subsequently has a positive impact on performance outcomes.

However, when assessments are formed affectively, they are less subject to careful scrutiny than when they are formed consciously. Since affective trust assessments are bound up in emotions that cause heuristic rather than calibrated assessments of others, I propose that this more generalized method of trust assessment engenders errors in trust judgments *beyond* a certain fulfillment point, which subsequently results in dysfunctional consequences on performance outcomes. McAllister (1997, p. 98) also suggests that decoupling trustworthy assessments from the cognitive foundations on which trust is initially formed “opens up significant possibilities for deception and betrayal.” Affective trust creates an unquestioning tendency towards the exchange partner such that the partner’s behaviors or activities, even if suspicious, are seen in a benevolent light. Whereas under the same circumstances, cognition-based trust might have led to questioning of the partner’s activities. Therefore, “this “emotion-driven” element of trust makes the relationship less transparent to objective risk assessments prescribed by economists” (Johnson and Grayson 2005, p. 501) and plays the role of a hygiene need (Agustin and Singh 2005). Drawing from the above, I propose that while affective trust has a positive (main) impact on performance outcomes, “too much affective trust” leads to dysfunctional consequences reflected by a decreasing incremental effect (that is, a unit change in affective trust has an increasingly smaller effect) on performance outcomes.

*H8a: Affective trust in a supplier is positively (negatively) associated with supplier performance, satisfaction, share of wallet and promoter score (switching intentions).*

*H8b: Affective trust in a supplier has a decreasing incremental effect/negative quadratic effect on performance, satisfaction, share of wallet, promoter score, and switching intentions.*

## **Moderating Effects of Monitoring and Perceived Supplier Relationship Orientation on Performance Outcomes**

Researchers recommend the usefulness of studying moderating factors/ boundary conditions under which high levels of trust can limit the benefits of trust and produce “dysfunctional” outcomes (Langfred 2004; Lewicki et al 2006). I propose that *monitoring* mechanisms adopted by the buyer will moderate the influence of overall trust in supplier on performance outcomes. Broadly, monitoring mechanisms are viewed as a process of regulation of a partner’s behaviors or its outcomes for the achievement of organizational goals (Wathne and Heide 2000). Conceptually, their role is to establish the extent to which compliance has taken place so that there are no unpleasant surprises. Jap and Ganesan (2000) refer to them as safeguards put into place to govern inter-organizational exchanges. Theoretically, monitoring helps to curb opportunism in two ways. First, it may place social pressure on a partner, that is, knowing that he or she is being evaluated increases compliance. Second, it increases the chances of detecting opportunism by reducing information asymmetry between relational partners, and hence engenders the ability to reward and sanction behavior accordingly (Heide, Wathne and Rokkan 2007).

Monitoring establishes the extent to which performance is aligned with the mandates in contracts, and may be achieved by explicitly measuring outputs or behavior (Anderson and Oliver 1987). While output monitoring measures visible consequences of a partner’s actions such as delivery time and product quality, behavior monitoring is directed at the partner’s actions, for example, manufacturing and quality control procedures (Heide, Wathne and Rokkan 2007). It can also be accomplished through a more informal, proactive socialization process by the means of promoting self-control. Thus, monitoring procedures are used to track the supplier’s behaviors from time to

time, to ensure they are following proper procedures, delivering products as per specifications and as per schedule, providing market- competitive prices and so on. These monitoring activities are different from the formal performance evaluations that are done quarterly, semi-annually or annually depending on the company policy to determine whether the suppliers performed well and whether or not their contracts with the company should be renewed for the next period.

In general, the more trustworthy a supplier is perceived to be, the less likely the buyer is to monitor them (Creed and Miles 1996). The less trust the buyer has in the supplier, the more the buyer feels the necessity to monitor him or her (Bromily and Cummings 1995). Therefore trust is assumed to conflict with monitoring. While trust is guided by the notion of positive expectations about another's motives, monitoring procedures regulate the behavior of individuals by employing certain procedures to verify their actions, and consequently make their behaviors more predictable (Das and Teng 1998). Extant research provides evidence of this contradiction by demonstrating that partners often perceive monitoring as obtrusive and invasive, and respond to them with reactance (like mistrust and hostility), that is, I do not trust you because you do not trust me (as you monitor my activities) (Heide et al. 2007). Further, trust is traditionally thought to reduce the amount of monitoring needed; therefore where there is trust, the need for reactive measurement efforts is reduced (Das and Teng 1998). Ouchi (1979) also observed that only one of the two mechanisms was necessary if two individuals were to engage in cooperation.

However, some amount of monitoring is always necessary, even when the supplier is trusted because monitoring not only reduces the chances of duplicity but



also helps to increase coordination and reduce process loss between the two parties (Langfred 2004; Powell 1996). Thus the more aware the buyer is of the supplier's activities, the better they can coordinate their work. According to Langfred (2004, p. 387), "cooperation is buttressed by sustained contact, regular dialogue and constant monitoring." He further demonstrated that self-managing teams with high levels of trust and high individual autonomy with low levels of monitoring resulted in a performance loss, suggesting that some monitoring mechanisms should be in place if process losses and coordination errors are to be avoided. Sitkin and George (2005) also predicted that organizational decision makers responded to greater threats to trust and legitimacy by an increased reliance on formal controls. Thus monitoring may be used to mitigate the greater hazards of opportunistic appropriations faced in relational exchanges and consequently used to leverage trust's benefits.

Further, Das and Teng (1998, p. 501) suggest that monitoring activities may help to build mutual trust as "track record and an objective evaluation process are more conducive for generating trust than a subjective evaluation process." Additionally, monitoring offers control by reducing information asymmetry between two partners. For example, it enhances a buyer's ability to detect supplier opportunism. While increased trust does provide a basis for reduced controls and vigilance (Ouchi 1979), it also increases the risk that critical signs of untrustworthiness may simply be unobserved or ignored. Unfortunately, for cases where deception has occurred, it is the accumulated trust in the relationship which provides the latitude for problem situations involving unreliability and even exploitation to go undetected for a long period of time.

Therefore, I expect monitoring mechanisms to have a positive moderating effect on the relationship between trust and performance outcomes. When a buyer monitors the supplier's behaviors and activities with, for example, quality-control procedures, inspection of delivery and so on, the presence of trust will offset any negative feelings and reactance that may arise on the part of the supplier because he or she is being kept under vigilance. Moreover, it will reduce any information asymmetry between them and improve the communication process so that both the buyer and supplier will have a shared understanding of their goals, all of which will contribute to better relationship and performance outcomes. Heide, Wathne and Rokkan (2007) provide empirical support for this by demonstrating that relational elements like social contracts enhance the effects of output and behavior monitoring to suppress opportunism. Formally:

*H9: Monitoring procedures increase the positive (negative) effect of trust in a supplier on supplier performance and share of wallet (switching intentions).*

I also propose that the perceived *supplier relationship orientation* will moderate the effect of overall trust on performance outcomes. That is, in a low relationship orientation scenario, the effect of trust on outcomes will not be significant but for high relationship orientation, the effect of trust will be positive and significant. Perceived relationship orientation may be defined as the extent to which the buyer perceives the supplier to be interested in maintaining and enhancing the relationship with the buyer (De Wulf, Odekerken-Schroder and Iacobucci 2001; Palmatier, Scheer, Evans and Arnold 2008). Investing time, resources and efforts creates psychological bonds that signal to the buyer that the supplier desires to engage in a strong relationship with them. However, perceived relationship orientation is not an individual personality trait; it is an

evaluation of the overall relationship based on the costs and benefits of the exchange (Palmatier et al. 2008). Antecedents to relationship orientation may be dependence, industry norms, complexity of purchase, relationship quality, tangible rewards and continuity expectations (Anderson and Narus 1990; Cannon and Perreault 1999; De Wulf et al. 2001).

I posit that perceived supplier relationship orientation will moderate the effect of overall trust on performance outcomes, so that the positive effect of trust on performance outcomes is enhanced when perceived supplier relationship orientation is high, since that signals that the supplier is interested in maintaining and strengthening the relationship and is not likely to engage in opportunistic behaviors (Palmatier et al. 2008). It also implies that the supplier is more likely to reciprocate the buyer's trust by delivering on promises and commitments which further enhances the impact of trust. For example, if a buyer requests an urgent meeting or information about certain products or expresses a desire to tour their manufacturing facilities, a supplier with high relationship orientation responds positively to such requests. On the other hand, if perceived relationship orientation is low, it suggests that the supplier doesn't desire a strong relationship with the buyer and is not interested in an ongoing cooperative relationship; this mitigates the effect of trust on performance outcomes.

*H10: Perceived supplier relationship orientation increases the positive (negative) effect of trust in a supplier on supplier performance and share of wallet (switching intentions).*

## **Relationship Lifecycle as an Overall Moderator**

Relationship lifecycle refers to the dynamic process by which exchange relationships develop over time (Dwyer, Schurr and Oh 1987; Jap and Ganesan 2000) and has its basis in exchange theory, marital theory, bargaining theory and power theory. This complex phenomenon allows the examination of time and context dependent properties of various constructs central to the study of relationship marketing. For example, Jap and Ganesan (2000) provided empirical evidence for how the efficacy of different control mechanisms in influencing supplier commitment, changes over the course of the relationship lifecycle. Drawing from Jap and Ganesan's (2000) work, the relationship lifecycle has four distinct phases: exploration, build-up, maturity and decline, and each phase symbolizes an evolution in the exchange partners' perceptions, expectations, attitudes and orientations toward one other.

*Exploration* refers to the search and trial phase in which exchange partners weigh the potential benefits, costs and obligations of exchange with a particular partner (Jap and Ganesan 2000). In this fragile phase, the main goal is uncertainty reduction, and trust in supplier is still in the development stage, wherein both partners are beginning to cultivate trust and get used to each other. The *build-up* phase however, is characterized by extensive information sharing, investments and joint participation by both partners. Moreover, there is increased risk-taking and inter-dependence within the buyer-supplier dyad (Dwyer, Schurr and Oh 1987). The goal in this phase is to understand each other's motivations and intentions, and build a mutually beneficial relationship that continues over the long run.

The next phase, *maturity* is the stage where both partners have implicitly or explicitly decided to continue their ongoing relationship with the other partner, and both adopt a long term orientation perspective in which they are willing to forgo short term profits in favor of long term gains. In this phase, both the partners experience relationship satisfaction that would be difficult to achieve in alternate relationships, and each partner relaxes the guard they had initially erected, with respect to the other's intentions and motivations (Jap and Ganesan 2000). Last, the *decline* phase is one in which the relationship between the partners starts to deteriorate, as either or both partners start experiencing dissatisfaction in the relationship, and begin to disengage and contemplate alternative relationships (Jap and Ganesan 2000). Moreover, both partners may be short-term oriented to the extent that they exhibit opportunistic tendencies.

I propose that the multi-dimensional trust-outcome relationship moderated by monitoring and perceived relationship orientation, will be a function of the particular phase in the relationship lifecycle of the buyer-supplier dyad. This will highlight the important of cognitive and affective trust across different relationship phases, as well as offer insights regarding its interactions with monitoring mechanisms and perceived relationship orientation. For the sake of simplicity, I condense the four phases in the relationship lifecycle into two broad groups: the *developing* phase (comprising of exploration and growth), and the *advanced* phase (comprising of maturity and decline), and offer hypotheses accordingly. However, I test the relationships empirically for each of the relationship phase.

### ***Impact of Relationship Lifecycle on Relationships Moderated by Monitoring***

Trust is one of the most important relational variables which thoroughly influences buyer-supplier interactions, and is especially critical at the onset of the relationship, that is, at the developing stage because it enables the exchange partners to determine goal compatibility, integrity and performance of the other partner (Dwyer, Schurr and Oh 1987). Cognitive trust, especially, is knowledge driven and due to the fact that the buyer makes trust judgments based on the other's level of expertise and reliability in the absence of complete knowledge (through own interaction or reported reputation in other relationships), a "leap of faith" becomes necessary to move forward. Consequently, the level of cognitive trust is higher than affective trust at the beginning of the relationship (Johnson and Grayson 2005); however this gap gets narrower as the relationship progresses over time and the emotional element of the relationship assumes more importance. I do not formally hypothesize these paths, although I do test them empirically in my model.

The beginning of a relationship is characterized by the prevalence of uncertainty regarding partner behaviors and focus on individual outcomes. When this is subjected to monitoring mechanisms at the same time, it results in undermining the impact of cognitive trust on performance outcomes, because the two mechanisms conflict with each other. On one hand, cognitive trust signals confidence in the supplier's abilities but on the other hand, monitoring implies suspicion and distrust that may be perceived as invasive and subsequently offend the partner's sense of autonomy. This continual conflict between cognitive trust and simultaneous probing, testing, and questioning, erodes the effect of cognitive trust on supplier performance outcomes in the developing stage of the

relationship. In a somewhat counterintuitive way, monitoring enhances the influence of affective trust because affective trust provides a buffer against potential reactance effects by signaling emotional connections, cooperative intentions and feelings of security in the buyer-supplier relationship (Johnson and Grayson 2005; Heide, Wathne and Rokkan 2007).

However in the later phases (advanced phase), the partners have already established standards of conduct and ground rules for future exchanges. Cognitive trust and affective trust increases as each partner fulfills expected obligations resulting in perceptions of goal congruence and cooperation that lead to expanded interactions. When this is coupled with monitoring behaviors, it amplifies its impact on mutual dependence and performance outcomes by erecting contractual structures to ensure the durability of the relationship (Dwyer, Schurr and Oh 1987). Noordewier, John and Nevin (1990) also found that increasing relational governance (in terms of monitoring) improved performance in terms of acquisition costs as the relationship moved to the relational end of the discrete-relational continuum as monitoring “...makes sure, as far as one can with documents, that the contractor has followed routines... creating a trail of paper for auditing if necessary...” (p. 84). Thus, this form of governance makes it easier to detect noncompliance by making the desired behavior transparent, lowers administrative costs and increases coordination and efficiency within buyer-supplier dyads. Therefore:

*H11a: In the developing stage, monitoring decreases the positive (negative) impact of cognitive trust on supplier performance, satisfaction, share of wallet and promoter score (switching intentions). On the contrary, it increases the positive (negative) impact of affective trust on supplier performance, satisfaction, share of wallet and promoter score (switching intentions).*

*H11b: In the advanced stage, monitoring increases the positive (negative) impact of cognitive trust and affective trust on supplier performance, satisfaction, share of wallet and promoter score (switching intentions).*

***Impact of Relationship Lifecycle on Relationships Moderated by Perceived Supplier Relationship Orientation***

A supplier's relationship orientation as perceived by the buyer indicates the supplier's evaluation of the costs and benefits of the exchange. In the developing phase of the relationship lifecycle, partners are just beginning to know each other and gauge each others' needs and resources. Since relations are just developing, there is little knowledge or perception of how the supplier feels towards the overall relationship, or the extent to which the supplier is likely to invest efforts and resources to maintain the relationship (De Wulf et al. 2001). As a result, supplier relationship orientation perceptions are not likely to be established yet, and therefore has a minimal impact on the trust (both cognitive and affective trust)-outcome relationship.

However as the relationship progresses, the exchange partners adopt a more long term orientation in evaluating their relationship, to the extent that the supplier is likely to expend effort and inputs in building and maintaining relational exchanges (De Wulf et al. 2001; Palmatier et al. 2008). I posit that perceived supplier relationship orientation moderates the impact of cognitive and affective trust on performance outcomes. When perceived supplier relationship orientation is high, that is, the supplier is willing to invest additional inputs into the relationship, the buyer is more likely to reciprocate the supplier's relational efforts by relying on the supplier's competence and reliability, as well as supplier benevolence and affect based behaviors. Conversely if perceived supplier relationship orientation is low, that is, the supplier doesn't desire a close partnership



preferring a transactional orientation instead, then the effect of cognitive and affective trust on performance outcomes is mitigated. Low supplier relationship orientation suggests that the buyer and supplier have divergent goals and are looking for different outcomes. Thus the buyer's willingness to depend on the supplier and its corresponding impact on outcomes will also be negatively affected. Consequently, a supplier whom the buyer perceives to be more relationally inclined toward the partnership will enhance the impact of cognitive and affective trust on performance outcomes. Hence:

*H12a: In the developing stage, perceived relationship orientation is not likely to have a significant (moderating) impact on the cognitive/affective trust-outcome relationship.*

*H12b: In the advanced stage, perceived supplier relationship orientation increases the positive (negative) impact of cognitive trust and affective trust on supplier performance, satisfaction, share of wallet and promoter score (switching intentions).*

## CHAPTER IV

### PILOT STUDY

Researchers have recently started paying attention to the dark side of trust in close relationships (Grayson and Ambler 1999; Anderson and Jap 2005), however, there is little understanding of exactly what this dark side is. In general, the onset of problems in close relationships is often met with denial at first, because it is difficult for the exchange partners to acknowledge that there is something “wrong” with the relationship since everything seemed to be going well. Moreover, it can also be problematic to provide concrete evidence (Anderson and Jap 2005). Therefore, the onset of the dark side of trust can be subtle and linger over a long period of time, with the partners perhaps not realizing it in the beginning, and not being able to do much about it later on. One of the most common mechanisms that gives rise to the dark side is opportunistic behaviors by one or both partners, where they engage in covert activities designed to exploit the other partner, under the umbrella of a cozy relationship (Wathne and Heide 2000; Jap and Anderson 2003; Heide, Wathne and Rokkan 2007). However there are other mechanisms as well, that play a role in engendering the dysfunctional effects of trust.

Therefore, this pilot study explores the following question: What are some of the problems associated with high trust levels in a buyer-supplier relationship? I adopted a qualitative approach to answer this question. Researchers agree that qualitative research is more appropriate when the purpose of the research question is to understand a

phenomenon in specific details, that is, to understand the “what” and “why”, and to explore substantive areas about which little is known (Strauss and Corbin 1998).

### **Research Activity**

Because this is an exploratory pilot study, I followed the guidelines for grounded theory development (Strauss and Corbin 1998). I collected data from managers engaged in buyer/procurement roles in manufacturing organizations and analyzed their responses, allowing patterns to emerge from the data. I conducted in-depth interviews with managers over the telephone, which lasted approximately forty-five minutes to one hour. Participants were informed about the purpose of the study (i.e. that I was investigating mechanisms used to improve buyer-supplier relationships) and assured confidentiality of their responses.

The participants were mostly recruited using personal contacts and subsequent snow-balling techniques. In total, I conducted twelve interviews with managers in procurement roles in manufacturing organizations. Of the 12 participants, 2 were women and the rest (10) were men. Further, 5 out of the 12 participants were senior-level managers. Participants’ tenure with their firm varied: 4 participants had worked at the firm for 2-5 years, 5 for 6-10 years and 3 participants for 11 years or more.

### **Interview Guide**

My interview guide was composed of two sections. In the first section, I asked participants about their overall relationship with their suppliers and then asked a series of probing questions to encourage them to provide more details on various aspects of their

relationship (such as quality of good relationships, process of supplier identification, descriptions of “good” and “bad” suppliers and so on). In the second part, I asked participants to describe in details, their relationship with a specific supplier (questions asked varied from specifics like duration of relationship, products/services procured to general questions on trust, distrust and monitoring levels in their relationships). Although I had developed the interview guide before starting these interviews, I modified them for subsequent interviews based on some of the insights from the early interviews. For example, although marketing literature uses the term “buyer” and “supplier”, it quickly became apparent that the practitioner world referred to them as “customer” and “vendor”. Modifications such as these were adopted for the rest of the interviews. The interview script that guided this discussion has been listed in appendix A.

### **Data Analysis and Interpretation**

On an average, interviews lasted forty-five minutes to one hour. Each interview was audio-taped and transcribed verbatim. Moreover, I took extensive notes during and immediately after the interviews. Next, the interviews were analyzed with the help of a computer-based text analysis package, Atlas. I used grounded theory coding (that is, open, axial and selective coding) to identify different facets of the dark side of trust. As I content-analyzed all the interviews, I identified some a-priori categories that have been discussed in the relationship marketing literature, as well as some emergent themes. I carefully went through each of the transcripts twice, and detailed passages and quotes that I believed reflected the managers’ perspectives on the dark side of trust. A sample transcript has been included in appendix B.

## Field Study Findings

*Trust Creates Vulnerability:* One of my primary interests was to explore when and if managers thought that excessive trust could be dysfunctional. My interview findings support the notion that high levels of trust can actually be detrimental to the relationship, beyond its immediate positive effects on attitudinal outcomes like cooperation, commitment, relationship satisfaction, expectations of continuity and loyalty. Many participants across seemed to agree that trust is a “good thing” in moderation, but that too much trust could pose problems down the road. They believed that high trust levels could expose them to *opportunism* and make them *vulnerable*. This is consistent with marketing literature which posits that the dark side of trust manifests itself by giving rise to opportunistic behaviors by either partner (Anderson and Jap 2005). Further, partners can never rule out that the other partner might see it as advantageous to cheat, if the incentives are large enough (Langfred 2004; Anderson and Jap 2005). For example, participants remarked that:

*“trust is an occupational hazard.... You have trust, but it can expose you, make you more vulnerable. You trust a supplier, but that supplier may share information and tomorrow if that information goes to a wrong place, it can prove to be dangerous. So you need to be very strict with the kind of information that you give out to the supplier. So I guess trust is limited...”*  
(Respondent 8)

*“ there are always issues with pricing, they come back and tell us they have to change pricing... you need to pay a lot more. Also, vendors say they can deliver something in 3 weeks but it takes 6 weeks... happens all the time, they start taking you for granted”* (Respondent 3)

*Trust Engenders Compliance:* Another problem associated with trusting too much seems to be increased complacency, so that the trusting party becomes complacent and consequently, not motivated to look outside the relationship for better

and more efficient options. As both partners reap trust benefits, their association can lead to a “lock-in” situation where the partners become so embedded in the relationship that they do not look outside their existing relationships, as a result of resource and routine rigidities (Gilbert 2005). Moreover, trust can have retarding effects on creativity and innovation, and inhibit flexibility to cope with complex and ambiguous situations. Consequently, trust can ultimately become constraining instead of enabling, and thus make it difficult for the partners to adapt to the changing environment. As one of the participants put it:

*“I think of complacency when I think of too much trust, you know, you start thinking the same way, there’s little exchange of new ideas, little innovation, stale thinking.... you don’t look outside, you don’t know if there’s something better out there... basically, you just start taking each other for granted...”*  
(Respondent 5)

*Trust Creates Dependence:* High trust levels can also lead to dependence on the other partner, such that other alternatives are not considered. For example, the buyer starts depending on the supplier for important resources and other capabilities, so that this dependence isolates the buyer from other opportunities, and later on, when there is a problem between them, the buyer will not have alternate resources to turn to. Thus they realize that it is prudent not to put “all your eggs in one basket.” The following quotes illustrate this:

*“Well, let’s say I rely on an electronic component, a board that goes into one of the products I manufacture, and my relationship with this supplier is so good and he is the only one qualified for that board. And all of a sudden, because they know they are the only one, they can change their behavior and force me to do things I don’t necessarily want to do, in order to buy the product. So basically I would be at their mercy until I am able to develop a second source”.* (Respondent 6)

*“once you establish trust, you don’t have to look closely at everything, you kind of think that they are acting in my best interests. But then if I reach a level where I am not doing my own homework, for example, for a new product, I trust that this company is going to be the cheapest for me, and I don’t start researching my options, then I want to give them 100% of the products I buy, then you could empower the supplier so much that you start depending on them.” (Respondent 5)*

*Trust can be Blinding:* Some participants also expressed that trust in partners causes an unquestioning attitude towards them, to the extent that they take their partners for their word, and do not check or verify information. Thus it can cause the partners to take the relation for granted, and blind them such that they run the risk of being cheated or missing out on important opportunities. Participants also mentioned that it was not always intentional on the part of the supplier; rather it could be a genuine mistake as well. According to a couple of managers:

*“... We had a lot of trust in this vendor but the supplier didn’t provide certification and later on it came out that he never had it in the first place. We ended up in a major legal disaster. The problem happened because we were ignorant....we trusted the supplier but we should have demanded proof for the same.” (Respondent 2)*

*“.... Sometimes you have to validate what the supplier is telling you, because they may be missing something in a very honest way. It might be a genuine mistake, not everything is done on purpose.” (Respondent 6)*

*“sometimes, you get to a point where you have a strong relationship and a lot of trust, then you might overlook what someone might call insignificant details and then it’s those details that can turn out to be a problematic issue down the road.” (Respondent 3)*

*Trust is only a “Pre-requisite”:* Interestingly, some participants expressed that though trust was a good thing to have, ultimately, it was performance that mattered. This mirrors Doney and Cannon’s (1997) finding that trust is an “order qualifier” not an “order winner”, so that trust is a requisite for a supplier to be included in the buyer’s

consideration set whereas it is the price and product quality, and not trust, that actually drives supplier choice. According to one respondent:

*“Trust only is not enough. You have to see results, basically, you have to look at hard data, you are in a business and you want to make sure that at the end of the day that your financial objectives are met. So you can trust the supplier and everything, but generally they are not the cheapest one” (Respondent 7)*

*Trust but Verify:* When questioned about what actions the managers took, to protect themselves against some of the dysfunctional side effects of trust, the ubiquitous response seemed to be “trust but verify”. Others referred to it as “guarded trust” or “healthy skepticism”. Each respondent emphasized the importance of checking and verifying their supplier’s actions to safeguard themselves against potential opportunism, or even unintended actions by suppliers, that could prove to be detrimental to their interests. The following quotes illustrate this point:

*“You know the old adage- trust and verify, if you have a relation and you don’t dig into details and really try to understand what issues, there might be a time when you are surprised down the road. So have an open trusting honest relation with the vendor but verify the details.... go out to the plants and see the hardware, and usually if your contracts are set up well, there are entry points of inspection, you have inspection clauses to go into the facility and look at things while they are being manufactured, so you can verify what you are being told. And if you don’t, then you are just being naïve about trust that you shouldn’t be...you should really go out and kick the tires.” (Respondent 8)*

*“I have to check and verify everything they say to me. If they give me the cost breakup of the product, I have to go out and see for myself whether what they are saying is true. Again they will do what they think is the best for their business and we will do what we think is the best for us. It is just business...they will hide their margins and it is our job to find out what they are and get a good deal for ourselves.” (Respondent 12)*

Another mechanism that many participants mentioned using was a monitoring system, in which the buyers evaluated their suppliers on different metrics to verify if the



suppliers were delivering on their commitments. Thus, they use performance evaluation tools to make sure they are getting what they were promised.

*“We use a lot of inspections or other measures like reports, weekly reports, stuff where we get way from trust levels to cold hard facts. So that’s what happens... we move away from the trust issue, and work on more of a metric driven and performance based type of tracking....” (Respondent 7)*

*“You kind of question everything that is coming from the supplier- whether it is a price quote, a delivery date commitment, a buying commitment- everything. And you basically put in additional activities to verify every single piece of information. We use business controls to measure the success of the activity,... you always deliver on time, you always deliver at the lowest possible cost, whatever it is or a combination of everything. Basically, whatever is important to you- you track their performance on those metrics so you can go back and look at those.” (Respondent 6)*

In summary, this qualitative study addressed the conceptual issues raised in this research. The in-depth interviews reveal that managers in procurement roles are well aware that while trust is important, it can also have dysfunctional side-effects. Accordingly, they take measures to protect themselves against it. Some of the negative consequences they mentioned with respect to the dark side of trust, are that high trust levels can make the buyer more vulnerable and open to abuse such that the supplier can take advantage of the former leading to pricing, delivery or quality issues. Thus trust can lead to “naiveté and a taken-for-granted mindset in which relationships are put on cruise-control” (Vlaar et al. 2007, p. 417). Second, it can make the buyer more complacent and discourage them from looking out for better and more efficient options. Third, high trust levels can increase the dependence of the buyer on the supplier such that the former may find themselves in a difficult situation in the event that the supplier is not able to meet supply requirements and the buyer doesn’t have any alternate suppliers. Last, high trust levels can lead to overlooking important details in the relationship even if they are

genuine and unintentional mistakes made by the supplier. In addition, the field study findings support the notion of using monitoring mechanisms in conjunction with trust processes for maintaining and enhancing buyer-supplier relationships.

## CHAPTER V

### STUDY 1: TEST OF THE CONCEPTUAL MODEL

#### **Empirical Context and Data Collection**

The empirical context for this study is business to business relationships between manufacturers and their suppliers, and the unit of analysis is a specific buyer-supplier relationship. To test my hypotheses, I needed a context in which individuals in procurement roles are engaged in purchases from suppliers on an ongoing basis. I chose ongoing relationships because they have had the opportunity to develop into relational exchanges which subsequently offer the scope for the development of trust as well as the onset of the “dark side” in ongoing relationships. As a result, I conducted my study in a manufacturing context. As such, data about buyer-supplier relationships can be collected from the supplier’s perspective, the buyer’s perspective or both (i.e. dyadic data). I chose to collect data from the buyer’s vantage point, because ultimately it is the buyer who evaluates his or her relationship with the supplier and makes purchase decisions, therefore the buyer’s perspectives on the relationship and subsequent behaviors are likely to be more important and relevant to my research questions. Besides, it offers advantages in terms of making data accessibility easier.

Data was collected by the means of a questionnaire mailed to manufacturing firms in the chemical, mechanical and electrical industries (U.S. Standard Industrial Classification codes 35, 36 and 37). The sample frame consisted of purchasing professionals, who were members of the Institute of Supply Management (ISM). ISM

provided a list of 1000 members (with postal addresses only) in the United States in return for a report of the overall results.

### ***Procedure***

1000 questionnaires were mailed to the buyers along with a pre-addressed, postage-paid envelop and a cover letter from the researchers explaining the purpose of the research and assuring the informants about the confidentiality of their responses. The buyers generally had the title of Director of Purchases, Director of Procurement, Senior Buyer, Materials Manager, Procurement/ Purchase Manager or Global Commodity Manager. The informants were asked at the outset of the questionnaire to identify *either their largest or second largest supplier* (in terms of securing share of business) with whom they had at least one year of frequent interaction, and then answer questions with respect to the supplier they had identified. Therefore half of the sample answered questions with respect to their “largest” supplier, and the other half reported on the “second largest” supplier. My objective behind this was to ensure variance in their relationships with their suppliers, especially on one of the dependent variables, share of wallet. Further, after completing the questionnaire, respondents were asked to respond to several questions that reflected their ability to portray the buyer-supplier relationship accurately. Specifically, three questions at the end of the survey (on a seven-point scale) assessed the respondents’ (1) involvement with the supplier, (2) knowledge about the supplier, and (3) confidence in their ability to answer the survey questions. There was only one wave of data collection and there was no follow-up mailing.

### *Sample characteristics*

Of the 1000 surveys mailed, 412 of them came back as undeliverable because of wrong addresses and/ or the person had left the company. Of the remaining, 73 responses were received resulting in a response rate of 12.4%. The response rate is quite low, compared to other studies conducted in similar contexts. Out of the 73 responses, 7 responses were dropped from the analyses based on post hoc informant check (informants with scores lower than 4 on the involvement scale, knowledge scale or confidence scale were dropped) so that the final sample size was 66. The average involvement score for the informants was 5.78 (s.d.= .86), average knowledge score was 5.66 (s.d.= .92), and average confidence score was 5.94 (s.d.= 1.02 ), indicating that the selected informants were qualified to report on their relationship with the suppliers.

Table 1 profiles the characteristics of the respondents.

\*\*\*\*\* Insert Table 1 about here \*\*\*\*\*

The total sample of the respondents can be described as follows: the majority of them were male (72.7%) in the age bracket of 46-55 (36.4%) years while some (22.7%) were between 36 to 45 years. With respect to total buyer experience, most (36.9%) had buyer experience of more than 20 years while 30.7% of the sample had 11-20 years of experience. Regarding job tenure, approximately 40% of the sample had been with the company 2- 10 years while 27.7% had been with the organization for more than 20 years. Finally, a vast majority of them (91%) had some college education.

## Questionnaire Development and Measures

I developed the survey instrument based on extant measures in the literature after a thorough review of previous research on buyer-supplier relationships. Subsequently, I pre-tested the instrument by emailing it to eight managers involved in purchasing roles to verify the appropriateness of the terminology used, the clarity and ordering of the questions, and the response formats. All of the eight managers provided feedback on the questionnaire, following which I incorporated the suggested changes and mailed the final version to the sample.

I operationalized the key study constructs in the conceptual framework using multi-item reflective scales. Most of the constructs were measured by a set of seven-point Likert scale items unless otherwise indicated (anchored by strongly disagree-strongly agree on either ends). The actual items and response formats for each construct are listed in appendix C along with their alpha reliabilities.

*Buyer and Supplier Relationship Specific Investments (RSIs):* Buyer RSI's indicate the extent to which the buying firm has made investments in time, effort and equipment to accommodate a specific supplier. Similarly, supplier RSI's reflect the extent to which the supplier makes specific investments in the relationship that could be lost if the relationship with a specific buyer were terminated. Each of these four-item measures was based on Rokkan, Heide and Wathne (2003). The reliabilities for buyer RSIs and supplier RSIs were 0.81 and 0.89 respectively.

*Relational Norms:* This nine-item scale was based on Palmatier (2007) and reflects the three dimensions of relational norms (solidarity, mutuality and flexibility). Relational norms reflect the extent to which exchange partners focus their efforts toward

preserving their relationship (solidarity), are involved in joint decision making (mutuality) and are adaptive to changing circumstances (flexibility). The composite of all these items was used as a measure of relational norms as I didn't make different predictions for each of these dimensions. The reliability for relational norms was 0.76.

*Buyer and Supplier Dependence:* This measure assessed the dependence of the buyer on the supplier and the perceived dependence of the supplier on the buyer, and consisted of three items each. Following Jap and Ganesan (2000), I operationalized dependence asymmetry as the supplier's dependence less the buyer's dependence. The measures for buyer and seller dependence were based on those used by Jap and Ganesan (2000), and the reliabilities were 0.79 and 0.90 respectively.

*Supplier Opportunistic Behaviors:* This scale describes the extent to which the supplier engages in "self-interest seeking behaviors with guile" (Williamson 1975), and comprised of four items based on John (1984) and Heide, Wathne and Rokkan (2007). The reliability for this measure was 0.90.

*Trust in supplier:* This scale reflects confidence in the exchange partner's competence and benevolence, and is based on measures used by Ganesan (1994) and Jap (2001). Since competence is based on *cognitive* attributions, while affect based trust is reflected in the *caring and benevolent* behaviors of the partner, I have used the credibility (seven items) and benevolence (five items) dimension of trust to measure cognitive and affective trust respectively. However, I have conceptualized overall trust in the supplier as a composite construct by averaging the items used to measure these two dimensions. The reliabilities for credibility trust and benevolence trust were .87 and .90 respectively.

*Monitoring:* This scale describes the buyer's efforts to verify and supervise the supplier's performance during the exchange, and comprises of seven items. The scale is based on that used by Noordewier, John and Nevin (1990) and was adapted to my context. The reliability for this scale was 0.63.

*Perceived Supplier Relationship Orientation:* This scale was based on Palmatier et al. (2008) and assesses the supplier's perceived need to engage in a relationship with the buyer. It was measured using a three item scale, and its reliability was 0.88

*Performance outcomes: Supplier performance* was measured by using a four item scale based on Cannon, Achrol and Gundlach (2000). A seven- point Likert scale was utilized ranging from "needs improvement" to "superior performance." The reliability for this measure was 0.88. *Share of Wallet* was a single open-ended item, and comprises of the buyer's report of the percentage of products that is purchased from the supplier out of all the potential products that could be purchased. *Switching Intentions* is based on Palmatier et al. (2008) and consists of three items that reflect the buyer's propensity to switch to a different supplier. The reliability for this scale was 0.68.

*Control variables:* Finally, I included other variables that are likely to influence performance outcomes, to account for alternative explanations. The control variables include duration of relationship between buyer and supplier, total buyer experience and company tenure (i.e. number of years the buyer has been employed in the current company), and were modeled as antecedents to the mediators and outcomes.



## Measure Validation

Each variable that was measured with multiple items was subjected to a scale development and validation procedure. First, I evaluated each item set (for all constructs) on the basis of item-to-total correlations and exploratory factor analysis (EFA) to get a sense of item-fidelity. Results for an EFA procedure for trust showed that four of the twelve items were inadequate as they did not demonstrate a dominant loading ( $< .50$ ) and/ or had significant cross-loadings ( $> .20$ ). Similarly, three items for relational norms and three items for monitoring were deemed inadequate because they didn't meet the guidelines for retaining items in a construct. All other constructs (buyer and supplier RSI's, buyer and supplier dependence, supplier opportunistic behaviors, perceived relationship orientation, supplier performance and switching intentions) were found to be distinct and demonstrated convergent and discriminant validity when they were run in an EFA procedure. However I didn't drop the inadequate items from the analysis, because the analysis is based on a limited sample size because of which the results may be suspect. Since all the measures are based on established scales in the literature, dropping items based on suspect results would not probably have been a wise decision.

Next, I estimated confirmatory measurement models to assess factor unidimensionality, using LISREL 8.5 (Joreskog et al. 2001) for each of the latent constructs separately, due to the constraints of sample size (i.e. since  $N=66$ ). For measures that had three or four items each, I conducted the analyses in a group; for example, I estimated confirmatory measurement models for performance and switching intentions in a single group, I did the same for supplier opportunistic behaviors and perceived supplier

relationship orientation. Similarly, buyer and supplier RSI's and buyer and supplier dependence were estimated in two separate groups respectively. Measurement models for trust in supplier (credibility and benevolence dimensions), relational norms and monitoring were estimated separately. In each measurement model, the item's loading was restricted to its *a priori* construct, cross-loadings were restricted to zero and the construct was allowed to correlate with other constructs (when estimated in a group). Although the chi-square goodness of fit index was significant for all the models ( $p < .01$ ), the root mean square of error of approximation (RMSEA) ranged from .06 - .12, the normed fit index (NFI) from .83 - .91, the non-normed fit index (NNFI) from .83 - .97 and the comparative fit index (CFI) ranged from .81 - .95, all of which suggest an acceptable fit of the models to the data (Browne and Cudeck 1992; Hu, Bentler and Kano 1992). Moreover, all the factor loadings were significant and in the predicted direction, in support of convergent validity. Table 2 summarizes the CFA results for the study constructs.

\*\*\*\*\* Insert Table 2 about here \*\*\*\*\*

Finally, I assessed discriminant validity by using the chi-square difference test in which I compared two nested models for each pair of latent constructs, by restricting the factor inter- correlations to unity, and then compared the chi-square values from the constrained and unconstrained models. A significantly lower chi-square value for the unconstrained model indicates that the constructs are not perfectly correlated, thus providing evidence for discriminant validity (Bagozzi and Phillips 1982). In each case, the chi-square statistic is significantly lower in the unconstrained model than the

constrained model ( $p < .05$ ), thereby establishing discriminant validity for all the study variables.

The descriptive statistics and correlations for all the study constructs are provided in Table 3. The alpha reliability for all the constructs (except for monitoring and switching intentions) is greater than 0.70 indicating satisfactory internal reliability for the constructs. On the basis of these tests, I concluded that my measures were valid and reliable.

\*\*\*\*\* Insert Table 3 about here \*\*\*\*\*

### **Hypotheses Tests and Results**

I tested my hypotheses by estimating ordinary least squares regression model. Table 4 summarizes the estimated coefficients for the hypothesized final model.

\*\*\*\*\* Insert Table 4 about here \*\*\*\*\*

#### ***Antecedents to Trust (H1a-H5a)***

The first set of hypotheses relate to the antecedents to overall trust. According to H1a, buyer RSIs are positively related to trust in supplier; this hypothesis is not supported as buyer RSI's have a significant negative effect on trust in supplier ( $B = -.38$ ,  $p < .01$ ). Supplier opportunistic behaviors were posited to negatively impact trust in supplier ( $B = -.34$ ,  $p < .01$ ); this hypothesis (H3a) was supported. Relational norms have a significant positive influence on trust in supplier ( $B = .31$ ,  $p < .05$ ), confirming H4a. The other antecedents to trust, supplier RSIs ( $B = .14$ , n.s) and dependence asymmetry ( $B = -.01$ , n.s) do not have a significant influence on trust in supplier, thus H2a and H5a were

not supported. Further, I performed mediation analyses by using hierarchical regression analysis, in which I estimated the effect of each antecedent on the three performance outcomes (seller performance, share of wallet and switching intentions) and found that trust fully mediates the effect of all antecedents on supplier performance, but has no impact on share of wallet. For switching intentions, it mediates all constructs except for dependence asymmetry ( $B = -.17, p < .05$ ) and supplier opportunism behaviors ( $B = .29, p < .05$ ), which are only partially mediated by trust and have a direct impact on switching intentions as well.

#### ***Curvilinear Mechanisms and Multidimensional Trust (H6, H7a-H8a)***

Next, I discuss the results of the curvilinear relationships of trust with all three performance outcomes. Contrary to my expectations, the quadratic term (trust<sup>2</sup>) did not have a significant effect on supplier performance, share of wallet or switching intentions. Trust was found to have a significant and positive influence on supplier performance ( $B = .71, p < .01$ ) and significant and negative impact on switching intentions ( $B = -.47, p < .01$ ), but including its curvilinear term did not yield a significant improvement to the model. Once again, there seems to be no relationship between trust in supplier and share of wallet. Thus hypothesis 6 was not supported.

H7a hypothesizes a positive relationship between cognitive trust and performance outcomes. Results show that cognitive trust has a significant impact on supplier performance ( $B = .73, p < .01$ ) and switching intentions ( $B = -.47, p < .01$ ), providing partial support for H7a. However, affective trust is not significantly related to the performance outcomes ( $B = .04, n.s.$  for supplier performance;  $B = -.06, n.s.$  for share

of wallet and  $B = -.10$ , n.s. for switching intentions), therefore there is no support for H8a.

***Moderating Effects of Monitoring and Perceived Supplier Relationship Orientation (H9-H10)***

I used a product-term regression procedure to evaluate whether monitoring and perceived supplier relationship orientation moderate the impact of trust on performance outcomes. It has been suggested that product-term regression detects true interactions better than sub-group analysis or the Chow test as the latter are more likely to produce spurious effects (Ping 1996; Cohen et al. 2003). Therefore, following Cohen et al. (2003), I first mean-centered the independent variables that constituted an interaction term (i.e. trust in supplier, monitoring and perceived supplier relationship orientation) to mitigate the potential threat of multicollinearity and then proceeded to form the product of the centered variables. These centered variables and their product term were then used in an OLS regression procedure.

Table 4 shows that my hypothesis regarding the moderating influence of monitoring on performance outcomes (H9) is partially supported. Specifically, monitoring positively moderates the influence of trust in supplier on supplier performance ( $B = .19$ ,  $p < .05$ ) but fails to reach significance for share of wallet ( $B = .11$ , n.s.) and switching intentions ( $B = .09$ , n.s.). Therefore, monitoring enhances the positive effect of trust in supplier on supplier performance, but not for the other dependent variables.

Finally, none of my propositions regarding the moderating effect of perceived supplier relationship orientation on performance outcomes were supported. The

predictions about the interactions of perceived relationship orientation with trust in supplier on performance outcomes are non-significant across supplier performance ( $B = .13$ , n.s.), share of wallet ( $B = .09$ , n.s.) and switching intentions ( $B = .14$ , n.s.). Therefore, H10 is not supported.

## **Discussion**

Most of the replicated hypotheses about the antecedents to trust were supported. Specifically, study findings indicate that buyer relationship specific investments (RSI's), relational norms and supplier opportunistic behaviors have a significant impact on trust in supplier while supplier RSI's and dependence asymmetry are not significantly related to trust. This confirms previous findings from the Palmatier et al (2007) study where the authors found that buyer and supplier RSI's, relational norms and seller opportunistic behaviors have a significant influence over trust. Thus these results are consistent with other empirical studies. Interestingly, contrary to my proposition, I found that buyer RSI's have a negative influence on trust in supplier, which implies that perhaps, when buyers need to make relationship specific investments, they have concerns about being held as hostages in the relationship and being taken advantage of, which consequently undermines their trust in the supplier.

I also tested for *post-hoc* mediation effects of trust, and found that trust mediates the effects of antecedents variables (buyer RSI's, relational norms and supplier opportunistic behaviors) on supplier performance, thus suggesting that trust is the immediate pre-cursor to supplier performance, as has been confirmed in earlier studies

(Palmatier et al. 2006; Morgan and Hunt 1994). Likewise, trust fully mediates the effects of buyer and supplier RSI's on switching intentions. However, supplier opportunistic behaviors ( $B = .29, p < .05$ ) and dependence asymmetry ( $B = -.17, p < .05$ ) were found to have a direct impact on the dependent variable as well. It is possible that when the buyer suspects that the supplier may be behaving opportunistically, it not only negatively impacts trust in the supplier, but also makes the buyer actively think about switching to another supplier, over and beyond the effects of negative trust.

Similarly, if the buyer is dependent on the supplier (perhaps because there aren't too many other alternatives), then he or she might not be willing to switch to another supplier, irrespective of the trust in supplier, simply because it won't be easy to find an alternate supplier. Curiously though, Palmatier et al. (2006, 2007) found that relationship investments were only partially mediated by trust, and had direct impact on performance outcomes as well, such that the direct impact was greater than the effect of the mediator. My findings didn't support this result, but it is possible that the small sample size limited my ability to find similar effects.

An interesting point to note is that there seems to be no association between share of wallet and trust in supplier, in fact the correlation between the two constructs was only about .08. I also tested whether any of the antecedents to trust directly affect share of wallet, but didn't find any association between them. This suggests that there are some other variables that have not been included in the model to explain the variance in share of wallet.

I had predicted that trust has a decreasing incremental effect on performance outcomes. However I didn't find any support for my propositions, since the quadratic

terms didn't emerge significant. Again, there is a strong possibility that the limited sample size is making the detection of effects difficult.

An interesting finding is that cognitive trust has a significant impact on supplier performance ( $B = .73, p < .01$ ) and switching intentions ( $B = -.46, p < .05$ ), while the impact of affective trust is non-significant on performance ( $B = .04, n.s.$ ) and switching intentions ( $B = -.10, n.s.$ ). This is one of the few studies that uses the multidimensional conceptualization of trust to demonstrate the impact of cognitive trust on performance outcomes (see Johnson and Grayson 2005). I also predicted that the influence of affective trust on outcomes is negative, but this hypothesis was not supported. Since affective trust develops only after a certain level of cognitive trust is established in the relationship (McAllister 1995), it is possible that some amount of affective trust gets vested in the buyer-supplier relationship with time, to the extent that it is present in the relationship, only it is not influential enough to have a significant negative effect on the outcome variables.

As far as the moderating mechanisms are concerned, most of my hypotheses regarding the moderating mechanisms were not supported. With respect to monitoring, only the interaction between trust and monitoring was found to be *significant* for *supplier performance*, not for share of wallet and switching intentions. However, I didn't find any significant effects for the moderating influence of perceived supplier relationship orientation on all three performance outcomes. One reason behind this could be the limited sample size, which made it difficult to detect interaction effects in such a small population. It has been suggested that the data set should be relatively large, typically consisting of at least 100 cases (Ping 1996).



\*\*\*\*\* Insert Figure 3 about here \*\*\*\*\*

However, the finding that monitoring has a positive moderating influence on supplier performance holds important implications. These results demonstrate that increasing levels of monitoring help to enhance the positive effect of trust in supplier on performance. Figure 3 shows the influence of trust in supplier on supplier performance for different levels of monitoring (I plotted the values of monitoring over the range -1.5 S.D to 1.5 S.D). At *lower levels of monitoring*, the level of performance for a given degree of trust in supplier is *lower* than the performance at *higher levels of monitoring*, suggesting that the extent of monitoring has an impact on how effective trust is.

## CHAPTER VI

### STUDY 2: TEST OF THE EXTENDED CONCEPTUAL MODEL

#### **Empirical Context and Data Collection**

The second study is also an empirical study, conducted in the context of B2B relationships where the unit of analysis is a specific buyer-supplier relationship. In addition to overcoming the sample size limitation of the previous study (study 1), this study offers an additional layer of complexity to the previous hypotheses, by examining the impact of relationship phases (i.e. exploration, growth, maturity and decline), on the cognitive/affective trust- outcome relationship.

Similar to the previous study, I conducted the survey among individuals in procurement roles in ongoing relationships, and chose to collect data from the buyer's perspective. However the main difference between Study 1 and this study is that the present study was conducted online through Vanderbilt University's eLab center. eLab is an academic research center dedicated to research in online environments through web-based experiments and surveys, and offers the use of a diverse international consumer panel. I sent out an email to a vast majority of the consumer panel, asking them to fill out a brief survey to determine their eligibility to participate in this research. The survey included questions like "are you currently involved in buyer/ procurement role", "if yes, how long have you been involved in this role", how many vendors do you deal with at any given time" and so on. The email and the survey that was sent to the panel, has been

listed in appendix D. Following this, panel members who confirmed their eligibility as procurement professionals were invited to participate in the survey.

### ***Procedure***

The survey questionnaire was sent to eligible panelists as and when they responded to the pre-survey. In the end, there were 928 eligible panelists (that is, panelists who both completed the pre-survey and answered questions to indicate that they were in a procurement role). All 928 were invited to participate in the survey: out of those 511 started the survey and 415 completed it resulting in a response rate of 44.7%. Data collection was terminated after one month. As in the previous study, the informants were asked at the outset of the questionnaire to identify *either their largest or second largest supplier* (in terms of securing share of business) with whom they had at least one year of frequent interaction, and then to answer questions with respect to the supplier they had identified. Once again, respondents answered several questions at the end of the survey, that reflected their ability to portray the buyer-supplier relationship accurately, for instance, their involvement with the supplier, their knowledge about the supplier and their confidence in answering the survey questions. There was only one wave of data collection.

### ***Sample Characteristics***

Out of the 415 survey responses, 12 respondents were dropped from the analysis based on post hoc informant check (informants with scores lower than 4 on the involvement scale, knowledge scale or confidence scale were dropped) so the final

sample size was 403. The average involvement score for the informants was 4.98 (s.d.= 1.21), average knowledge score was 5.85 (s.d.= .79), and average confidence score was 5.36 (s.d.= 1.04), indicating that the selected informants were qualified to report on their relationship with the suppliers. Table 5 profiles the characteristics of the respondents.

\*\*\*\*\* Insert Table 5 about here \*\*\*\*\*

The total sample of the respondents can be described as follows: a little more than half of the sample comprised of males (56.3%) in the age bracket of 25-35 (34.5%) years while some (27.8%) were between 36 to 45 years. With respect to total buyer experience, most (32.5%) had buyer experience between 6 and 10 years, while about 26.8% of the sample had 2-5 years of experience. Regarding job tenure, approximately 63% of the sample had been with the company 2- 10 years while about 28% had been with the organization 2-5 years. Finally, a majority of them (75%) had some college education.

### **Questionnaire Development and Measures**

Most of the measures in Study 2 remained the same as those used in Study 1. They are all based on measures in extant relationship marketing research that have undergone prior psychometric analysis, and use multi-item reflective scales that were adapted to fit the context of my research. However, for some of the constructs, items were further modified from the scales used in Study 1, to make them suitable for the second study (constructs like cognitive and affective trust, monitoring and relational norms). In addition, study 2 incorporated three more constructs: relationship lifecycle,

satisfaction and promoter score (details given below). As in the previous study, most of the constructs were measured by a set of seven-point Likert scale items anchored by “strongly disagree”-“strongly agree” on either ends (unless otherwise indicated). The actual item details for each construct are listed in appendix E along with its reliability score.

*Relationship Lifecycle:* Relationship lifecycle refers to the dynamic process by which exchange relationships develop over time. Drawing from Jap and Ganesan’s (2000) work, the relationship lifecycle has four distinct phases: exploration, build-up, maturity and decline. The measure that I used to capture this construct is also based on their work. It describes the various phases in the relationship life cycle, and then asks the respondent to choose *one phase* that most accurately portrays their firm’s current relationship with their supplier.

*Satisfaction:* Satisfaction is a positive affective state resulting from an overall appraisal of all aspects of a working relationship with an exchange partner. This two item measure was based on Jap (2001), and was measured by using a seven-point Likert scale, where 1= “strongly disagree” and 7=“strongly agree.” The reliability of this scale was .88.

*Promoter Score:* This construct refers to the willingness of a buyer to recommend his/her supplier to a colleague or a friend, and is based on Reichheld (2003). It was measured by a single item that asked “how likely is it that you would recommend this supplier to a friend or colleague who buys similar products?” and was rated on a scale of 1 to 10 where 1 stood for “not at all likely” and 10 stood for “extremely likely.”

*Control variables:* As in the previous study, I included other variables that are likely to influence performance outcomes, to account for alternative explanations. The control variables include duration of relationship between buyer and supplier, total buyer experience and company tenure (i.e. number of years the buyer has been employed in the current company), and were modeled as antecedents to the mediators and outcomes.

### **Measure Validation**

Each multi-item scale measure was subjected to a validation procedure. After the item-to-total correlations were examined for each construct and the items were submitted to an exploratory factor analysis (EFA), those with low correlations and those that exhibited significant cross-loadings ( $> .20$ ) were eliminated. As a result, one item for relational norms, and one item for supplier RSI's was deemed inadequate because they demonstrated significant cross-loadings ( $> .20$ ) and were hence dropped from further analyses. Similarly, two items for performance and one item for switching intentions didn't meet the criteria for retaining items in a construct and were consequently dropped. All the other constructs (buyer RSI's, buyer and supplier dependence, supplier opportunistic behaviors, cognitive and affective trust, monitoring, perceived relationship orientation, and satisfaction) were found to be distinct and demonstrated convergent and discriminant validity when they were run in an EFA procedure.

I then estimated confirmatory measurement models to assess factor unidimensionality, using LISREL 8.5 (Joreskog et al. 2001) for all the constructs in a single group, where each item's loading was restricted to its *a priori* construct, cross-loadings were restricted to zero and the construct was allowed to correlate with other constructs.

Although the chi-square was significant ( $p < .01$ ), a finding not unusual with large sample sizes (De Wulf et al. 2001), the values for CFI, NFI, NNFI, root mean square of error of approximation (RMSEA) and standardized root mean residual (SRMR) were acceptable and close to the standards suggested by Browne and Cudeck (1992): .95 for NFI, .97 for NNFI and CFI, and .06 for RMSEA and SRMR. Given that these goodness of fit indices were satisfactory, I concluded that the measurement model fit the data well. Next, I evaluated the quality of my measures by assessing the unidimensionality, reliability, convergent validity and discriminant validity for each construct. All the factor loadings were significant ( $> .84$  for all the items except for one item for relational norms whose loading was .65) and in the predicted direction in support of unidimensionality and convergent validity. Table 6 reports the CFA results for the study constructs.

\*\*\*\*\* Insert Table 6 about here \*\*\*\*\*

The composite reliability for the constructs ranged from .85 to .94 exceeding the .70 benchmark (Nunnally 1978), demonstrating good internal reliability for all the scales. Finally, I tested for discriminant validity by comparing a series of nested confirmatory factor models in which correlations between latent constructs were constrained to 1 (Bagozzi and Phillips 1982). The resulting chi-square differences were significant for all the comparisons, supporting discriminant validity for all the study constructs. I further performed a stronger test for discriminant validity with Fornell and Larcker's (1981) criterion. Table 6 shows that the average variance extracted (AVE) by the underlying construct was larger than the maximum shared variance (squared intercorrelations) with other latent constructs for all the variables, except for relational norms (where the

maximum variance shared (.52) > AVE (.46)). However, given that the average variance shared with other constructs for relational norms (.20) is smaller than the AVE (.46), I did not consider this a major problem.

In summary, the measurement model was shown to have ample evidence for unidimensionality, reliability, convergent validity and discriminant validity for all the study constructs, on the basis of which I concluded that my measures were reliable and valid. The descriptive statistics and correlations for all the study constructs are provided in Table 7.

\*\*\*\*\* Insert Table 7 about here \*\*\*\*\*

### **Hypotheses Tests and Results**

I estimated several path models in Lisrel 8.5 (Joreskog et al. 2001), to test each set of hypotheses (related to the influence of antecedents to cognitive/ affective trust, quadratic effects of trust, and the moderating effects of monitoring, perceived supplier relationship orientation and relationship lifecycle on the trust-outcome relationship). The chi-square goodness of fit index was significant for all the models ( $p < .01$ ), and the other fit indices were less than satisfactory, in that they did not meet the criteria for a good fit (NFI ranged from .53 to .66, CFI from .54 to .66, and SRMR from .17 to .21). However, given that these models were just path analyses and didn't account for measurement error within the latent constructs, these results are not that unusual. Moreover, I tested the same hypotheses by using regression analysis and obtained the same results (all the coefficients were in the same range).



Tables 8-12 summarize the estimated coefficients for the various hypothesized models.

\*\*\*\*\* Insert Table 8 about here \*\*\*\*\*

### ***Antecedents to Cognitive and Affective Trust (H1b-H5b)***

According to H1b, buyer RSIs have a significant and positive impact on cognitive trust and affective trust. As table 8 shows, this hypothesis was not supported as the influence of buyer RSIs on cognitive trust is non-significant ( $B= 0$ , n.s), while its impact on affective trust is significant but in the negative direction ( $B= -.08$ ,  $p < .05$ ). H2b was partially supported because supplier RSIs have a significant and positive impact on affective trust ( $B= .20$ ,  $p < .01$ ), but its impact on cognitive trust was not significant ( $B= 0$ , n.s). As predicted by H3b, opportunistic behaviors have a significant negative impact on cognitive and affective trust ( $B= -.15$ ,  $p < .001$  /  $B= -.07$ ,  $p < .05$ ) for cognitive trust and affective trust respectively). Further this impact is stronger for cognitive trust as compared to affective trust ( $p < .05$ ), therefore H3b was partially supported. In accord with H4b, relational norms have a significant influence on both cognitive ( $B= .74$ ,  $p < .001$ ) and affective trust ( $B= .76$ ,  $p < .001$ ), but there is no significant difference in their impact ( $p > .05$ ), thus there was partial support for H4b. Finally, dependence asymmetry doesn't have a significant impact on cognitive and affective trust; therefore H5b was not supported ( $B= -.03$ ,  $p > .10$  /  $.03$ ,  $p > .10$ ).

Further, I also performed mediation analysis to understand whether the effect of antecedents on outcomes is mediated by cognitive and affective trust (Palmatier et al. 2007). For this, I followed Baron and Kenny's (1986) three step procedure, in which the

first step entails showing the effect of the independent variables on the mediator (step 1); the second step involves demonstrating the effect of the independent variables on the outcomes (step 2), and the third step entails assessing the effect of the independent variables and the mediator on the outcomes (step 3).

\*\*\*\*\* Insert Table 9 about here \*\*\*\*\*

As Table 9 shows, cognitive trust fully mediates the influence of relational norms on performance (step 2 effect;  $B=.40$ ,  $p < .01$ , becomes insignificant in step 3;  $B=.12$ , n.s) when cognitive trust is incorporated as an additional predictor into the model.

However, it partially moderates the influence of relational norms on satisfaction (step 2 effect:  $B= .48$ ,  $p < .01$ , is weaker in step 3:  $B= .15$ ,  $p < .05$ ) and promoter score (step 2 effect;  $B= .61$ ,  $p < .001$ , is weaker in step 3;  $B= .22$ ,  $p < .01$ ). Cognitive trust doesn't mediate the effect of relational norms on share of wallet and switching intentions.

Similarly, cognitive trust partially mediates the effect of opportunism on performance (step 2 effect;  $B= -.15$ ,  $p < .01$ , is weaker in step 3;  $B= -.09$ ,  $p < .05$ ), satisfaction (step 2 effect;  $B= -.21$ ,  $p < .01$ , is weaker in step 3;  $B= -.15$ ,  $p < .01$ ) and promoter score (step 2 effect;  $B= -.25$ ,  $p < .01$ , is weaker in step 3;  $B= -.21$ ,  $p < .01$ ). But once again, it doesn't mediate the effect of opportunism on share of wallet and switching intentions.

I also conducted the Sobel test (Iacobucci 2008; Baron and Kenny 1986) to test whether the indirect effect of the antecedent on the outcomes via cognitive trust is significantly different from zero. The results also indicate that cognitive trust significantly mediates the impact of relational norms on performance (Sobel test-statistic= 6.76,  $p < .001$ ), satisfaction (Sobel test-statistic= 7.56,  $p < .001$ ), and promoter

score (Sobel test-statistic= 5.95,  $p < .001$ ). Likewise, it significantly mediates the impact of opportunism on performance (Sobel test-statistic= 4.17,  $p < .01$ ), satisfaction (Sobel test-statistic= 4.34,  $p < .01$ ), and promoter score (Sobel test-statistic= 3.96,  $p < .01$ ).

Like cognitive trust, affective trust also completely mediates the effect of relational norms on performance (step 2 effect;  $B=.40$ ,  $p < .01$ , becomes insignificant in step 3;  $B=.11$ , n.s), but is a partial mediator for outcomes like satisfaction (step 2 effect:  $B= .48$ ,  $p < .01$ , is weaker in step 3:  $B= .17$ ,  $p < .05$ ) and promoter score (step 2 effect:  $B= .61$ ,  $p < .01$ , is weaker in step 3:  $B= .20$ ,  $p < .05$ ), when it is incorporated as an additional predictor into the model. In the case of supplier RSIs, affective trust is a partial mediator for performance (step 2 effect:  $B= .20$ ,  $p < .01$ , is weaker in step 3:  $B= .12$ ,  $p < .05$ ), satisfaction (step 2 effect:  $B= .15$ ,  $p < .01$ , is weaker in step 3:  $B= .07$ ,  $p < .05$ ) and promoter score (step 2 effect:  $B= .22$ ,  $p < .01$ , is weaker in step 3:  $B= .12$ ,  $p < .05$ ). Similarly, affective trust partially mediates the impact of opportunism on performance (step 2 effect:  $B= -.15$ ,  $p < .01$ , is weaker in step 3:  $B= -.12$ ,  $p < .05$ ), satisfaction (step 2 effect:  $B= -.21$ ,  $p < .01$ , is weaker in step 3:  $B= -.19$ ,  $p < .05$ ) and promoter score (step 2 effect:  $B= -.25$ ,  $p < .01$ , is weaker in step 3:  $B= -.21$ ,  $p < .05$ ).

The Sobel test results also indicate that affective trust significantly mediates the impact of relational norms on performance (Sobel test-statistic= 6.80,  $p < .001$ ), satisfaction (Sobel test-statistic= 7.08,  $p < .001$ ), and promoter score (Sobel test-statistic= 6.78,  $p < .001$ ). Likewise, it is a significant mediator for the influence of supplier RSI's on performance (Sobel test-statistic= 5.01,  $p < .001$ ), satisfaction (Sobel test-statistic= 5.12,  $p < .001$ ), and promoter score (Sobel test-statistic= 5.00,  $p < .001$ ). Finally, affective trust significantly mediates the impact of opportunism on performance

(Sobel test-statistic= 2.23,  $p < .05$ ), satisfaction (Sobel test-statistic= 2.24,  $p < .05$ ), and promoter score (Sobel test-statistic= 2.23,  $p < .05$ ).

Interestingly, affective trust appears to be acting as a suppressor variable for the impact of buyer RSIs on satisfaction as step 2 effect ( $B = .09$ ,  $p < .05$ ) becomes stronger than step 3 effect ( $B = .13$ ,  $p < .05$ ) when affective trust is included as a predictor in the model (Sobel test-statistic= 2.53,  $p < .05$ ). Like cognitive trust, affective trust doesn't mediate the effect of any of the antecedents on switching intentions and share of wallet.<sup>1</sup>

### ***Curvilinear Mechanisms and Multidimensional Trust (H7a,b-H8a,b)***

To test the quadratic effects of cognitive trust and affective trust on the outcome variables, I estimated two models in which each dimension of trust was entered separately. Both the variables were mean-centered before obtaining their quadratic term to mitigate the potential threat of non-essential multicollinearity (Cohen et al. 2003). Table 10 summarizes the results for the estimated models.

\*\*\*\*\* Insert Table 10 about here \*\*\*\*\*

According to H7a, cognitive trust has a significant impact on performance outcomes. As table 10 shows, cognitive trust has a significant impact on all outcomes in the predicted directions (performance:  $B = .60$ ,  $p < .001$ ; satisfaction:  $B = .70$ ,  $p < .001$ ; switching intentions:  $B = -.47$ ,  $p < .001$ ; share of wallet:  $B = .06$ ,  $p < .001$ ; and promoter

---

<sup>1</sup> Both cognitive trust and affective trust seem to have a suppressor effect for the opportunism-switching intentions relationship; however there is no significant difference between the total effect and the direct effect ( $.74 / .75$ ,  $p > .10$ ). Since the difference in the two coefficients was only .01, I concluded that this was probably an anomaly.

<sup>2</sup> I also estimated another model in which I entered the two dimensions of trust, i.e. cognitive trust and affective trust, and their quadratic terms simultaneously into the model. For cognitive trust, all the 10 coefficients are in the predicted direction and are significant for the same relationships as in the earlier

score:  $B = .98, p < .001$ ). Therefore H7a is supported. Further, table 10 indicates that cognitive trust has a positive and significant quadratic effect for performance ( $B = .06, p < .01$ ), satisfaction ( $B = .06, p < .01$ ), share of wallet ( $B = .02, p < .01$ ), and promoter score ( $B = .17, p < .001$ ), as predicted. However, it has a significant negative quadratic effect on switching intentions ( $B = -.15, p < .001$ ). This provides partial support for H7b.

Regarding the main effects of affective trust, affective trust has a positive and significant impact on performance ( $B = .51, p < .001$ ), satisfaction ( $B = .60, p < .001$ ), share of wallet ( $B = .04, p < .01$ ), and promoter score ( $B = .76, p < .001$ ) as predicted. However it doesn't have a significant influence on switching intentions ( $B = -.05, n.s.$ ), therefore H8a is partially supported. Further, H8b predicts that affective trust has a significant, negative quadratic effect on the outcome variables. However, as table 10 shows, the negative quadratic effect of affective trust was not supported for any of the outcomes, therefore H8b was not supported. Interestingly, and contrary to my expectations, affective trust has a positive quadratic effect for share of wallet ( $B = .02, p < .01$ ).<sup>2</sup>

### ***Moderating Effects of Relationship Lifecycle***

I now discuss the overall moderating role of relationship lifecycle on the cognitive/affective trust- outcome relationship moderated by monitoring and perceived supplier relationship orientation. For clarity of exposition, I first consider the three-way

---

<sup>2</sup> I also estimated another model in which I entered the two dimensions of trust, i.e. cognitive trust and affective trust, and their quadratic terms simultaneously into the model. For cognitive trust, all the 10 coefficients are in the predicted direction and are significant for the same relationships as in the earlier model. However, for affective trust, 9 out of the 10 coefficients have the same direction and nature of significance as the former model (the exception being the significant main effect of affective trust on switching intentions; see table 10).

interactions among cognitive/ affective trust, monitoring and relationship lifecycle, for which I estimate the “cognitive trust by monitoring” interaction and the “affective trust by monitoring” interaction, along with the main effects across the four different relationship phases. Next, I do the same for perceived supplier relationship orientation. I estimated these models using the multiple groups’ option in Lisrel. Given that these models contain both main effects and constituent interaction terms, the potential for multicollinearity is likely to be higher in the sub-groups (the different phases) because of smaller sample size. To address this concern, I mean-centered the data in this analysis. Results show that none of the variance inflation factors were greater than 5 indicating a low probability of multicollinearity (Cohen et al. 2003). Additionally, I constrained the effects of the independent variables (cognitive trust, affective trust, monitoring, relationship orientation) and the interaction terms on performance outcomes to be equal across a pair of phases to test whether there is an overall difference between the coefficients of the two phases. If the chi-square difference between the two models (one model in which the coefficients are constrained to be equivalent across the phases compared to another model in which the corresponding parameters are not constrained) is significant, it indicates that the relationships are not equal across the two phases. Tables 11 and 12 summarize the results for the estimated models (for monitoring and perceived supplier relationship orientation respectively).

\*\*\*\*\* Insert Table 11 about here \*\*\*\*\*

\*\*\*\*\* Insert Table 12 about here \*\*\*\*\*

### ***Impact of Relationship Lifecycle on Relationships Moderated by Monitoring***

As table 11 indicates, the estimated coefficients are reported for the overall relationship, as well as for the individual phases of the relationship lifecycle. Although I offered hypotheses for two broad groups within the relationship lifecycle, I tested the proposed relationships for each phase. According to H1 1a, monitoring decreases the impact of cognitive trust on supplier performance, satisfaction, share of wallet, promoter score, and switching intentions, in the exploration and build-up phases. Results show that that this hypothesis is partially supported as the cognitive trust by monitoring interaction is negative and significant for satisfaction ( $B = -.27, p < .001$ ) and promoter score ( $B = -.21, p < .01$ ) in the build-up phase. However, monitoring does not appear to moderate the influence of cognitive trust on performance ( $B = -.07, n.s.$ ), switching intentions ( $B = .08, n.s.$ ), or share of wallet ( $B = .01, n.s.$ ) across the build-up phase. Similarly, none of the results for the cognitive trust by monitoring interaction are significant across any of the outcomes in the exploration phase.

Further, H1 1a also hypothesizes that monitoring increases the impact of affective trust on supplier performance, satisfaction, share of wallet, promoter score, and switching intentions. As Table 11 shows, the affective trust by monitoring interaction is positive and significant for performance ( $B = .11, p < .05$ ), satisfaction ( $B = .10, p < .01$ ), and promoter score ( $B = .22, p < .01$ ), but not for switching intentions ( $B = 0, n.s.$ ), and share of wallet ( $B = .02, n.s.$ ). However, none of the results for the affective trust by monitoring interaction are significant for any of the outcomes in the exploration phase. Further, there is no significant difference among parameters between the exploration and build-up phases for share of wallet and promoter score. Therefore, H1 1a is partially supported.

According to H11b, monitoring increases the impact of cognitive trust and affective trust on all the outcomes in the maturity and decline phases. Results indicate that this is true for the cognitive trust by monitoring interaction for satisfaction ( $B = .46, p < .01$ ), share of wallet ( $B = .13, p < .01$ ), and promoter score ( $B = .42, p < .01$ ) in the decline phase (and are significantly different from the maturity phase). Further, the affective trust by monitoring interaction is positive and significant for share of wallet in the maturity phase ( $B = .01, p < .05$ ) as predicted, but not significant for the other outcomes. However, these coefficients are not significantly different from the build-up phase.

However, contrary to my expectations, the cognitive trust by monitoring interaction is negative and significant for performance ( $B = -.21, p < .01$ ) in the decline phase, and for share of wallet ( $B = -.03, p < .01$ ) in the maturity phase. Similarly, monitoring appears to negatively moderate the impact of affective trust for switching intentions in the maturity phase ( $B = .07, p < .05$ ), and for performance ( $B = -.30, p < .01$ ), satisfaction ( $B = -.49, p < .01$ ), and share of wallet ( $B = -.14, p < .01$ ) in the decline phase. Its impact on any of the other outcomes in the maturity or decline phases is non-significant. Therefore, the results offer only partial support to H11b. Interestingly, the parameters in the maturity phase are not significantly different from the build-up phase, while those in the decline phase are significantly different from the maturity phase.

### ***Impact of Relationship Lifecycle on Relationships Moderated by Perceived Supplier Relationship Orientation***

H12a posits that perceived supplier relationship orientation is not likely to have a significant (moderating) impact on the cognitive/affective trust- outcome relationship in



the exploration and build-up phases. As table 12 shows, this hypothesis is not supported as the cognitive trust by relationship orientation interaction is negative and significant for share of wallet ( $B = -.08, p < .05$ ) in the exploration phase, while the affective trust by relationship orientation interaction has a positive and significant impact on share of wallet ( $B = .03, p < .01$ ) and promoter score ( $B = .11, p < .05$ ) in the build-up phase. However, the former coefficient ( $B = .03$ ) is not significantly different from the exploration phase ( $p > .05$ ), while there is a significant difference between the exploration and build-up phases for the affective trust by relationship orientation interaction for promoter score ( $p < .05$ ).

According to H12b, perceived supplier relationship orientation increases the impact of cognitive trust and affective trust on supplier performance, satisfaction, share of wallet, promoter score, and switching intentions. This hypothesis was partially supported because the cognitive trust by relationship orientation interaction is positive and significant for share of wallet ( $B = .05, p < .05$ ) in the decline phase, and approaches significance for satisfaction ( $B = .06, p < .10$ ) in the maturity phase. The affective trust by relationship orientation interaction is also positive and significant for performance ( $B = .27, p < .01$ ) and satisfaction ( $B = .37, p < .01$ ) in the decline phase. Additionally, these coefficients are significantly different from the previous relationship phase ( $p < .05$ ).

Contrary to my expectations, RO appears to negatively moderate the impact of cognitive trust for promoter score ( $B = -.11, p < .05$ ) in the maturity phase, and for performance ( $B = -.19, p < .05$ ) in the decline phase. Similarly, the affective trust by relationship orientation interaction is also negative for switching intentions ( $B = .08, p < .05$ ) in the maturity phase, and for share of wallet ( $B = -.12, p < .001$ ) in the decline phase.

Finally, the moderating impact of relationship orientation on the other outcomes in the maturity and decline phases is non-significant. Therefore, the results offer partial support to H12b.

## **Discussion**

The field survey in study 2 replicates prior work that shows the impact of relational norms, relationship specific investments and opportunism on trust in a supplier. However, one of the main contributions of this study is to explicate these effects on multidimensional trust, that is, cognitive and affective trust. Specifically, this study confirms that relational norms have a similar impact on cognitive and affective trust, whereas the impact of opportunism is greater on cognitive trust as compared to affective trust. This suggests that supplier opportunistic behaviors undermine competence and reliability beliefs about the supplier to a greater extent. Further, buyers seem to think that suppliers who make relationship specific investments (RSIs), are more concerned about the relationship, as supplier RSIs have a significant influence on affective trust, but not on cognitive trust. Conversely, buyer RSIs undermine affective trust, probably because they have trepidations about increased vulnerability to the supplier.

Further, consistent with other studies (Palmatier et al. 2006; Palmatier et al. 2007), this study demonstrates that supplier RSI's are not fully mediated by affective trust (since supplier RSI's do not seem to be related to cognitive trust). However, my research departs from other studies in that it *doesn't* support full mediation by cognitive trust and affective trust even for constructs like relational norms and opportunism on outcomes (like satisfaction and promoter score), whereas prior research found that trust mediates *all*

constructs except for RSIs. This suggests that studying the mediational nature of multidimensional trust is critical. The study results also indicate that the mediating impact of affective trust is smaller than that of cognitive trust for opportunism, because the indirect impact of opportunism on outcomes is more for affective trust as compared to cognitive trust (for example,  $-.19$  (affective trust) versus  $-.15$  (cognitive trust) for satisfaction).

This study also examines the differential quadratic impact of cognitive and affective trust on various performance outcomes. Specifically, I found that cognitive trust has an increasing incremental impact on performance, satisfaction, share of wallet and promoter score, suggesting that investments in cognitive trust are well worth the effort as “more is better.” The same rule doesn’t apply to affective trust, however, as affective trust has a significant impact on outcomes up to an optimal point, after which it hits a plateau. Interestingly, “more affective trust” is beneficial for share of wallet. These curvilinear effects are illustrated in figures 4, 5 and 6, which plot the predicted performance outcomes against cognitive trust and affective trust.

\*\*\*\*\* Insert Figure 4 about here \*\*\*\*\*

\*\*\*\*\* Insert Figure 5 about here \*\*\*\*\*

\*\*\*\*\* Insert Figure 6 about here \*\*\*\*\*

Specifically, figures 4 and 6 reveal that cognitive trust and affective trust have a differential impact on perceptual/attitudinal performance outcomes like performance, satisfaction and promoter score. The impact of cognitive trust conforms to its hypothesized motivator effect as it depicts an increasing incremental effect on the

performance outcomes. This is described in the positive, significant slope of the squared cognitive trust term. However, affective trust doesn't appear to play the role of hygiene need as predicted, since its quadratic impact was not significant for any of the outcomes.

Figure 5 tells a slightly different story. The graph on the left hand side depicts that cognitive trust has a decreasing incremental effect on switching intentions, suggesting that for this outcome (with more behavioral and economic implications in the near future), cognitive trust has a hygiene effect. The negative quadratic slope illustrates the beneficial effect of cognitive trust up to a fulfillment point, beyond which it yields a decreasing rate of return. Affective trust, on the other hand, has a non-significant quadratic effect on switching intentions. Finally, the graph on the right hand side in figure 5 portrays the positive and significant quadratic impact of both cognitive and affective trust on share of wallet. Theoretically, this suggests that both dimensions of trust serve the role of motivator needs to influence share of wallet.

A major contribution of this study lies in delineating the moderating impact of monitoring and perceived supplier relationship orientation on outcomes in the various phases of the buyer-supplier relationship lifecycle. Though I proposed hypotheses for two broad phases (developing and advanced phases) for the sake of simplicity, each hypothesis was tested empirically for all the four phases (i.e. exploration, build-up, maturity and decline) providing valuable insights into the effectiveness of moderating mechanisms for each phase. My research suggests that overall, neither of the moderating mechanisms have a significant impact on buyer-supplier relationships in the exploration phase. However, in the build-up phase, monitoring seems to undermine the impact of cognitive trust while it

bolsters the impact of affective trust on perceptual/ attitudinal performance outcomes (i.e., performance, satisfaction and promoter score).

\*\*\*\*\* Insert Figure 7 about here \*\*\*\*\*

\*\*\*\*\* Insert Figure 8 about here \*\*\*\*\*

The left hand side of Figures 7 and 8 depict this interaction over lower (- 1.5 S.D) and higher (+ 1.5 S.D) levels of monitoring, to show that the level of satisfaction and promoter score are significantly lower *at higher levels of monitoring*, thus highlighting the conflicting nature of cognitive trust and monitoring in the build-up phase. However, affective trust provides an emotional buffer against potential reactance to monitoring, so that monitoring has beneficial effects. This is portrayed in the right hand side of figures 7 and 8, which illustrate that *at lower levels of monitoring*, the level of satisfaction and promoter score for a given degree of affective trust is significantly *lower* than the satisfaction and promoter score *at higher levels of monitoring*.

The later phases (i.e. maturity and decline) show a slightly different picture. In the maturity phase, overall, monitoring doesn't seem to moderate the impact of either cognitive trust or affective trust on most outcomes. The only exception is the positive interaction between monitoring and affective trust on share of wallet, and a couple of negative interaction effects.

\*\*\*\*\* Insert Figure 10 about here \*\*\*\*\*

Figure 10 illustrates that monitoring enhances the impact of affective trust on share of wallet, because the share of wallet levels are higher at higher (+ 1.5 S.D) levels

of monitoring as compared to lower (- 1.5 S.D) levels of monitoring. However, for the most part, the moderation results are insignificant, suggesting that as relational exchanges move to the maturity phase, relationships are put on cruise-control wherein each partner relaxes their guard, and the relationship proceeds on its own rhythm (unless something drastic happens and upsets this balance). The beneficial effect of monitoring is once again demonstrated in the decline phase, where it enhances the effect of cognitive trust on satisfaction, share of wallet and promoter score. This is graphically portrayed in Figure 9.

\*\*\*\*\* Insert Figure 9 about here \*\*\*\*\*

Both graphs in Figure 9 illustrate the crucial role of monitoring mechanisms in the decline phase. As is apparent, higher levels of monitoring when coupled with existing cognitive trust levels, has an enhanced influence over satisfaction and share of wallet, whereas low monitoring levels have a detrimental impact. This finding suggests that competence and reliability beliefs signal an assurance to the party that their interests will be safeguarded as the relationship heads towards termination, while monitoring maintains accountability/compliance to procedures and transparency on both ends. However, it has the opposite effect on affective trust, as monitoring probably undermines the buyer's benevolence beliefs about the supplier and engenders feelings of insecurity, at a time when the relationship is about to come to an end, which subsequently has a negative impact on outcomes.

I also proposed that perceived supplier relationship orientation (RO) doesn't have a significant moderating impact on the cognitive/affective trust- outcomes relationship in

the exploration and build-up phases, because it hasn't developed to the extent of being effective. This appears to be generally true, though, perceived supplier RO appears to enhance the influence of affective trust for *some* outcomes, which suggests that when buyers perceive suppliers to be relationally oriented, it bolsters their benevolence beliefs about them. But this was true only for share of wallet and promoter score in the build-up phase.

However, relationship orientation proves to be beneficial in the decline phase of the relationship lifecycle for some outcomes, especially the affective trust-outcome relationships. Figures 11 and 12 depict this effect.

\*\*\*\*\* Insert Figure 11 about here \*\*\*\*\*

\*\*\*\*\* Insert Figure 12 about here \*\*\*\*\*

As illustrated in figure 11, the levels of share of wallet are higher for higher (+ 1.5 S.D) levels of relationship orientation as compared to lower (- 1.5 S.D) levels of relationship orientation. Similarly, both graphs in figure 12 illustrate that for a given degree of affective trust, performance and satisfaction levels are significantly higher for higher (+ 1.5 S.D) levels of relationship orientation. Therefore, in the decline phase, higher perceived relational orientation enhances the impact of affect-based judgments about the supplier, probably because it signals that both the buyer and supplier have similar goals and desire a smooth dissolution process. Although results supported this effect for only some outcomes, it suggests that perceived relationship orientation is an important consideration towards the end of the relationship lifecycle. Perhaps I would

have found more significant results with a larger sample size in this group (N=16 in decline phase).

Additionally, an examination of the significance of parameter differences across the phases for the hypothesized relationships indicates that overall, the build-up phase is different from the exploration phase. However, there are not many significant differences between the build-up and maturity phases. But when it comes to the decline phase, it is significantly different from the maturity phase for most of the hypothesized relationships. This suggests that future research could probably collapse the build-up and maturity phases into one broad group and examine relationships accordingly.

Therefore, study 2 makes two main contributions. One, it demonstrates the differential impact of cognitive trust and affective trust on various outcomes. Specifically, it uses the curvilinear mechanism to illustrate how the two dimensions of trust have distinct quadratic influences on both perceptual and objective performance outcomes. This suggests that perhaps, it is affective trust which accounts for the “dark” side of trust, in that, it is effective and beneficial up to a fulfillment point after which, it tethers off. The second contribution of this study lies in showing how these different mechanisms operate in various phases of the relationship lifecycle. The next chapter discusses the overall findings of this research in more details and offers implications for managers.



## CHAPTER VII

### GENERAL DISCUSSION AND IMPLICATIONS

The main question guiding my dissertation is: what mechanisms can be employed to enhance the effectiveness of trust on supplier performance outcomes. This emerges from the recent work in the relationship marketing area that focuses on the “dark side” of relational exchanges and contends that while trust has fairly consistent significant effects on attitudinal/perceptual outcomes, its effects on behaviors and performance outcomes are weaker (Grayson and Ambler 1999; Anderson and Jap 2005; Dirks and Ferrin 2001). First, I conducted in-depth interviews with procurement professionals, to understand the notion of the dark side of trust, and what it meant to them. Next, I examined the incremental influence of trust on performance outcomes by modeling it through curvilinear mechanisms. Moreover, I used a multidimensional conceptualization of trust to examine which dimension of trust (i.e. cognitive or affective trust) is more vulnerable to the dark side of trust. And finally, I hypothesized moderating conditions that enhance the influence of trust on performance outcomes in different phases of the buyer-supplier relationship lifecycle. Specifically, I predicted that monitoring mechanisms and perceived supplier relationship orientation have differential moderating impact on the cognitive/affective trust- outcome relationship depending on the specific phase of the relationship lifecycle. Overall, findings from this study offer preliminary prescriptive advice for managing and mitigating the dark side of trust in ongoing relational exchanges and suggest avenues for future research.

## **The Significance of the “Dark” Side of Trust**

The in-depth interviews with procurement professionals revealed that managers are well aware of the hazards of high trust levels in their exchange partners. Participants across the interviews admitted that while trust was “generally good,” too much of it could have potential negative consequences by making them vulnerable to their exchange partners and exposing them to opportunism. Some of the other problems associated with high levels of trust that were highlighted in the qualitative study are: increased complacency wherein the partners are happy with status quo and get in a “lock-in” situation, and increased dependency such that they start depending on a favored supplier for all their needs and end up putting “all eggs in one basket.”

Overall, the study participants seemed to feel that “too much” trust leads to unquestioning attitudes which can engender risks of either being cheated, or missing out on important opportunities. Therefore, they take measures to protect themselves from succumbing to this trap. All participants emphasized the importance of checking and verifying suppliers’ actions to safeguard their firm. They referred to this trust process as “guarded trust” or “healthy skepticism.” Moreover, they adopt quantitative monitoring procedures to track their supplier’s behaviors and make sure that they are delivering on their commitments. This process simultaneously accompanies their trusting behaviors, highlighting the notion that managers employ trust and distrust (in the form of monitoring) simultaneously to maximize outcomes and benefits from their relationships with their suppliers.

## **Antecedents to Trust**

Most of the replicated hypotheses about the antecedents to trust were supported in both empirical studies. Specifically, study I findings indicate that buyer relationship specific investments (RSI's), relational norms and supplier opportunistic behaviors had a significant impact on trust in supplier, while study 2 replicates the previous study findings by delineating this impact on cognitive trust and affective trust. Thus, studies 1 and 2 together confirm findings from Palamtier et al (2007), where the authors found that buyer and supplier RSIs, relational norms and seller opportunistic behaviors have a significant influence over trust. Like them, my research didn't find an effect for dependence asymmetry on trust. As such, my results are consistent with other empirical studies. Study 2 also highlights the importance of using multidimensional trust to examine these effects as results indicate differential impact for cognitive versus affective trust.

My results suggest that relational norms have a strong positive effect on trust in a supplier, and that this impact is similar for cognitive and affective trust. This provides support to previous research that indicates that the presence of relational norms is beneficial for buyer-supplier relationships (Jap and Ganesan 2000; Gundlach, Achrol and Mentzer 1995; Palamtier et al. 2007). Thus buyers perceive suppliers as being competent, reliable and genuinely interested in their welfare, as a result of jointly setting goals, freely exchanging information, being adaptable to changing conditions and acting in solidarity with their exchange partners. Further, supplier opportunistic behaviors undermine buyer cognitive and affective trust because when the buyer suspects opportunism in the exchange counterpart, in the form of either distortion and

misrepresentation of information, or reneging on explicit or implicit commitments such as failing to fulfill obligations, he or she starts questioning whether the relationship will continue into the future. As a result, the buyer starts doubting the supplier's intentions, as well as competence and reliability to perform. This effect seems to be larger for cognitive trust vs. affective trust.

Interestingly (and contrary to my proposition), I found that buyer RSIs have a negative influence on trust in a supplier (in study 1) and on affective trust (in study 2), which implies that perhaps, when buyers need to make relationship specific investments, they have concerns about being held as hostages in the relationship and being betrayed, which consequently undermines their affective trust in the supplier. According to transaction cost theory, specific investments involve considerable risk; because these investments are partially sunk, they lock in the investor to that particular relationship. This in turn gives rise to the possibility that the other relational partner may act opportunistically and betray the buyer's faith, thereby having a negative impact on the affective dimension of trust. On the other hand, it does not lead the buyer to question the supplier's competence, that's probably the reason it does not have a significant impact on cognitive trust. Similarly, supplier RSIs were found to have a positive impact on affective trust, but not on cognitive trust. This suggests that perhaps, relationship investments do not influence perceptions of the supplier's capability and competency. Instead, it engenders affective and gratitude-based reciprocal behaviors (Palmatier et al. 2009). A recent study by Palmatier and colleagues (2009) demonstrates that relationship investments generate feelings of gratitude and subsequent gratitude-based reciprocal behaviors which could lead to affect-based trust in the supplier.

I also tested for *post-hoc* mediation effects of trust, and found that although overall trust completely mediates the effects of antecedent variables (buyer RSIs, relational norms and supplier opportunistic behaviors) on supplier performance, multidimensional trust *only partially mediates* these effects. Specifically, study 2 findings revealed that only relational norms completely mediated the effect of cognitive and affective trust on performance, but the rest were partially mediated. This once again highlights the critical role played by multidimensional trust. Moreover, the mediating impact of cognitive trust seems to be greater than that of affective trust for the opportunism-outcome relationship. Perhaps overall trust masks the partial mediating nature of cognitive and affective trust to give complete mediating effects. This suggests that the current model is missing one or more important mediating mechanisms. As suggested by Palmatier et al. (2009), customer gratitude is one such mechanism; betrayal might be another missing link.

An interesting point to note is that affective trust appears to act as a suppressor variable for the impact of buyer RSIs on satisfaction, such that the direct impact of buyer RSIs on satisfaction is greater than its total impact. Further, while cognitive trust and affective trust partially mediate the effect of antecedents on perceptual/attitudinal performance outcomes (like satisfaction, performance and promoter score), they have no mediating impact for objective performance outcomes (share of wallet and switching intentions). This also implies that there is some important missing link, thus further research is required to address these concerns.

## **Curvilinear Mechanisms and Multidimensional Trust**

This research is one of the few studies that contribute to a better understanding of the impact of multidimensional trust on performance outcomes. The extant relationship marketing model is based on the cognitively oriented social exchange theory (Hunt and Morgan 1994; Dwyer, Schurr and Oh 1987) which focuses on maximizing mutual benefits over a period of time. Only recently have some researchers started investigating affective and behavioral aspects of relationship marketing, like affective trust (Johnson and Grayson 2005) and gratitude-based reciprocal behaviors (Palmatier et al. 2009). I predicted that while overall trust has a decreasing incremental effect on performance outcomes, cognitive trust and affective trust have differential quadratic impact on various outcomes. Although study 1 results did not confirm the curvilinear effects of trust, study 2 highlights some important findings. Specifically, it demonstrates the beneficial effect of both cognitive and affective trust on outcomes. While multidimensional (cognitive/affective) trust has a substantial impact on perceptual/attitudinal performance outcomes, it has a smaller but still significant impact on objective outcomes. Study 1, however, found significant effects of cognitive trust only, and none for affective trust.

Moreover, study 2 provides empirical evidence for the curvilinearities associated with the influence of multidimensional trust. Although cognitive and affective trust are significantly correlated, isolating the two dimensions reveals a marked difference in the way they influence outcomes. Specifically, cognitive trust has an increasing incremental effect on all the performance outcomes except for switching intentions (for which it has a negative quadratic effect), whereas affective trust has non-significant quadratic effects

on all outcomes except for share of wallet (for which it has a positive quadratic effect). Thus cognitive trust conforms to its hypothesized motivator effect, while affective trust doesn't appear to play the role of hygiene need. This provides evidence for the critical role of cognitive trust in relational exchanges, such that "more cognitive trust is better." By this, I don't mean to imply that affective trust isn't important, only that affective trust is beneficial up to a certain fulfillment point (as evidenced by its significant main effect) beyond which its significance fades away. Although affective trust doesn't have an incrementally decreasing effect as I hypothesized, once it gets vested in the relationship, it stays present in the relationship (unless something drastic happens to change this), only it is not influential enough to have a significant negative quadratic effect on the outcome variables.

Interestingly, cognitive trust plays the role of a hygiene need for switching intentions as depicted by its decreasing incremental effect on switching intentions, suggesting that it is beneficial up to a fulfillment point, beyond which it yields a decreasing rate of return. Finally, both cognitive and affective trust serve as motivator needs for share of wallet as is evidenced by their positive and significant quadratic impact on share of wallet. I expected to find this effect for cognitive trust but not for affective trust as share of wallet is an outcome of an economic nature; therefore I did not expect "emotion-driven" trust to influence this economic outcome. This finding suggests that perhaps, the decision to award business to suppliers is not always driven only by rational, cognitive assessments of the supplier capabilities, but instead is accompanied by emotional evaluations (affect-based feelings and behaviors) as well.

In summary, my research suggests that although cognitive trust and affective trust are both critical in the beginning of the buyer-supplier relationship, the beneficial effects of cognitive trust carry through the entire relationship whereas the impact of affective trust starts fading off after an “optimal,” fulfillment point. This implies that, perhaps, this dimension of trust is more vulnerable to the dark side of trust as relationships continue over time. Future studies with a longitudinal design may be able to provide empirical evidence for this detrimental effect.

### **Impact of Moderating Mechanisms and Relationship Lifecycle**

Study 1 and study 2 yielded different results with respect to the moderating hypotheses. In study 1, most of my hypotheses regarding the moderating mechanisms were not supported. With respect to monitoring, the trust by monitoring term was found to be significant only for *supplier performance*, not for share of wallet and switching intentions. However, I didn't find any significant effects for the moderating influence of perceived supplier relationship orientation on any of the performance outcomes. One reason behind this could be the limited sample size (N=66), which makes it difficult to detect interaction effects in such a small population. Study 2 on the other hand, yields some interesting findings, so I will focus on discussing those results below.

In addition to testing the moderating effects of monitoring and perceived supplier relationship orientation on performance outcomes, study 2 proposes and empirically demonstrates the impact of relationship lifecycle on these moderating mechanisms, thus highlighting the importance of cognitive and affective trust and their interactions with monitoring and perceived supplier relationship orientation, across different phases of the



buyer-supplier relationship lifecycle. I tested each hypothesis in four phases of the relationship life cycle, i.e. exploration, build-up, maturity and decline. Preliminary analysis indicates that the levels of cognitive and affective trust (i.e. their means) change over the four phases, however t-tests for the equality of means show that there is a significant difference between cognitive trust levels in the build-up and maturity phases (5.53 vs. 5.81,  $p < .05$ ), and in the maturity and decline phases (5.81 vs. 4.69,  $p < .001$ ) only. Affective trust levels do not change significantly over the first three phases, the significant difference being only between the maturity and declines phases (5.27 vs. 4.06,  $p < .001$ ).

Moreover, I had expected affective trust levels to be higher than cognitive trust levels as the relationship progressed, but I didn't find any support for that; the mean of affective trust remained less than that of cognitive trust in all the four phases. Further, t-tests revealed that there is a significant difference between cognitive and affective trust levels ( $p < .001$ ) across each phase. This suggests that cognitive trust remains more important than affective trust over the course of the relationship, or in other words, the heart doesn't rule the head even when the relationship develops over time.

With respect to cognitive/affective trust by monitoring interactions, I didn't find any moderating effects in the exploration phase for both cognitive and affective trust. This is probably because this is a trial and error phase in which exchange partners are just beginning to do business with each other, because of which monitoring isn't very effective yet. This study, however, demonstrates that monitoring conflicts with cognitive trust to have a negative impact on most outcomes in the build-up phase. This suggests that as partners begin to get used to each other in the build-up phase and establish beliefs

about the other partner's competence and reliability, simultaneous monitoring erodes this trust by generating reactance and engendering an environment of distrust and suspicion which subsequently has a negative impact on performance outcomes. Affective trust, on the other hand, provides an emotional buffer against this kind of reactance effect by minimizing stress, so that monitoring actually proves to be beneficial.

Monitoring doesn't seem to have a significant moderating impact on most of the outcomes in the maturity phase implying that once the buyer-supplier dyad has reached a level of understanding, each partner lets down their guard, and the relationship goes on some kind of cruise-control which doesn't need much interference or "checking in." Additionally, most of the parameters for the hypothesized relationships in this phase were not significantly different from the previous phase. In the decline phase, however, monitoring appears to be beneficial for most outcomes as it bolsters the impact of cognitive trust on outcomes, implying that competence and reliability beliefs signal an assurance to the party that their interests will be safeguarded in the dissolution process while maintaining compliance and transparency on both ends. But the same doesn't hold true for monitoring's moderating impact on the affective trust-outcome relationship. I found that maintaining constant investigation and interference undermines the buyer's benevolence beliefs about the supplier and engenders feelings of insecurity/distrust, at a time when the relationship is about to be terminated, thus having a negative impact on performance outcomes.

Therefore, my research provides evidence for the beneficial effects of monitoring over the course of the buyer-supplier relationship lifecycle. Other studies have also provided support for the beneficial effects of monitoring on partner opportunism when it

is combined with more informal social contracts (Heide, Wathne and Rokkan 2007). Specifically, monitoring interacts in a distinct way with cognitive trust and affective trust; where it conflicts with cognitive trust in the build-up phase, it mitigates the uncertainty about the exchange partner's behaviors and augments cognitive trust in the decline phase. Conversely, monitoring and affective trust work together to accomplish maximum benefits in the build-up phase, but clash in the decline phase. Notably, its moderating impact is insignificant in the exploration and build-up phases. This offers important implications for managers as they can choose to establish monitoring procedures (and vary the intensity) according to where they are in their relationship lifecycle.

Regarding the moderating impact of perceived supplier relationship orientation, my research shows that it doesn't have a significant impact on outcomes in the exploration phase, probably because it hasn't developed to the extent of being effective. However, it has a positive moderating impact for share of wallet and promoter score in the build-up phase. This suggests that when suppliers are perceived to be relationally oriented, it augments affect-based feelings and behaviors towards them and subsequently has a positive impact on outcomes. But this was true only for *some* outcomes, and for the most part, it appears that perceived relationship orientation doesn't have much influence on performance outcomes in the developing phases of the relationship lifecycle.

The same holds true for the maturity phase, as relationship orientation's moderating impact for *most* of the outcomes is non-significant. The only exceptions are when relationship orientation decreases the impact of affective trust on switching intentions and of cognitive trust on promoter score. I had expected to find that relationship orientation augments buyer's competence and affective trust judgments in

the supplier, but perhaps the supplier is satisfied with the status quo, and isn't as interested in having a relational orientation. That might explain why relationship orientation has a minimal moderating impact in the maturity phase as well. However, as for monitoring, the parameters for the interaction terms were not significantly different between the maturity and build-up phases.

Surprisingly, perceived supplier relationship orientation was found to have an overall negative moderating impact on the cognitive trust-outcome relationship in the advanced phases of the relationship lifecycle. This was especially true in the decline phase, suggesting that suppliers were not as relationally inclined as perceived, probably because the alliance was heading towards termination. However, it still enhanced the impact of affective trust on outcomes in the decline phase, implying that perceptions of the supplier's orientation and commitment to the relationship augment the belief that the supplier still cares about the relationship and may facilitate relationship repair or a smooth dissolution process, which consequently has a positive impact on perceptual performance outcomes (like performance and satisfaction).

In summary, my research contributes to extant research in relationship marketing by disaggregating the dimensions of trust and studying its main and curvilinear effects on various perceptual and objective performance outcomes. It also demonstrates that monitoring can be beneficial, contingent on being used in combination with either cognitive trust or affective trust across various phases of the buyer-supplier relationship lifecycle.

## **Implications for Management**

This research suggests that the impact of interpersonal relationships on performance outcomes is time and context dependent. Moreover, it delineates the differential impact of cognitive trust and affective trust on outcomes by suggesting that although both the dimensions of trust are important in the beginning of the relationship, the beneficial effects of cognitive trust increase over time whereas the advantages of affective trust remain stagnant. Thus it offers insights to managers regarding their relationship-building resource allocations across a portfolio of supplier relationships at various phases of the relationship lifecycle. Managers can choose to invest resources in building close relationships with their suppliers, by emphasizing on both the cognitive and affective dimensions in the beginning of the relationship but putting more emphasis on the competence, reliability and expertise expectations from the supplier at a later time (i.e. maturity and decline). This research also revealed that overall, cognitive and affective trust both significantly impact attitudinal/perceptual outcomes, whereas the impact of cognitive trust is more significant for objective outcomes like share of wallet and switching intentions. This finding can also help managers to make prudent allocation decisions depending on which outcome is more important to them at the time.

The moderating impact of monitoring also offers important implications for managers. One of the important findings in this study relates to the importance of monitoring in enhancing the effectiveness of affective trust in the build-up phase, and of cognitive trust in the decline stages of the relationship. Additionally, monitoring doesn't seem to be very effective in the exploration phase and the maturity phase. Accordingly, managers can choose to deploy monitoring procedures (and vary the intensity) according

to where they are in their relationship lifecycle. Similarly, managers can take advantage of supplier relationship orientation towards the end of the relationship because results suggest that supplier relationship orientation is an important consideration in the advanced phase of the relationship owing to its significant effect on outcomes in the decline phase compared to the earlier phases of the relationship.

### **Limitations and Future Research Directions**

Several limitations of this study need to be considered in the interpretation of my findings. First, this study is based on cross-sectional data and thus, makes no claims about causality. Longitudinal studies are needed to draw inferences about the causality of various mechanisms at play. To fully appreciate the dark side of trust and demonstrate its dysfunctional nature, further research is needed to investigate how cognitive and affective trust levels change over time and whether the effects of the moderating factors change dynamically. Future research can also consider using experimental methodologies because these facilitate the temporal separation between cause and effect variables.

Second, my data is single sourced and self-reported, that is, information about the different study variables are gathered from a single source (the buyer) thus raising concerns about common method variance that could have impacted construct relationships. The use of perceptual data also creates the potential for inaccuracies, based on incorrect perceptions (for example, supplier relationship orientation) although I tried to control for this by verifying respondent knowledge ability. Further, relying on responses of just the buyers provides an incomplete view of the relationship. A supplier's point of view might be different. Future studies should focus on getting data from multiple sources,

such as dyadic data (data from both buyers and suppliers) or secondary data (like financial outcomes).

Third, the sample frame used in this research (online consumer panel) also warrants caution in the generalization of my findings. Although respondents in this study came from varied backgrounds and industries, further research should confirm my results with different industries to examine how the pattern changes from one industry to the other. Further, I did not control for the type of products (i.e. off-the-shelf products vs. strategic products) in this study. It is likely that the kind of product purchased will play a role in determining the strength of relationships. Thus additional research is needed to factor in these elements.

Fourth, respondents were asked to respond to the survey questions by referring to relationships with either their main or second biggest supplier. This possibly restricts the range of responses, and excludes examination of other weaker supplier relationships. Future research should include a range of supplier relationships that vary from strong to weak relationships and offer a wider variance in responses.

Further research is also needed to investigate other drivers of trust ineffectiveness as well as other moderating factors that have the potential to enhance its effectiveness. Moreover, future studies should incorporate financial data in the objective outcomes like sales revenue, growth and so on. Additionally, respondents in this study were asked to mark the relationship lifecycle phase in where they were in, with the particular supplier they were referring to while answering the survey. This resulted in small sample sizes for a couple of phases (N= 52 for exploration, N=16 for decline) and restricts the variance of

findings. Future experimental studies should manipulate this construct by asking respondents to choose suppliers from a specific phase, in order to get equal cell sizes.

Finally, I used path analysis to estimate the various models for hypotheses testing which do not account for measurement error in the study constructs (as reflected in the less than satisfactory fit indices), although all the measures demonstrated convergent and discriminant validity with high reliabilities, and all results were compared with OLS procedures. Future studies should use superior modeling techniques to overcome this limitation.

Overall, I hope that future research extends my findings by providing more dynamic views of the effectiveness of trust among buyer-supplier dyads in different environments. Nevertheless, my findings provide new insights in the extant relationship marketing field, which will hopefully be useful to academics and practitioners alike.



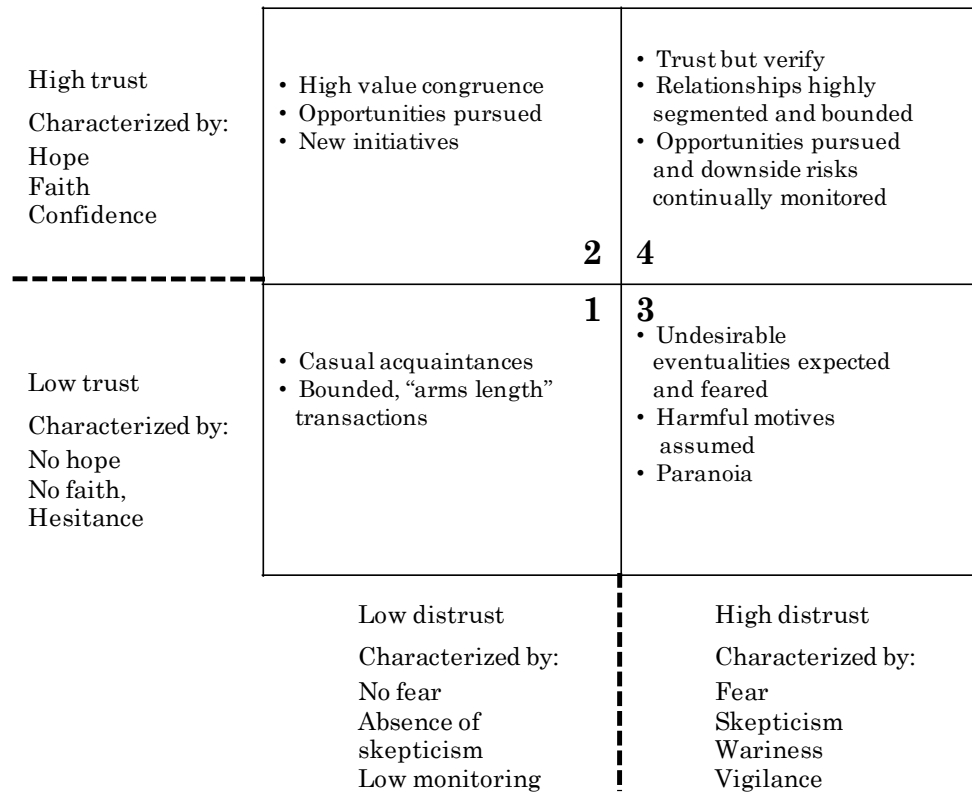


FIGURE 1: Combined Trust/ Distrust Model (Lewicki, Tomlinson and Gillespie 2006)

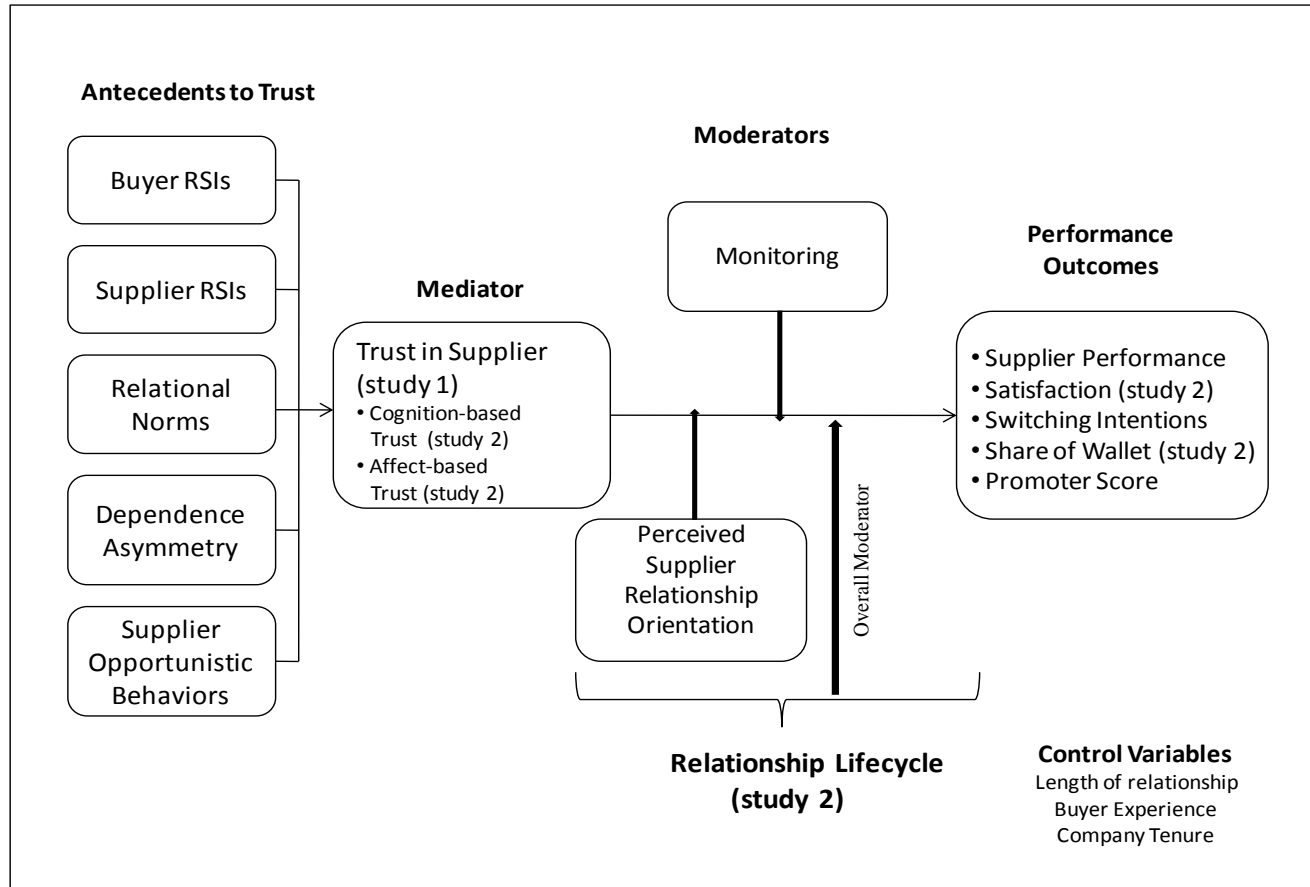
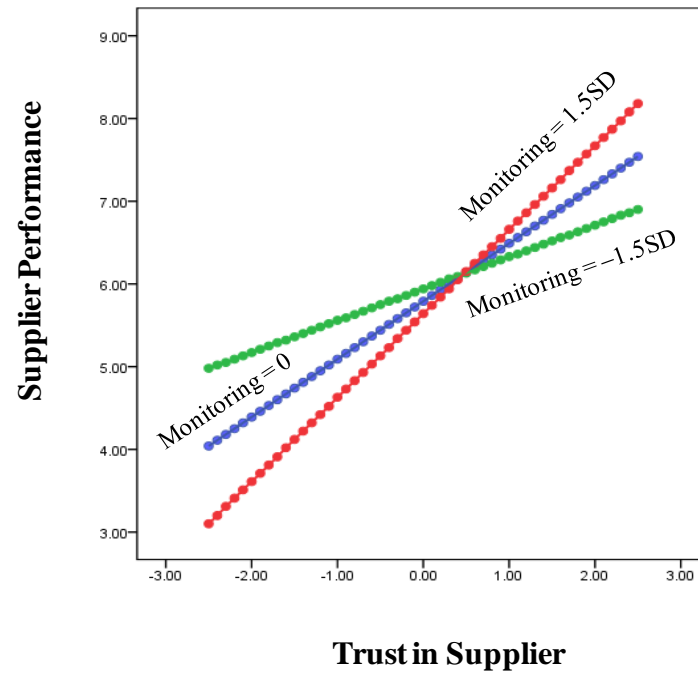


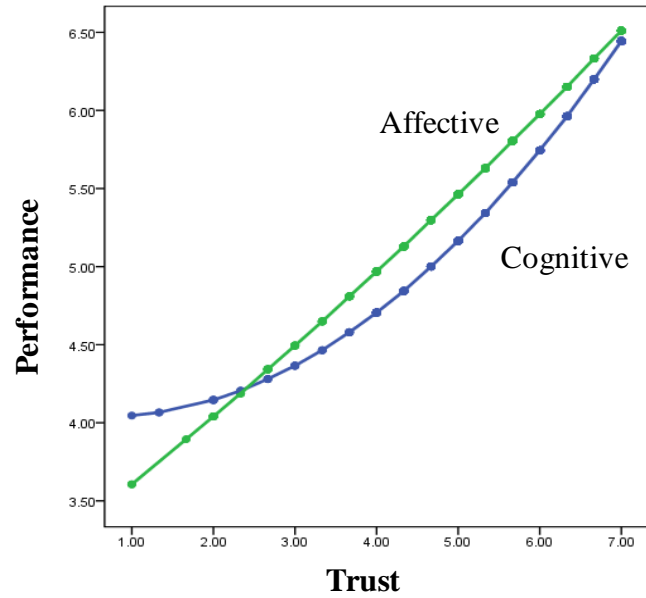
FIGURE 2: Conceptual Model



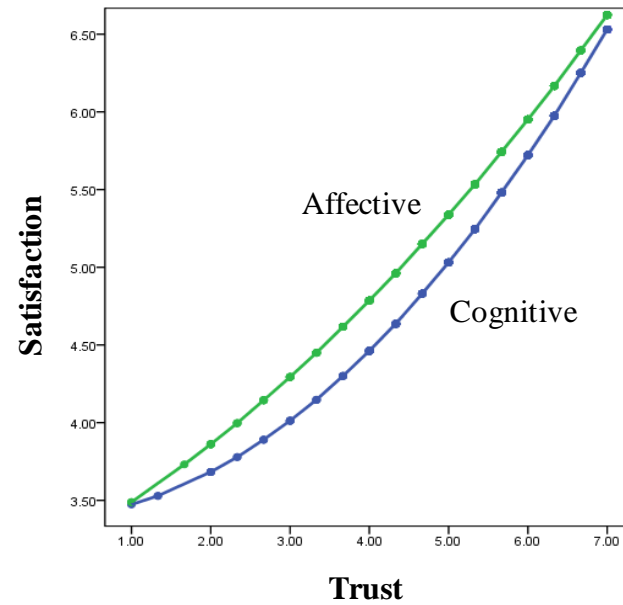
Equation plotted is:

$$\text{Performance} = 5.79 + .70 * \text{Trust} - .10 * \text{Monitoring} + .21 * \text{Trust} * \text{Monitoring}$$

FIGURE 3: Influence of Trust on Supplier Performance for Different Levels of Monitoring (Study 1)

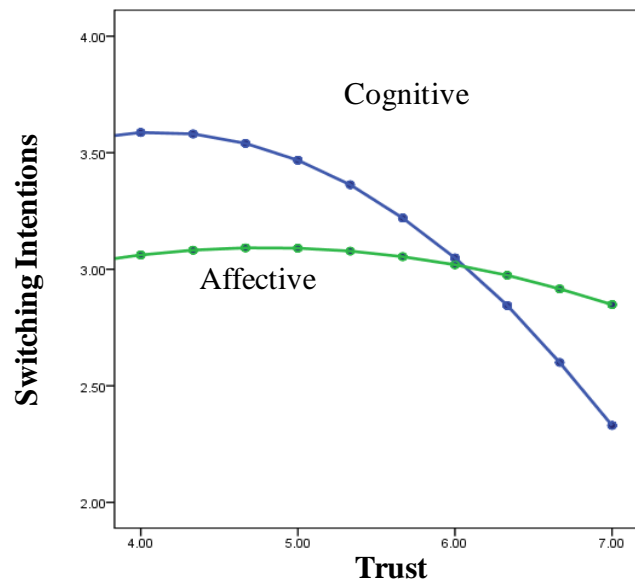


Equations plotted are:  
 $Perf = 5.54 + .60*CT + .06*CT^2$   
 $Perf = 5.61 + .51*AT + .01*AT^2$

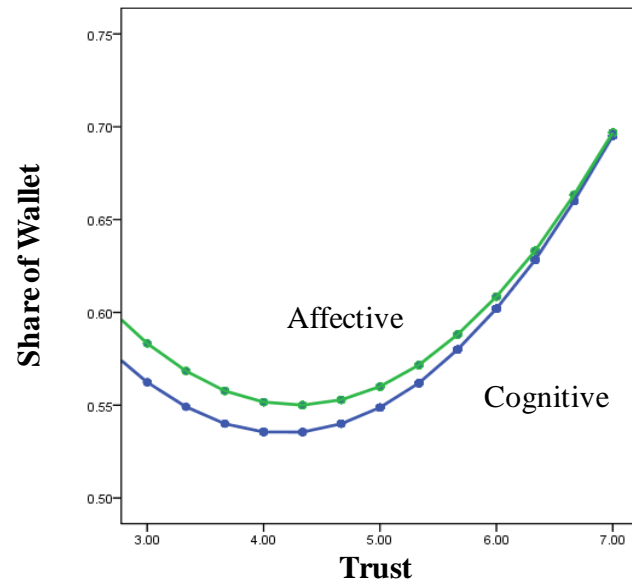


Equations plotted are:  
 $Sat = 5.48 + .70*CT + .06*CT^2$   
 $Sat = 5.51 + .60*AT + .03*AT^2$

FIGURE 4: Quadratic Effects of Cognitive/ Affective Trust on Performance and Satisfaction (Study 2)

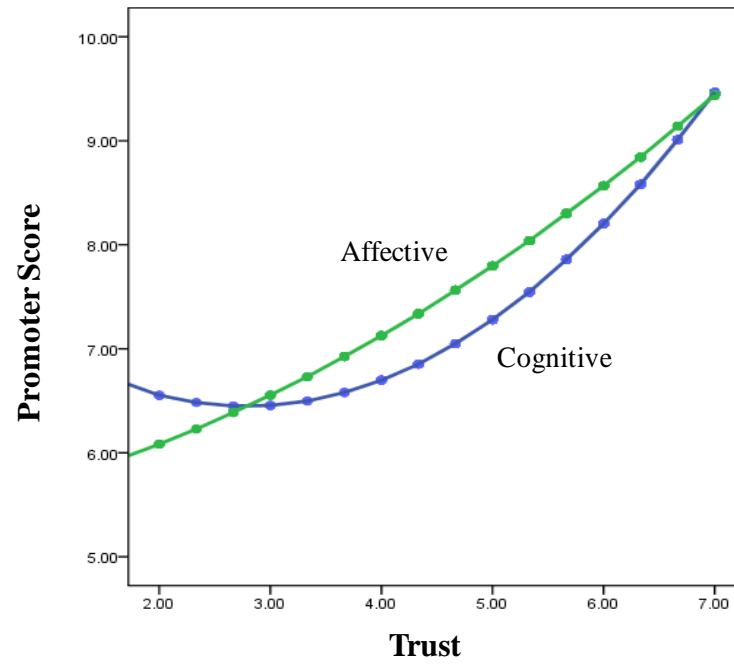


Equations plotted are:  
 $Switch = 3.22 - .47*CT - .15*CT^2$   
 $Switch = 3.08 - .05*AT - .05*AT^2$



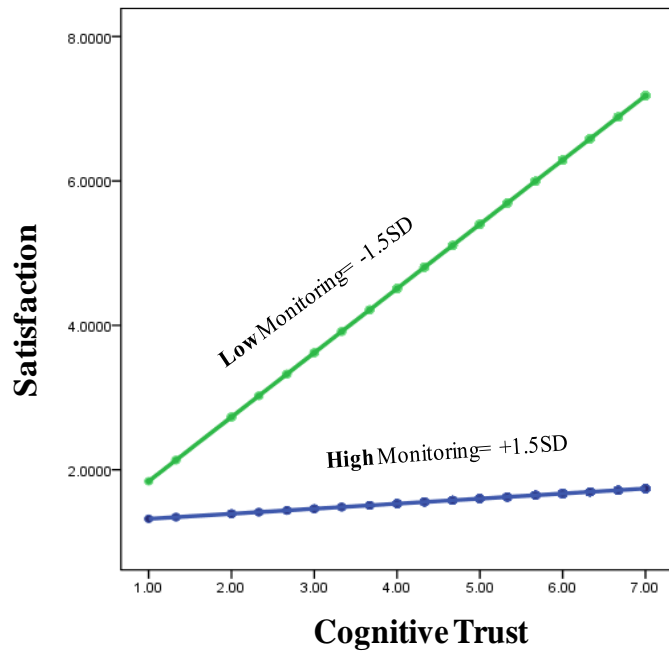
Equations plotted are:  
 $Share = .58 + .06*CT + .02*CT^2$   
 $Share = .57 + .04*AT + .02*AT^2$

FIGURE 5: Quadratic Effects of Cognitive/ Affective Trust on Switching Intentions and Share of Wallet (Study 2)

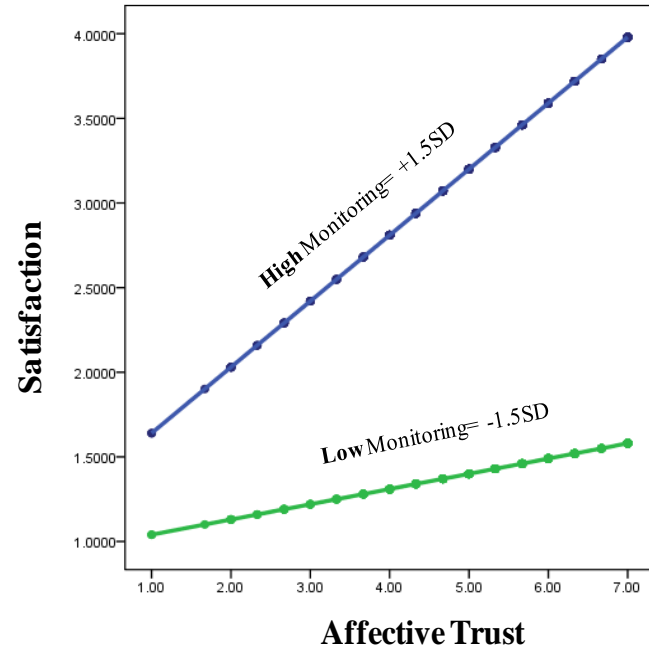


Equations plotted are:  
 Promoter =  $7.86 + .98*CT + .17*CT^2$   
 Promoter =  $8.01 + .76*AT + .05*AT^2$

FIGURE 6: Quadratic Effects of Cognitive/ Affective Trust on Promoter Score (Study 2)

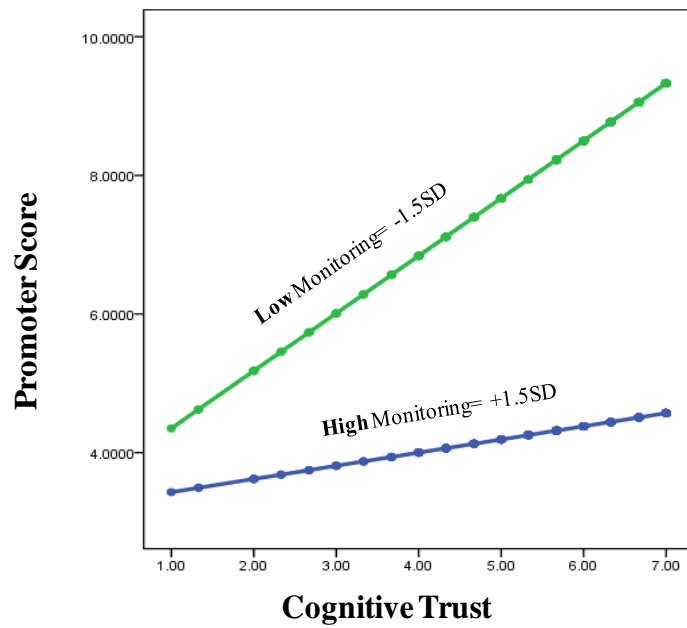


Equations plotted are:  
*High Mon*:  $Sat = 1.25 + .07 * CTrust$   
*Low Mon*:  $Sat = .95 + .89 * CTrust$

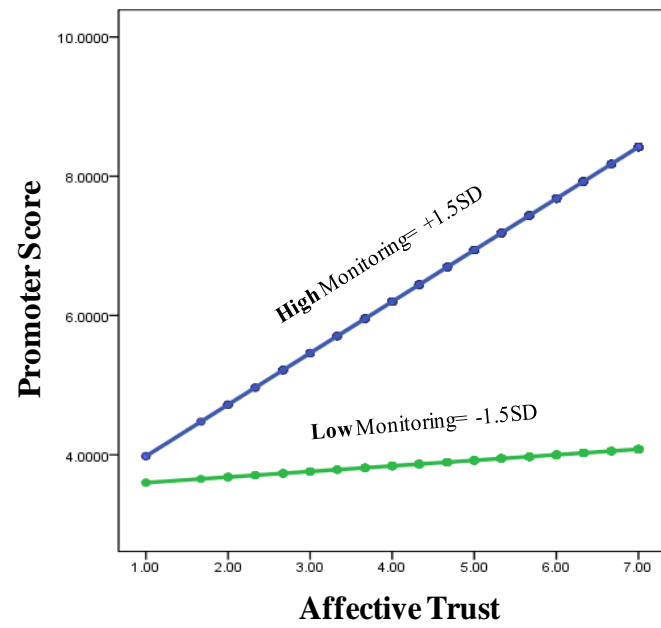


Equations plotted are:  
*High Mon*:  $Sat = 1.25 + .39 * ATrust$   
*Low Mon*:  $Sat = .95 + .09 * ATrust$

FIGURE 7: Cognitive/Affective Trust by Monitoring Interaction on Satisfaction in the Build-up Phase (Study 2)



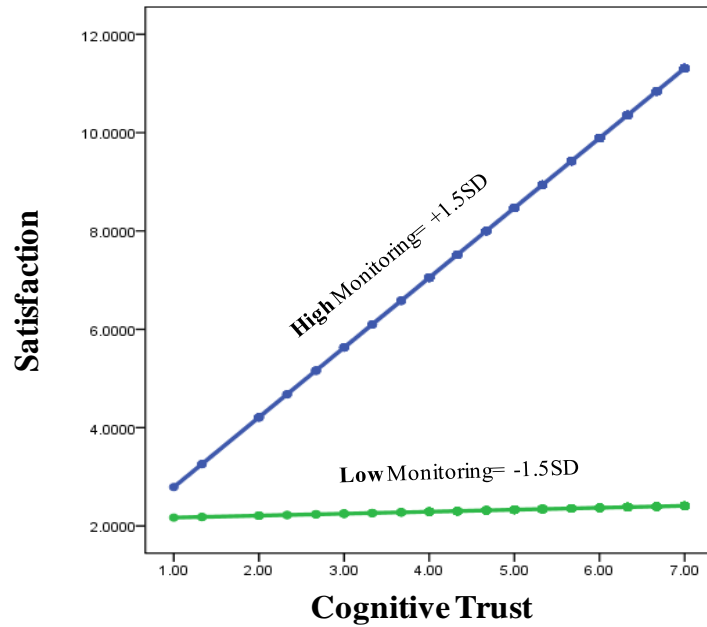
Equations plotted are:  
*High Mon:*  $Promo = 3.24 + .19 * CTrust$   
*Low Mon:*  $Promo = 3.52 + .83 * CTrust$



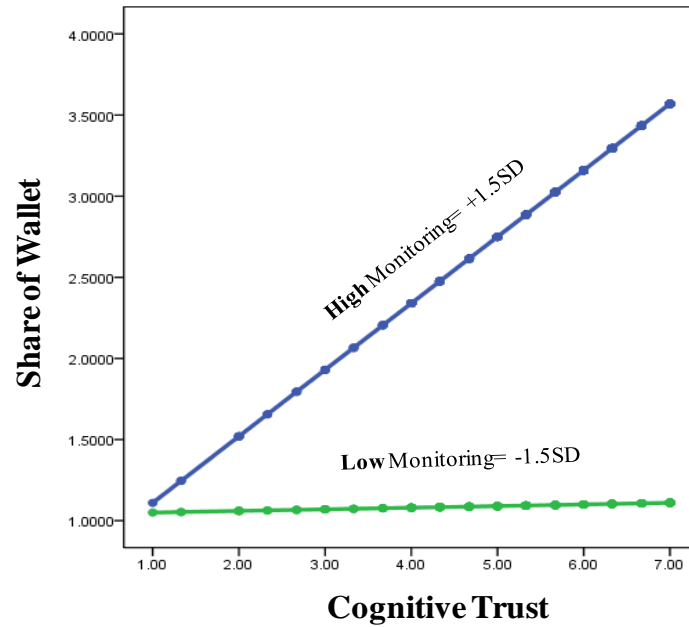
Equations plotted are:  
*High Mon:*  $Promo = 3.24 + .74 * ATrust$   
*Low Mon:*  $Promo = 3.52 + .08 * ATrust$

FIGURE 8: Cognitive/Affective Trust by Monitoring Interaction on Promoter Score in the Build-up Phase (Study 2)



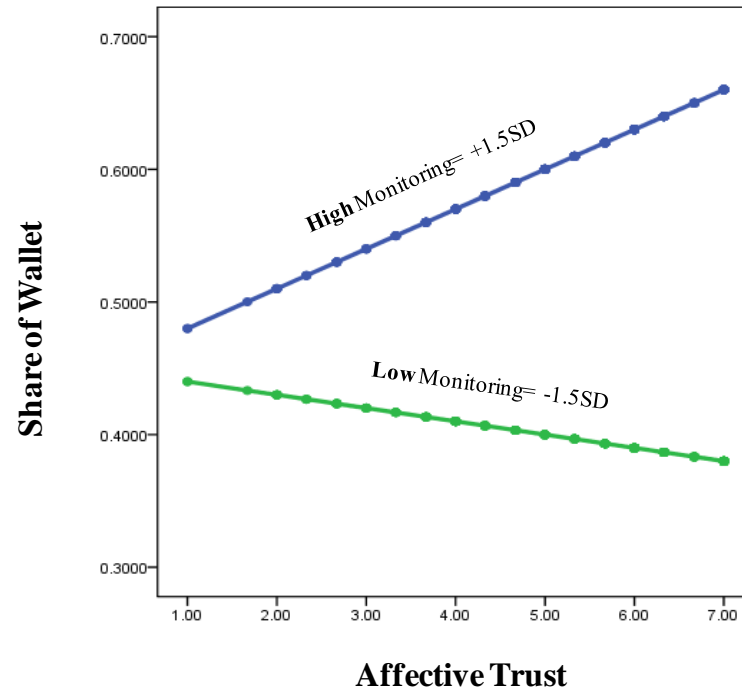


Equations plotted are:  
*High Mon*:  $Sat = 1.37 + 1.42 * CTrust$   
*Low Mon*:  $Sat = 2.13 + .04 * CTrust$



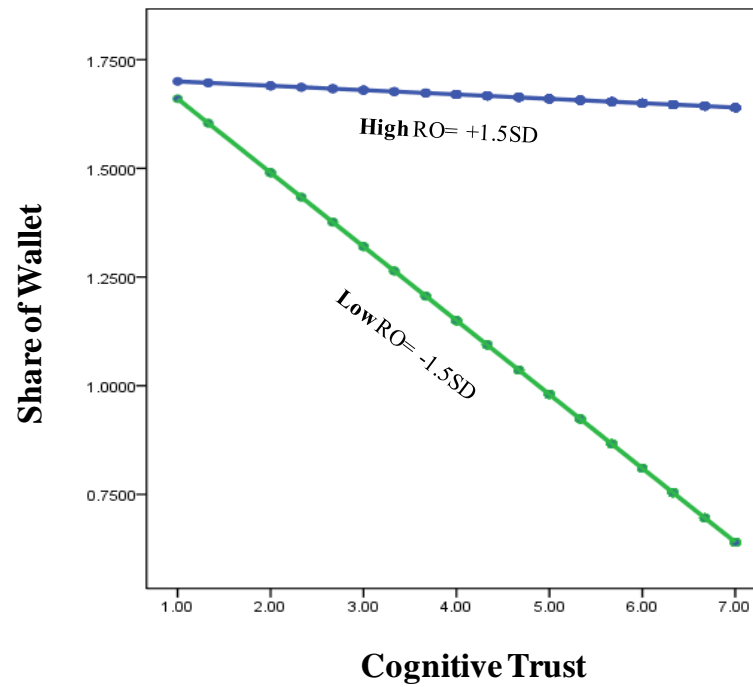
Equations plotted are:  
*High Mon*:  $Share = .70 + .41 * CTrust$   
*Low Mon*:  $Share = 1.04 + .01 * CTrust$

FIGURE 9: Cognitive Trust by Monitoring Interaction on Satisfaction and Share of Wallet in the Decline Phase (Study 2)



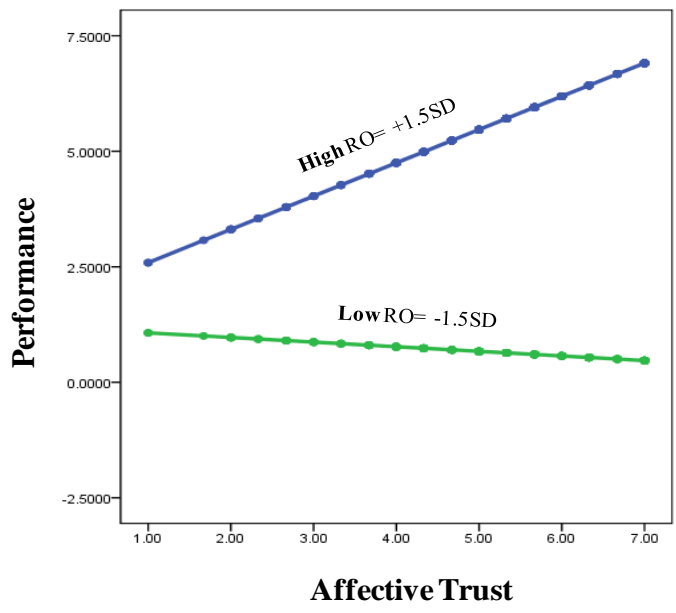
Equations plotted are:  
*High Mon*: Share = .45 + .03\*ATrust  
*Low Mon* : Share = .45 - .01\*ATrust

FIGURE 10: Affective Trust by Monitoring Interaction on Share of Wallet in the Maturity Phase (Study 2)

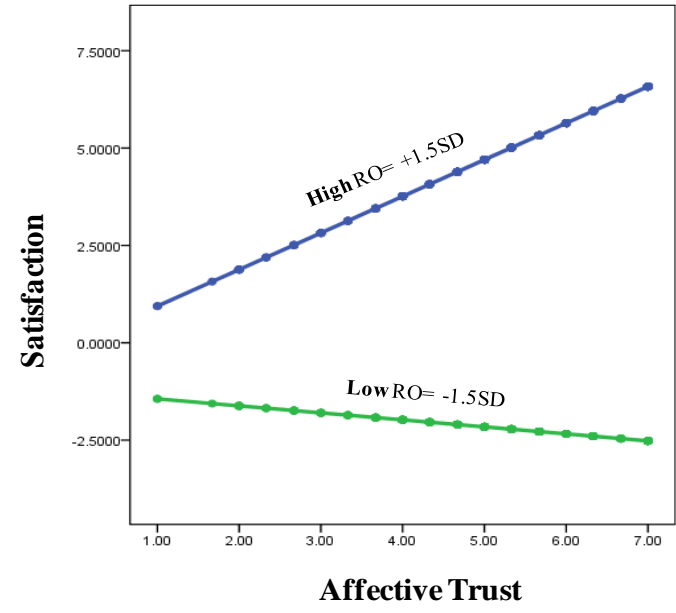


Equations plotted are:  
*High RO*: Share = 1.71 - .01\*CTrust  
*Low RO*: Share = 1.83 - .17\*CTrust

FIGURE 11: Cognitive Trust by Perceived Supplier Relationship Orientation Interaction on Share of Wallet in the Decline Phase (Study 2)



Equations plotted are:  
*High RO*: Perf = 1.87 + .72\*ATrust  
*Low RO*: Perf = 1.17 - .10\*ATrust



Equations plotted are:  
*High RO*: Sat = .94\*ATrust  
*Low RO*: Sat = -1.26 - .18\*ATrust

FIGURE 12: Affective Trust by Perceived Supplier Relationship Orientation Interaction on Performance and Satisfaction in the Decline Phase (Study 2)

TABLE 1: Characteristics of Respondents (Study 1)

Age		Gender		Level of Education		Company Tenure		Buyer Experience	
< 25 yrs	3	Male	72.7	High School	-	< 2 yrs	10.8	< 2 yrs	6.2
25 - 35 yrs	10.6	Female	27.3	Tech. Certification	-	2 -5 yrs	20	2 -5 yrs	15.4
36 - 45 yrs	22.7			Associate's Degree	9.1	6 -10 yrs	20	6 -10 yrs	10.8
46 - 55 yrs	36.4			Some College	10.6	11 -15 yrs	13.8	11 -15 yrs	9.2
56 - 65 yrs	24.2			College Degree	50	16 -20 yrs	7.7	16 -20 yrs	21.5
> 65 yrs	3			Graduate School	30.3	> 20 yrs	27.7	> 20 yrs	36.9

All numbers are in percentages

TABLE 2: Estimated Factor Loadings and Measurement Properties for Study Constructs (Study 1)

Construct/ Item	Loading	t-value	$\alpha$	Construct/ Item	Loading	t-value	$\alpha$		
<b>Buyer RSTs</b>	0.54	4.58	0.81	<b>Cognitive Trust</b>	0.85	8.29	0.87		
	0.67	5.93			0.75	6.8			
	0.98	10.11			0.52	4.33			
	0.75	6.89			0.67	5.85			
<b>Supplier RSTs</b>	0.85	8.23	0.89	0.72	6.52	<b>Affective Trust</b>	0.9		
	0.81	7.68		0.63	5.41				
	0.79	7.39		0.71	6.37				
	0.85	8.21		0.79	7.44				
<b>Monitoring</b>	0.33	2.35	0.63	0.85	8.44	<b>Opportunistic Behaviors</b>	0.9		
	0.45	3.28		0.93	9.82				
	0.36	2.52		0.67	5.94				
	0.36	2.57		0.81	7.74				
	0.43	3.13		0.73	6.65				
	0.75	5.56		0.76	7.07				
	0.59	4.36		0.87	8.56				
<b>Relational Norms</b>	0.37	2.8	0.76	0.94	9.68	<b>Performance</b>	0.88		
	0.38	2.87		0.81	7.86				
	0.41	3.16		0.67	6.02				
	0.51	4.05		0.81	7.85				
	0.45	3.49		0.96	10.25				
	0.63	5.14		<b>Switching Intentions</b>	0.68				
	0.85	7.56						0.88	8.09
	0.62	5.09						0.56	4.62
<b>Buyer Dependence</b>	0.72	6.67	0.79	0.59	4.91	<b>Perceived Supplier RO</b>	0.88		
	0.82	6.78		0.84	7.92				
	1.05	8.89		0.82	7.72				
<b>Seller Dependence</b>	0.43	3.48	0.9	0.87	8.4				
	0.92	9.34							
	0.86	8.32							
	0.84	8.08							

TABLE 3: Descriptive Statistics and Correlation Matrix (Study 1)

	Mean	S.D	1	2	3	4	5	6	7	8	9	10	11
<b>1 Buyer RSI's</b>	3.2	1.49	1										
<b>2 Supplier RSIs</b>	3.84	1.45	0.51**	1									
<b>3 Relational Norms</b>	5.12	0.74	0.02	0.28**	1								
<b>4 Dependence Asymmetry</b>	0.28	1.97	0.09	-0.25**	-0.12*	1							
<b>5 Seller Opportunistic Behaviors</b>	2.51	1.28	0.19*	-0.01	-0.44**	0.06	1						
<b>6 Trust in Supplier</b>	5.45	0.96	-0.37**	0.06	0.48**	-0.18**	-0.56**	1					
<b>7 Monitoring</b>	4.94	0.8	0.28**	0.36**	0.43**	-0.07	-0.08	0.09	1				
<b>8 Perceived Seller Relationship Orientation</b>	5.17	1.05	-0.25**	0.1	0.46**	-0.31**	-0.32**	0.35**	0.44**	1			
<b>9 Performance</b>	5.8	0.87	-0.36**	-0.06	0.48**	0	-0.47**	0.71**	0	0.26**	1		
<b>10 Share of Wallet<sup>a</sup></b>	0.4	0.24	0.07	0.03	0.25**	0.19**	-0.11*	0.08	0.03	0.03	0.15*	1	
<b>11 Switching Intentions</b>	2.52	1.27	0.21**	-0.06	-0.34**	-0.07	0.47**	-0.53**	0.06	-0.23**	-0.61**	-0.12*	1

\*\* Correlation is significant at the .01 level (2-tailed)

\* Correlation is significant at the .05 level (2-tailed)

a. % scale

All other constructs on seven-point Likert scale

TABLE 4: Estimated Coefficients for the Various Relationships Proposed in the Model (Study 1)

<b>Hypothesized Path</b>	<b>Standardized Beta Coefficient</b>	<b>t-value</b>
<i>Effects of Antecedents → Trust</i>		
Buyer RSI's → Trust	<b>-0.38</b>	<b>-3.37</b>
Supplier RSI's → Trust	0.14	0.99
Relational Norms → Trust	<b>0.31</b>	<b>2.56</b>
Dependence Asymmetry → Trust	-0.01	-0.10
Seller Opportunistic Behaviors → Trust	<b>-0.34</b>	<b>-3.14</b>
<i>Quadratic Effects of Trust → Performance Outcomes</i>		
Trust → Performance	<b>0.71</b>	<b>7.06</b>
Trust Squared → Supplier Performance	0.00	0.99
Trust → Share of Wallet	0.17	1.15
Trust Squared → Share of Wallet	0.23	1.56
Trust → Switching Intentions	<b>-0.47</b>	<b>-3.86</b>
Trust Squared → Intentions	0.14	1.18
<i>Multidimensional Trust → Performance Outcomes</i>		
Cognitive Trust → Supplier Performance	<b>0.73</b>	<b>6.16</b>
Affective Trust → Supplier Performance	0.04	0.30
Cognitive Trust → Share of Wallet	0.14	0.74
Affective Trust → Share of Wallet	-0.06	-0.30
Cognitive Trust → Switching Intentions	<b>-0.47</b>	<b>-3.15</b>
Affective Trust → Switching Intentions	-0.10	-0.69

\* Bold Figures indicate significance



TABLE 4, Continued

Hypothesized Path	Standardized Beta Coefficient	t-value
<i>Effect of Moderators → Performance Outcomes</i>		
Trust → Supplier Performance	<b>0.76</b>	<b>8.66</b>
Monitoring → Supplier Performance	-0.07	-0.86
Trust * Monitoring → Supplier Performance	<b>0.20</b>	<b>2.25</b>
Trust → Share of Wallet	0.12	0.80
Monitoring → Share of Wallet	0.00	0.03
Trust * Monitoring → Share of Wallet	0.13	0.83
Trust → Switching Intentions	<b>-0.53</b>	<b>-4.81</b>
Monitoring → Switching Intentions	0.08	0.74
Trust * Monitoring → Switching Intentions	0.08	0.75
Trust → Supplier Performance	<b>0.75</b>	<b>7.62</b>
Perceived Supplier RO → Supplier Performance	0.01	0.08
Trust* Perceived Supplier RO → Supplier Performance	0.13	1.34
Trust → Share of Wallet	0.12	0.72
Perceived Supplier RO → Share of Wallet	0.00	-0.03
Trust* Perceived Supplier RO → Share of Wallet	0.09	0.60
Trust → Switching Intentions	<b>-0.48</b>	<b>-4.04</b>
Perceived Supplier RO → Switching Intentions	-0.02	-0.20
Trust* Perceived Supplier RO → Switching Intentions	0.12	1.08

\* Bold Figures indicate significance

TABLE 5: Characteristics of Respondents (Study 2)

<b>Gender</b>		<b>Age</b>		<b>Level of Education</b>		<b>Company Tenure</b>		<b>Buyer Experience</b>	
Male	56.3	< 25 yrs	3.2	High School	10.7	< 2 yrs	3.2	< 2 yrs	4.2
Female	43.7	25 - 35 yrs	34.5	Tech. Certification	6.5	2 -5 yrs	27.8	2 -5 yrs	26.8
		36 - 45 yrs	27.8	Associate's Degree	7.7	6 -10 yrs	35.2	6 -10 yrs	32.5
		46 - 55 yrs	24.6	Some College	15.6	11 -15 yrs	14.4	11 -15 yrs	17.9
		56 - 65 yrs	8.9	College Degree	32.3	16 -20 yrs	7.4	16 -20 yrs	7.2
		> 65 yrs	1	Graduate School	27.3	> 20 yrs	11.9	> 20 yrs	11.4

All numbers are in percentages

TABLE 6: Estimated Factor Loadings and Measurement Properties for Study Constructs (Study 2)

	Loading	t-value	High Var.	Avg. Var.	AVE	Rel.		Loading	t-value	High Var.	Avg. Var.	AVE	Rel.						
<b>Buyer RSIs</b>	1.28	16.34	0.64	0.2	0.66	0.88	<b>Opportunism</b>	1.63	20.64	0.66	0.11	0.8	0.94						
	1.2	16.44						1.7	22.84										
	1.62	21.35						1.84	25.21										
	1.56	20.35						1.77	23.34										
<b>Supplier RSIs</b>	1.65	23	0.66	0.22	0.78	0.92		<b>Cognitive Trust</b>	1.15	22.34	0.64	0.2	0.72	0.88					
	1.58	22.6							1.04	17.48									
	1.57	21.08							1.17	22.1									
<b>Norms</b>	0.84	13.83	0.52	0.2	0.46	0.87		<b>Affective Trust</b>	1.16	21.99	0.64	0.24	0.66	0.85					
	0.88	14.63							1.17	17.23									
	0.96	16.06							1.16	18.87									
	<b>Buyer Dep.</b>	0.92						17.23	0.14	0.07	0.65	0.85	<b>Monitoring</b>	1.62	19.43	0.49	0.2	0.65	0.88
		0.85						15.63						1.69	20.81				
		0.65						8.93						1.1	15.02				
		0.88						17.39						1.43	19.11				
		0.88					18.78												
<b>Supplier Dep.</b>	1.44	18.37	0.46	0.18	0.77	0.91	<b>Perceived Supplier RO</b>	1.35	19.64	0.46	0.2	0.76	0.86						
	1.54	20.89						1.52	21.43										
	1.31	15.8																	
<b>Supplier Dep.</b>	1.56	20.81	0.69	0.19	0.77	0.87	<b>Performance</b>	1.17	20.87	0.69	0.23	0.79	0.88						
	1.68	23.17						1.01	21.41										
	1.62	21.7						1.11	22.75										
							<b>Satisfaction</b>	1.2	21.4	0.69	0.23	0.79	0.88						
								1.61	20.34					0.66	0.09	0.8	0.89		
							<b>Switching</b>	1.83	23.18										

TABLE 7: Descriptive Statistics and Correlation Matrix (Study 2)

	Mean	S.D	1	2	3	4	5	6	7	8	9	10	11	12	13	14
<b>1 Relational Norms</b>	5.57	0.92	1													
<b>2 Buyer RSI's</b>	4.65	1.52	.37**	1												
<b>3 Supplier RSIs</b>	4.58	1.68	.34**	.72**	1											
<b>4 Dependence Asymmetry</b>	-0.41	1.85	0	.20**	.40**	1										
<b>5 Seller Opportunistic Behaviors</b>	3.18	1.79	-0.11*	.29**	.23**	.14**	1									
<b>6 Cognitive Trust</b>	5.67	1.19	.60**	.14**	.13**	-0.08	-.29**	1								
<b>7 Affective Trust</b>	5.29	1.27	.62**	.27**	.37**	.11*	-.12*	.67**	1							
<b>8 Monitoring</b>	4.78	1.56	.37**	.61**	.62**	.35**	.18**	.23**	.34**	1						
<b>9 Perceived Seller Relationship Orientation</b>	4.99	1.55	.41**	.53**	.57**	.41**	.15**	.23**	.42**	.57**	1					
<b>10 Performance</b>	5.63	1.17	.43**	.21**	.29**	0	-.21**	.52**	.55**	.31**	.28**	1				
<b>11 Satisfaction</b>	5.56	1.23	.50**	.28**	.29**	-0.03	-.28**	.61**	.59**	.28**	.32**	.73**	1			
<b>12 Switching Intentions</b>	3.01	1.82	-0.05	.24**	.22**	.15**	.74**	-.17**	-0.01	.19**	.13*	-.14**	-.19**	1		
<b>13 Share of Wallet<sup>a</sup></b>	0.59	0.27	.11*	0.05	0.05	-.13**	-.14**	.18**	.11*	-0.06	0.01	.19**	.18**	-.17**	1	
<b>14 Promoter Score<sup>b</sup></b>	8.09	1.76	.42**	.19**	.23**	-0.05	-.25**	.51**	.52**	.19**	.28**	.62**	.75**	-.18**	.21**	1

\*\* Correlation is significant at the .01 level (2-tailed)

\* Correlation is significant at the .05 level (2-tailed)

a. % scale

b. Ten – point Likert scale

All other constructs on seven-point Likert scale

TABLE 8: Antecedents to Cognitive and Affective Trust (Study 2)

Dependent Var.→ Antecedents	Cognitive Trust		Affective Trust	
	Coefficient	t-value	Coefficient	t-value
Relational norms	<b>0.74</b>	<b>15.04</b>	<b>0.76</b>	<b>14.69</b>
Buyer Inv.	0	0.09	<b>-0.08</b>	<b>-2.65</b>
Supplier Inv.	0	0.01	<b>0.2</b>	<b>6.92</b>
Dep. Asymm.	-0.03	-1.16	0.03	1.06
Opportunism	<b>-0.15</b>	<b>-5.91</b>	<b>-0.07</b>	<b>-2.43</b>

\* Bold Figures indicate significance

TABLE 9: Mediating Influence of Cognitive and Affective Trust on Outcome Variables (Study 2)

Mediator	Outcomes → Antecedents ↓	Performance		Satisfaction		Switching Intentions		Share of Wallet		Promoter Score	
		IV → DV	IV → DV	IV → DV	IV → DV	IV → DV	IV → DV	IV → DV	IV → DV	IV → DV	IV → DV
		Step 2	(Med. Incl.) Step 3	Step 2	(Med. Incl.) Step 3	Step 2	(Med. Incl.) Step 3	Step 2	(Med. Incl.) Step 3	Step 2	(Med. Incl.) Step 3
Cognitive T	Relational norms	<b>0.4</b>	0.12	<b>0.48</b>	<b>0.15</b>	0.04	-0.03	0.01	-0.01	<b>0.61</b>	<b>0.22</b>
	Opportunism	<b>-0.15</b>	<b>-0.09</b>	<b>-0.21</b>	<b>-0.15</b>	<b>0.74</b>	<b>0.75</b>	<b>-0.02</b>	<b>-0.02</b>	<b>-0.25</b>	<b>-0.17</b>
Affective T	Relational norms	<b>0.4</b>	0.11	<b>0.48</b>	<b>0.17</b>	0.04	-0.06	0.01	0	<b>0.61</b>	<b>0.2</b>
	Buyer Inv.	-0.02	0.01	<b>0.09</b>	<b>0.13</b>	-0.01	0	0	0.01	0.03	0.07
	Supplier Inv.	<b>0.2</b>	<b>0.12</b>	<b>0.15</b>	<b>0.07</b>	0.04	0.02	0.02	0.02	<b>0.22</b>	<b>0.12</b>
	Opportunism	<b>-0.15</b>	<b>-0.12</b>	<b>-0.21</b>	<b>-0.19</b>	<b>0.74</b>	<b>0.75</b>	<b>-0.02</b>	<b>-0.02</b>	<b>-0.25</b>	<b>-0.21</b>

\* Bold figures indicate significance

\*\* Only antecedents with a significant impact on the mediators have been shown

TABLE 10: Estimated Coefficients for Hypothesized Quadratic Relationships between Cognitive/ Affective Trust and Outcomes (Study 2)

**(A) Each dimension is tested in a separate model**

Outcomes → Independent Var. ↓	Performance		Satisfaction		Switching Intentions		Share of Wallet		Promoter Score	
	Coeff.	t - value	Coeff.	t - value	Coeff.	t - value	Coeff.	t - value	Coeff.	t - value
Cognitive Trust	<b>0.6</b>	<b>14.27</b>	<b>0.7</b>	<b>17.26</b>	<b>-0.47</b>	<b>-6.27</b>	<b>0.06</b>	<b>5.59</b>	<b>0.98</b>	<b>15.81</b>
Cognitive Trust Sq.	<b>0.06</b>	<b>3.27</b>	<b>0.06</b>	<b>3.03</b>	<b>-0.15</b>	<b>-4.44</b>	<b>0.02</b>	<b>3.03</b>	<b>0.17</b>	<b>5.91</b>
Affective Trust	<b>0.51</b>	<b>13.17</b>	<b>0.6</b>	<b>15.37</b>	-0.05	-0.72	<b>0.04</b>	<b>3.61</b>	<b>0.76</b>	<b>12.77</b>
Affective Trust Sq.	0.01	0.3	0.03	1.58	-0.05	-1.22	<b>0.02</b>	<b>2.97</b>	0.05	1.59

**(B) Each dimension is tested together in the same model**

Outcomes → Independent Var. ↓	Performance		Satisfaction		Switching Intentions		Share of Wallet		Promoter Score	
	Coeff.	t - value	Coeff.	t - value	Coeff.	t - value	Coeff.	t - value	Coeff.	t - value
Cognitive Trust	<b>0.38</b>	<b>9.54</b>	<b>0.46</b>	<b>11.73</b>	<b>-0.72</b>	<b>-9.84</b>	<b>0.05</b>	<b>5.01</b>	<b>0.71</b>	<b>11.82</b>
Cognitive Trust Sq.	<b>0.08</b>	<b>4.18</b>	<b>0.04</b>	<b>2.3</b>	<b>-0.19</b>	<b>-5.6</b>	0.01	1.48	<b>0.19</b>	<b>6.94</b>
Affective Trust	<b>0.3</b>	<b>8.08</b>	<b>0.33</b>	<b>9.11</b>	<b>0.33</b>	<b>4.84</b>	0.01	0.59	<b>0.38</b>	<b>6.85</b>
Affective Trust Sq.	-0.03	-1.63	0.02	0.81	0.05	1.41	<b>0.01</b>	<b>2.37</b>	-0.05	-1.64

\* Bold figures indicate significance

TABLE 11: Estimated Coefficients for Moderating Relationships: Cognitive/Affective Trust X Monitoring X Relationship Lifecycle (Study 2)

Relationship Phase.→		All Phases (N=403)		Exploration (N=52)		Build-Up (N=141)		Maturity (N=194)		Decline (N=16)				
Dependent Var.	Independent Var. ↓	Coeff.	t - value	Coeff.	t - value	Coeff.	t - value	Coeff.	t - value	Coeff.	t - value			
<b>Performance</b>	Cognitive Trust (CT)	<b>0.22</b>	<b>5.73</b>	<b>0.37</b>	<b>4.3</b>	<b>0.34</b>	<b>5.27</b>	0.07	1.28	*	<b>-0.45</b>	<b>-2.26</b>	*	
	Affective Trust (AT)	<b>0.32</b>	<b>8.65</b>	<b>0.16</b>	<b>2.26</b>	<b>0.2</b>	<b>2.93</b>	<b>0.39</b>	<b>7.69</b>	*	0.18	0.59	*	
	Monitoring (Mon)	<b>0.11</b>	<b>3.64</b>	<b>0.24</b>	<b>3.9</b>	<b>0.14</b>	<b>2.4</b>	0.05	1.22		<b>-0.44</b>	<b>-2.79</b>	*	
	CT * Mon	<b>-0.06</b>	<b>-2.71</b>	0.08	1.11	-0.07	-1.42	*	-0.06	-1.81		<b>-0.21</b>	<b>-2.58</b>	*
	AT * Mon	0.03	1.52	-0.09	-1.41	<b>0.11</b>	<b>2.45</b>	*	0	0.04		<b>-0.3</b>	<b>-2.92</b>	*
<b>Satisfaction</b>	Cognitive Trust (CT)	<b>0.34</b>	<b>8.9</b>	<b>0.55</b>	<b>5.13</b>	<b>0.48</b>	<b>9.68</b>	<b>0.17</b>	<b>3.16</b>	*	<b>0.73</b>	<b>3.09</b>	*	
	Affective Trust (AT)	<b>0.32</b>	<b>8.84</b>	<b>0.23</b>	<b>2.73</b>	<b>0.24</b>	<b>4.73</b>	<b>0.36</b>	<b>7.41</b>	*	-0.23	-0.65	*	
	Monitoring (Mon)	<b>0.08</b>	<b>2.85</b>	0.03	0.41	<b>0.1</b>	<b>2.15</b>	0.05	1.15		-0.25	-1.32	*	
	CT * Mon	<b>-0.08</b>	<b>-3.36</b>	0.01	0.11	<b>-0.27</b>	<b>-7.53</b>	*	0.01	0.32	*	<b>0.46</b>	<b>4.73</b>	*
	AT * Mon	0.02	0.97	-0.02	-0.29	<b>0.1</b>	<b>2.77</b>	*	-0.03	-1.17	*	<b>-0.49</b>	<b>-3.95</b>	*
<b>Switching Intentions</b>	Cognitive Trust (CT)	<b>-0.45</b>	<b>-6.19</b>	<b>-0.71</b>	<b>-2.77</b>	<b>-0.46</b>	<b>-3.74</b>	*	<b>-0.29</b>	<b>-3.67</b>	*	0.61	1.74	*
	Affective Trust (AT)	<b>0.2</b>	<b>2.94</b>	<b>0.47</b>	<b>2.3</b>	0.18	1.42	*	0.08	1.16		-0.19	-0.37	*
	Monitoring (Mon)	<b>0.23</b>	<b>4.17</b>	0.32	1.76	<b>0.39</b>	<b>3.44</b>		0.09	1.55	*	0.11	0.4	
	CT * Mon	0.03	0.7	-0.15	-0.66	0.08	0.91	*	-0.03	-0.61		0.19	1.36	*
	AT * Mon	<b>0.1</b>	<b>2.4</b>	0.24	1.29	0	0.02	*	<b>0.07</b>	<b>1.98</b>		0.06	0.34	
<b>Share of Wallet</b>	Cognitive Trust (CT)	<b>0.03</b>	<b>3.05</b>	0.05	1.18	<b>0.05</b>	<b>2.85</b>		0.02	1.13		<b>0.21</b>	<b>3.24</b>	*
	Affective Trust (AT)	0.01	1.03	0	-0.12	0.02	1.28		0.01	1.06		<b>-0.23</b>	<b>-2.41</b>	*
	Monitoring (Mon)	<b>-0.02</b>	<b>-2.04</b>	-0.02	-0.66	<b>-0.05</b>	<b>-3.01</b>		0	-0.23		<b>-0.11</b>	<b>-2.13</b>	*
	CT * Mon	-0.01	-1.89	-0.06	-1.72	0.01	0.9	*	<b>-0.03</b>	<b>-3.67</b>		<b>0.13</b>	<b>4.9</b>	*
	AT * Mon	0.01	1.46	0.04	1.51	0.02	1.3		<b>0.01</b>	<b>1.96</b>		<b>-0.14</b>	<b>-4.19</b>	*
<b>Promoter Score</b>	Cognitive Trust (CT)	<b>0.37</b>	<b>6.06</b>	<b>0.74</b>	<b>4.82</b>	<b>0.51</b>	<b>6.2</b>	*	0.15	1.62	*	<b>0.9</b>	<b>2.38</b>	
	Affective Trust (AT)	<b>0.48</b>	<b>8.37</b>	<b>0.28</b>	<b>2.32</b>	<b>0.41</b>	<b>4.83</b>		<b>0.47</b>	<b>5.76</b>		<b>1.13</b>	<b>2</b>	*
	Monitoring (Mon)	0.03	0.62	0.17	1.56	-0.09	-1.2	*	-0.03	-0.45		0.17	0.56	*
	CT * Mon	<b>-0.08</b>	<b>-2.25</b>	-0.1	-0.71	<b>-0.21</b>	<b>-3.55</b>		0.02	0.46	*	<b>0.42</b>	<b>2.69</b>	*
	AT * Mon	<b>0.07</b>	<b>2.17</b>	0.12	1.09	<b>0.22</b>	<b>3.71</b>		-0.03	-0.66	*	-0.01	-0.04	

Bold figures indicate significance

\* Indicates differences in coefficients (at the .05 level) from the previous relationship phase



TABLE 12: Estimated Coefficients for Moderating Relationships: Cognitive/Affective Trust X Perceived Supplier Relationship Orientation X Relationship Lifecycle (Study 2)

Relationship Phase.→		All Phases (N=403)		Exploration (N=52)		Build-Up (N=141)		Maturity (N=194)		Decline (N=16)				
Dependent Var.	Independent Var. ↓	Coeff.	t - value	Coeff.	t - value	Coeff.	t - value	Coeff.	t - value	Coeff.	t - value			
<b>Performance</b>	Cognitive Trust (CT)	<b>0.27</b>	<b>6.84</b>	<b>0.56</b>	<b>6.6</b>	<b>0.38</b>	<b>5.64</b>	*	<b>0.12</b>	<b>2.16</b>	*	0.05	0.25	
	Affective Trust (AT)	<b>0.3</b>	<b>8.14</b>	-0.07	-1.02	<b>0.22</b>	<b>3.2</b>	*	<b>0.38</b>	<b>7.38</b>	*	0.31	0.96	
	RO	<b>0.06</b>	<b>2.04</b>	<b>0.28</b>	<b>4.39</b>	0.06	1.15	*	-0.02	-0.4		0.23	1.9	*
	CT * RO	-0.02	-0.7	-0.01	-0.12	0.02	0.42		0.04	1.03		<b>-0.19</b>	<b>-2.44</b>	*
	AT * RO	0.01	0.54	-0.05	-1.29	0.07	1.59	*	-0.04	-1.49	*	<b>0.27</b>	<b>3.4</b>	*
<b>Satisfaction</b>	Cognitive Trust (CT)	<b>0.42</b>	<b>10.76</b>	<b>0.66</b>	<b>6.66</b>	<b>0.64</b>	<b>11.45</b>		<b>0.21</b>	<b>3.89</b>	*	0.08	0.33	*
	Affective Trust (AT)	<b>0.26</b>	<b>7.1</b>	0.01	0.08	<b>0.14</b>	<b>2.36</b>	*	<b>0.33</b>	<b>6.73</b>	*	0.38	1.03	
	RO	<b>0.09</b>	<b>3.03</b>	<b>0.2</b>	<b>2.69</b>	0.04	0.86	*	0.07	1.71		<b>0.42</b>	<b>2.96</b>	*
	CT * RO	0.01	0.46	-0.08	-0.97	0	0.08		0.06	1.88		-0.05	-0.59	*
	AT * RO	-0.02	-0.82	-0.08	-1.82	-0.01	-0.3		-0.05	-1.76		<b>0.37</b>	<b>4.03</b>	*
<b>Switching Intentions</b>	Cognitive Trust (CT)	<b>-0.45</b>	<b>-6.05</b>	<b>-0.77</b>	<b>-2.93</b>	<b>-0.42</b>	<b>-3.35</b>	*	<b>-0.29</b>	<b>-3.73</b>		0.33	0.95	*
	Affective Trust (AT)	<b>0.2</b>	<b>2.93</b>	<b>0.46</b>	<b>2.22</b>	0.13	1.01	*	0.07	0.95		-0.07	-0.14	
	RO	<b>0.17</b>	<b>3.05</b>	<b>0.43</b>	<b>2.22</b>	<b>0.28</b>	<b>2.65</b>		0.1	1.7	*	-0.11	-0.55	*
	CT * RO	0.06	1.19	-0.05	-0.2	0.1	1.01		-0.08	-1.59		-0.03	-0.27	
	AT * RO	0.05	1.31	0.2	1.77	-0.12	-1.54	*	<b>0.08</b>	<b>2.02</b>	*	0.09	0.69	
<b>Share of Wallet</b>	Cognitive Trust (CT)	<b>0.04</b>	<b>3.33</b>	0	-0.1	0.03	1.79		<b>0.04</b>	<b>2.56</b>		-0.09	-1.48	*
	Affective Trust (AT)	0	0.46	-0.04	-1.45	<b>0.04</b>	<b>2.15</b>	*	0	0.13		-0.12	-1.38	*
	RO	0	-0.13	<b>0.09</b>	<b>3.4</b>	-0.02	-1.47	*	0	-0.06		-0.04	-1.26	
	CT * RO	-0.01	-1.51	<b>-0.08</b>	<b>-2.38</b>	-0.01	-1	*	0	-0.1		<b>0.05</b>	<b>2.07</b>	*
	AT * RO	<b>0.01</b>	<b>1.99</b>	0.02	1.45	<b>0.03</b>	<b>2.7</b>		0.01	1.11		<b>-0.12</b>	<b>-5.52</b>	*
<b>Promoter Score</b>	Cognitive Trust (CT)	<b>0.44</b>	<b>7.18</b>	<b>0.88</b>	<b>6.34</b>	<b>0.57</b>	<b>6.87</b>	*	0.15	1.61	*	0.01	0.02	*
	Affective Trust (AT)	<b>0.38</b>	<b>6.57</b>	<b>-0.25</b>	<b>-2.29</b>	<b>0.39</b>	<b>4.42</b>	*	<b>0.41</b>	<b>5.1</b>		<b>1.33</b>	<b>2.31</b>	*
	RO	<b>0.13</b>	<b>2.85</b>	<b>0.68</b>	<b>6.5</b>	-0.04	-0.54	*	0.13	1.95	*	0.04	0.2	
	CT * RO	<b>-0.09</b>	<b>-2.17</b>	-0.1	-0.84	0.03	0.5		<b>-0.11</b>	<b>-2.04</b>	*	0.19	1.32	*
	AT * RO	0.02	0.49	-0.04	-0.66	<b>0.11</b>	<b>2.17</b>	*	-0.02	-0.45	*	-0.13	-0.93	

RO = Perceived Supplier Relationship Orientation

Bold figures indicate significance

\* Indicates differences in coefficients (at the .05 level) from the previous relationship phase

## APPENDIX

### A. Interview Script (Pilot Study)

Good Morning- My name is Sanjukta Kusari and I am a PhD student currently working on my dissertation. I really appreciate your taking some time out to talk to me.

I hope you received the consent form that I emailed to you earlier. As I mentioned in it, I will be recording this conversation so that I can talk to you freely and not waste any time in taking notes. Also, I want to assure you about the confidentiality of your responses- whatever you say to me will *only* be used for research purposes, and not be shared with anyone.

#### **General relationship questions:**

Q. How long have you been dealing with suppliers? Do you deal with them directly? *If yes, continue asking about current suppliers. If no, ask about suppliers directly dealt with in the past. In the end, ask for contacts of people who communicate with suppliers directly.*

Q. How many suppliers do you work with? How much time on an average do you spend with them?

Q. So how would you describe your relationship with suppliers? Pl. tell me in details... Why/how is that?  
*Probe in details on type of relationship shared.*

Q. How do you identify suppliers?

Q. What are the qualities of a “good” supplier? Why do you do more business or less business with some suppliers but not the others?

Q. What behaviors/ activities would cause you to question your relationship with a supplier? Could you pl. elaborate further?

Q. Could you describe a “good” relationship that you had with any of your suppliers?

Q. And now, could you describe a “poor” relationship that you had with any of your suppliers?

## Supplier specific questions

Q. Now, I want you to think of a supplier who is one of your biggest suppliers and one that you have been working with for than two years. If you can please write that one particular supplier's name down and while I ask the next set of questions- refer to your relationship with this particular supplier when answering.

Q. How long have you been doing business with this supplier?

Q. How would you describe your relationship with your current supplier? Pl. tell me more.... What do you mean by that?

*Probe : strictly formal/ professional, sometimes social/ friendly*

Q. What kind of products/ services do you purchase from this supplier? Can you give me an approximate idea of the amount of business you do annually with this supplier?

Q. What other services does the supplier provide to you?

*Probe : keep track of your inventory and replenish stocks when required  
: share information with you about latest product updates  
: make recommendations on products  
: share information about competitive activity*

## Trust in the relationship:

Q. Do you trust this particular supplier? In what ways?

Q. What is the role of trust in a buyer-supplier relationship? Why is it important? What does trust mean to you?

*(Probe on trusting the supplier on prices quoted, discount given, information shared, quality of products/ services)*

*(Probe on trusting the supplier's ability/ competence, integrity, helpful/ benevolent behavior, dependability, responsiveness to needs)*

Q. Are there some areas where you trust him/ her more than other areas, i.e. "I trust my supplier to do this..... but not that.....".

Q. Can you think of a relationship where you didn't have this level of trust? What problems did you face then? How did that impact your relationship?

Q. Do you think trust is always good, i.e. more trust is better? Why do you think so?

Q. **(If no)** How so? .... have you ever faced a situation where too much trust proved to be harmful? What did you do then? How can you protect yourself against such a situation? What level of trust do you think is appropriate (i.e. is there an optimum level of trust)?  
*(Probe on rise in opportunism, loss of objectivity, rising expectations....)*

Q. Have you ever suspected your supplier of not being ethical/ truthful to you?

**(If yes)** Can you describe that incident to me? What happened... what did you do- how did you resolve the situation?

**(If no)** Have you ever had such problems with past suppliers? What happened then ....what did you do to resolve the situation?

Q. What processes do you have in place to monitor the supplier's behavior/ check against their opportunistic behavior?

Q. Is trust enough to maintain a long-term relationship with the supplier or do you have/ need other processes in place to maintain / develop your relationship?

### **Distrust in the relationship**

Q. Do you sometimes distrust your supplier? Why?

Q. What is the role of distrust in a relationship? What are the pros and cons of "distrusting" your supplier? Why is that?

*Probe on reasons distrust is/ is not relevant in relationships. If reqd.- distrust may be defined as the expectation that the other party will perform an action that will be harmful to you.*

### **Norms in the relationship**

Q. Do you need written/ formal regulations and policies to manage your relationship with the supplier? Do you need them for specific activities?

Q. Do you also have unwritten (implicit) policies/ understanding with your supplier? What are those..., i.e. how did they develop? Do you find that it helps your relationship? How so?

*Probe on* : mutual understanding about each other's roles  
: mutual understanding about each other's responsibilities  
: mutual understanding about each other's performance  
: mutual understanding about how disagreements will be handled  
: mutual understanding about dealing with uncertainty/ unexpected events

Q. What expectations do you have from your supplier? How do you manage those expectations, i.e. make sure that they fulfill those expectations?

**Wrapping up.....**

Q. How do you rate performance of the supplier? What is the basis for deciding if the supplier (buyer) is profitable/ unprofitable for you?

Q. In the end, what mechanisms in your opinion are necessary to have in place to maintain and develop your relationship with suppliers? Do you have any suggestions on how buyer-supplier relationships can be improved?

Thank you very much for your time, you have been really helpful! (*terminate interview*).

## **B. Sample Transcript (Pilot Study)**

*Can you tell me something about your role- what exactly is your function?*

My role in my company is that of a global commodity manager and I am basically responsible for finding the right supplier for the product that I need to buy, negotiating the best possible cost for my company and I own the relationship between my company and the seller company. I am also responsible to make sure that suppliers get in touch and understand the needs of other depts. Like marketing dept, engineering dept. etc – in other words make sure that right people get in touch with various depts.

*So you basically maintain relationships on a daily basis?*

Correct.

*So how many?*

Uh- for the commodities I manage, I have, let me count, about 8 suppliers that I work with in any given time.

*And how much time do you spend with them on an average?*

On a daily basis, you mean?

*Generally in a week, month, how long do you spend with them?*

It depends. I want to say at least a couple of hours on any given day, in emails or live meetings, if you count emails, then 3-4 hrs a day

*So how would you describe your relationship with suppliers?*

Well, it depends on the suppliers. So for the specific commodity, we call strategic suppliers, the relationship is a lot different than, let's say, a relationship when I buy off the shelf products. So if I can buy the same product from 10 different suppliers, and it is a non critical component for me, then the relation is very simple. I put out a bid and then whoever gives me the best quote, i.e. the best cost and best quality at the lowest cost, that becomes my supplier, and the minute someone else can improve that, then that's my new supplier. So generally we try to focus more on the strategic supplier, people who work with us on the development of the product with parts we need supplied and basically add value, as versus just commodities because they work with our sales department, engineering department etc. so my relationship with them has to be first established before we can think of doing anything else. And obviously we have all kinds of legal contracts in place to protect my company, protect their company and so, we pretty much know all the rules of the game. We are governed by a contract but the day to day relationship; I make sure that every proposition, every negotiation goes well, is a win-

win scenario. It is not in my best interests to win all the battles and bankrupt my suppliers. So every time we are negotiating for better payment terms, lower costs or anything else, I want to make that my supplier also, for lack of a better term, is making enough money or a fair amount of money that allows them to stay in business, stay my strategic supplier for the next generation of products.

*So how is this relationship different from the one that you have with suppliers of off-the shelf products?*

Well, no. 1, you know, is in daily engagement. For off-the shelf products, all you do is request for quote or do internet bidding or whatever the mechanism is, and find the lowest cost at the highest levels of quality- kind of like a onetime relationship as opposed to an ongoing relationship. Now if you have a suppliers that can supply all of your off the shelf products requirements as opposed to bidding, then that supplier can become your strategic supplier. Because now you are talking of consolidation and you can get a much better deal from the company.

*Do you have different suppliers for the same product?*

Yes, we have multiple sources for the same product, and basically I decide what % I give to each supplier depend on negotiating condition. All things being equal, whoever is giving me the best deal, in the best time frame-you know number of units being allocated, or let's say one of them had a bad week, or the factory has problems, they don't have enough inventory, running shortages. Generally I have 2 or more suppliers of the same products.

*How do you identify these suppliers, you know, how do you evaluate them?*

No. 1- in the computer industry, depending on the commodity you are buying, for e.g. if you are buying screws you have to have a ton of suppliers, it's not critical which one you go to. When it comes to specific components like processors, boards etc etc, then you kind of know who the industry players are, and you kind of know which one depending on the size. You start somewhere, the engineering side defines the product and they are the ones to advise or certify the different suppliers that I can buy products from. So somewhere there is a bidding process, you see what concessions you can make on cost or any other business deals that we can get fm them. And then you know you proceed to working out business deal and then that is with the strategic suppliers that produce a part for a finished product that is specific to my company. Again if you are dealing with off the shelf product, it doesn't come to all that.

*So how do you evaluate them when it comes to choosing between them?*

Well, obviously price is one of the biggest components, quality is also very important - it doesn't do me any good if they are very cheap but quality is not what it needs to be and it ends up costing me more. Uhh, financial help is another component, we have a special group that looks at a supplier's financial health and based on the estimated amount of

dollars we are looking to spend, they assess whether the supplier is healthy enough to support our business- they make a recommendation from a finance perspective whether they are good to go. So three elements- cost, quality and finance.

*Are those 3 the only criteria?*

No no, they are the general ones. Then you start to look where they are located... Logistics lead time etc etc which are more specific to a product, but in general you look at the 3 elements I mentioned earlier. There's also- well, you look at the previous history. In an industry like the one I am in, in a company the size of my company generally you have had relationships with them in the past, so you look at their previous performances, if they didn't work very well with us in the past or the amount of services they provided to other areas of the company or other commodities they are selling. That's another element you weigh in.

*What are the qualities of a good supplier?*

Well, I think cooperation is an important one and then alignment of the companies objectives For e.g. I can buy a product today from you and today we are good but as we go along and if you are buying a commodity you know like electronics then over time the cost goes down. Then you have to see, we are not doing one time purchases, we are doing on-going purchases, so if they cooperate with us and pass on cost reductions... if all those benefits get passed on me, that's one of the things I look at. If the roadmap for those companies are aligned meaning I am looking at current generation of products now but I am also planning or rather my engineering group is planning the next generation, make sure that the supplier is also working on those, positioning themselves to be the supplier of those specific products in the future. That's also very important because you don't want to go and ask to certify a new supplier all the time.

*What about bad relationships?*

Well, yes, there are several reasons. You don't keep commitments, let's say you agree to a cost of the product and then they come back and say we have to raise the cost. And I am a reasonable person. But sometimes they arbitrarily raise costs. If they are not able to maintain continuity of supplies, I buy components to keep my production lines running. And this supplier has to be able to supply products to meet my demand forecast and if for some reason they are not able to do that and I have to stop my production, that's also you know, a bad experience. If the supplier is, you know, if product quality is bad and we incur wastes at my company or get a lot of customer complaints then that drives a lot of costs at my end. Obviously, like I stated earlier there are contractual points that protect me from that but even if I am covered financially, let's say on a bad quality issue, how do you measure bad customer experience or a product that didn't work? So generally a bad supplier is a supplier that fails to deliver on their commitments in terms of maintaining continuity of suppliers, agreed upon costs and has bad quality. And also that they can't be trusted. There are companies that have conflict of interests because they sell products to me and my competitor and then maybe



depending on the size of the business I am no. 2 and my competitor is their no. 1 customer.... so in situations like that when there is a shortage of products for e.g. I am not no. 1 in the supplier's business so that's also a bad situation because you want the supplier to look at your best interests not someone else's.

*Sure... what kind of behaviors on the part of a supplier would make you question your relationship with them?*

Umm... there are a number of things. Generally, when there are decommitments on supplies or cost, when also the environment changes, the economical environment changes, unless the laws of supply and demand kick in... so if you are buying a market based commodity. And the price changes so or you know the price is going to change in the near future, you know it's going to go up then you try to buy as much of the product as you can before that happens and then you have the suppliers creating situations so they are not able to support your needs so that you have to buy them at higher costs. So it's very specific, but when you feel that your company's interests are not in the best interests of your suppliers, then you start questioning, and it is generally manifested as cost increases or unjustified cost increases and lack of supplies.

*Ok, so now I want you to think of a specific supplier....How long have you been with this particular supplier?*

3 yrs

*And how would you describe your relationship with them?*

Very good, very good in terms of we work very closely, we both understand our company's needs. So remember I work with purchasing and I work with the sales side of the supplier so I understand their goal and they understand my goal in terms of cost reduction etc etc. so they pass, every time they see an opportunity to improve our cost, they act on it- that means they are going to be selling us products at a lower cost. So there is a trust relationship and basically supplier does that because they know by doing these things they are going to be considered for the next generation of products. There is an ongoing relationship and it's in their best interests to continue being the preferred supplier. So there is an alignment of our objectives, meaning, I know which products they are required to sell more so if I can help in that situation, I will. They know which product benefits me most, they know which products are critical for me, one's I must have to maintain the minimum level if that's the case. And there is a pretty good understanding of the industry from the supplier, and this supplier also proactively works with my engineering team and quality team. So basically, there is no quality problem and whenever there is one they quickly act on it.

*What products do you buy from this supplier?*

Mostly electronic components.

*You talked about having a trust relationship with them- in what ways do u trust them?*

I will give you an example. Couple of my suppliers are also my competitors. Meaning they integrate the parts, put them in a box just like I do. So I am competing against their brand. But I am dealing with their sales department within the organization, so it is in their best interests to sell to me than push their own brand. So when I am talking about trust, I mean they are representing my interests to their own company even though they are my competitors, in other words, they know the cost at which they are selling to me and that cost doesn't get passed onto the sales organization within the supplier who competes with me in order to keep up a competitive environment. And when I talk about trust, I also mean personal integrity, not only the supplier company but also the actual person I deal with, that the person is going to conduct himself with personal integrity. That they are not going to do things that are questionable or are illegal...unethical. Which is not always the case but you make sure that people conduct themselves along those guidelines. That's pretty much it, so when I talk about trust, I mean trust in that specific company and trust in the person appointed by the company.

*So what is the role of trust in a buyer-supplier relationship?*

Umm... it helps to make sure that you are not overpaying. You need to know what you are buying, what the fair market price is, but a lot of these transactions conducted as an open book, so I see their costs and we agree on what margin they are going to make. So if I don't have trust in them, I have to verify their costs, what they are saying...once you have trust, the process is a lot quicker. I know the numbers they are sending are accurate and there is no hiding thing. Trust is important because you want to make sure you always get the best product. For e.g. what if they have a questionable product from a quality standpoint- I am thinking of extreme cases here, so you trust that they are not going to feed in the supply lines that are coming in to my company but companies do that, especially when they are at the end of their financial quarter or year because they have to push in their sales. So it is important, especially for me, I try to concentrate on getting the best for both our companies instead of worrying about what I get from the supplier.

*So do you feel the need to monitor the supplier activities after you establish this kind of trust?*

Oh you still need to do that from time to time but you don't need to deep dive.

*Why is that?*

Because there are a couple of reasons. Let's say we are buying chair that's made of metal, got some padding and several things and you want to know what it costs to make that. Let's say when you get a bill of materials with a cost break up for each of the things that go into it. So we are talking of when trust has been established, it's important to verify because it could be that I don't think they are going to take an advantage of me. Let's say the price of metal they are buying is 50 c and I have another source that I can

buy it at 40 c and you can uncover opportunities. You can say to the supplier that if you go and buy from this supplier and tell them that you are going to be selling to me then you are going to get it at that cost. At the end, I also benefit from the lower cost, that's why I need to make sure that they are getting the best possible cost from their own suppliers. And you know one other element that I didn't mention previously is that once the supplier has demonstrated their ability to manage their own suppliers, you don't have to worry about that part of it, you know they are capable of doing it. Sometimes you find that you are not only managing the relationship with your own suppliers but also their suppliers. That is really time consuming and that's not where I want to be.

*Would you say the trust you have in your suppliers for off-the shelf products is different from those of strategic suppliers?*

Totally different- with those suppliers I don't need to have a strategic approach to the relationship, the relationship is transactional, a one-time by the lowest bidder. I don't care if they go out of business by selling me that component as long as I get the benefit I need and there's always the guy next door who can sell it to me. These are totally different approaches because most likely I am not dealing with that supplier for a long term.

*So do you think there are areas where you trust your suppliers more than other areas?*

Umm, well.... Not really. I also talked about our objectives being aligned so once they know what is important to me, which is obviously the dollars I spend, and also that any efficiencies gained by them in manufacturing the material get passed on to me. You know, once they know that that's what I need and that's the area I focus on, it's not that I trust them to do that but not to give me the best quality- it really doesn't work that way.

*Ok...can you think of a relationship where you didn't have this level of trust, what problems did you face then?*

Oh yeah. So when that doesn't exist but yet they are strategic to you, because let's say they own the technology you are buying so you are forced to go to them or the company certifies them, we have to kind of deal with them and be more careful, basically you have to be a lot more careful when you are writing the contract. And by that I am not saying that I am not careful with the suppliers I trust, but you rarely go and pull every clause from the contract, it's more like a gentleman's agreement... but with a supplier you really don't trust, you have to go by the books. You have to have everything in writing, have it looked over by the legal department, make sure I am not exposed in any area. So it just requires a lot more watching.

*So you talked about agreements and contracts- do you also have implicit understandings with them?*

Yes...

*What kind? Can you please elaborate?*

So you know the contracts are generic enough, we have standard contracts that are adjusted to specific suppliers but there are always areas not covered or not considered. So even within the contract the language specifies that in those kinds of situations, the company will look for reasonable solutions. Obviously you can't think of every possible situation in a contract. In those cases you know, there is implied agreement, we might request you to... for e.g. let's say I was planning to buy 1000 units and all of a sudden, my demand increases and I find I need 2000 units so there's a lot of things that need to happen, you have to expedite delivery, so there's extra cost incurred by the suppliers to be able to satisfy/fulfill my order. When things like that happen, there's extra costs, it is implied that depending on the size of the bus, the supplier is not going to come to me about every single additional dollar spent. It is implied that we are going to share the expenses, because at the end of the day its additional revenue for them so I guess what's implied is that those companies will make their best effort to accommodate each other's requirement.

*So tell me something- do you think more trust is better?*

Umm...it could be that if the company's overall objectives change, if you know, the environment changes and you know, let me put it this way, if you trust the person and not the company, and then the person changes. And because you trusted the person there are no contracts in place for specific things, then I am exposed. In that kind of situation it matters, but in general I can say that to a healthy level, it is good. But if you start relaxing my requirement because I trust them too much, it could be bad.

*Oh that's interesting....can you elaborate on that?*

Well, I am basically thinking- remember I said once you establish trust, you don't have to look closely at everything, you kind of think that they are acting in my best interests. But I still have to check, but then if I reach a level where I am not doing my own home work, for a new product, for e.g. I trust that this company is going to be the cheapest for me and I don't start researching my options, if I trust this company so much that I want to give them 100% of the products I buy, then you could empower the supplier so much that you start depending on them. So that's the only risk I see.

*How can that be a problem?*

Well, let's say I rely on an electronic component, a board that goes into one of the products I manufacture, and my relationship with this supplier was so good and he is the only one qualified for that board. And all of a sudden, because they know they are the only one, they can change their behavior and force me to do things I don't necessarily want to do, in order to buy the product. So basically I would be at their mercy until I am able to develop a second source. Or till the next generation of product comes out. Let's say the supplier company has had a change of plans and they don't want to participate in the specific products I am buying, and because I trust them so much and they are the

cheapest, I never felt the need to look for alternate suppliers elsewhere, and then I could be exposed. There is misalignment of the product roadmap.

*Have you ever suspected the supplier of not being ethical to you?*

Of course.... Umm, well generally when you are dealing with a new supplier, or when they provide the initial quotes for the product, everyone aims high, and basically you are basing your negotiating point off there so if I ask you to quote something for me that I want to buy, you are going to come in with a number and that's not going to be the final number we are going to go in, scratch a few things, keep negotiating and look at what's the best for you and me and then we will have a final number when we are done. So when those first numbers come in I know they are not the closest to reality as can be. So that's when I can say I know they are not being 100% honest.

*So what processes do you have in place to check against any kind of opportunistic behavior?*

Well, generally we have a quarterly business review for our strategic suppliers, where we have a score card. All kind of things get measured there, for e.g. costs they committed to.... it measures all kinds of things... quality; it basically measures them against all of their commitments.

*So do you think trust is enough to maintain long term relationships?*

Umm. Trust only is not enough. You have to see results, basically, you have to look at hard data, you want to make sure that at the end of the day you are in a business and you want to make that your financial objectives are met. So you can trust the supplier and everything, but generally they are not the cheapest one.

*What other processes do you have in place?*

I don't think there are any fine processes. But trust goes both ways, suppliers must trust you too, to get business done. I will give you an e.g. for e.g. if I have an urgent need to buy a product, and its Friday night and the buyer who is going to issue a purchase order won't be in till the following Friday and then all it takes is my word to get the business going, to give them the commitment that they don't need to worry about payment or anything. So that's very helpful, as opposed to 'we understand your emergency but till we get the hard purchase order in our hands, we are not going to react'.

*What about distrust in your suppliers?*

Yes, there are situations which lead you to believe that the supplier is not completely honest. For e.g. they are forcing you to buy the next generation products, and want to make more money but I am not ready to go there yet. So sometimes, some of the bad suppliers are basically moving to basically force you to adopt a new technology by making the old generation product not available to you. So intentionally creating product

shortages...or by defaulting on price agreements that we had on old generations. So you feel that supplier is only looking at his own interests and not the company's interests.

*What are the pros and cons of distrusting your supplier?*

Pros- I guess it makes the relationship more effective through past experiences. Could result in better output for both. Distrusting requires more verification, extra costs, you know to verify every piece of info you get from the supplier, or verify product quality etc etc. I guess, cons, you know, if I don't trust the supplier, eventually I am going to end up looking for a replacement, or substitute for that supplier. But a con for the supplier point of view is that if I don't trust them, their business gets limited.

*Do you keep looking?*

Yes, we are constantly looking for who the industry players are, what products are out there, who's offering what costs even if you are not going to switch ultimately but you need to make sure what you are buying is cost competitive in the market. You want to make sure you are always competitive in the market.

*What mechanisms do you have in place to develop your relationship with the supplier?*

Umm... well, need to make sure you are buying at the right cost, getting the best quality, getting them delivered as promised. So you have mechanism to monitor each of those things and the supplier works with you for future potential opportunities. I guess each of those things are separate, and you keep track of those and they dictate whether you maintain a relationship or not. Also, remember we are talking about the computer industry, so the supplier must be up to date with technology. In other words we can have a very good relationship, we can trust each other, have the best quality delivered at the right time at best cost but there's limited shelf time for the product I am buying. Within a year or 2, its going to become obsolete, then if the supplier does not keep up with the change there won't be anything for me to buy.

*You had talked about having a downside to trust, i.e. that too much trust can have a negative effect, could you please elaborate more on that from an experience in your career?*

Ok, let me think about an example- where I faced such a problem from a real case. So I guess, you know, this a real example- let's say when you buy a product and the transaction goes well, and then the next generation of product comes in, so you assume that because you are working with the same supplier and you have worked with them earlier too, that they would pass on the same cost reduction to you on the next generation product as well, and they typically don't. In other words, when the next line of products comes in, although you think they will continue to work in the same way, they don't keep the momentum; they charge you higher prices than what it should be. So even if you trust them you can't be sure that they are doing the right thing. So I need to

keep verifying what they are charging me for the products and services I am buying. Also, if they commit to the products being delivered by such and such day and then it doesn't come or gets delayed, then it gives a bad customer experience. Then there are also quality issues where they ship inferior quality products hoping you won't find out....so that also happens.

*So such incidents have happened to you? .... How did you resolve them?*

Yes, this has happened. Well, obviously we have contracts in place that specifically address such problems, and we make sure we can recover any losses. But the relationship is basically affected- it leaves a bad taste in the mouth. Obviously you have multiple suppliers, and you can look for alternate supplier, but then you spend more time on them, it's more time consuming, you spend more time on negotiating, you basically have to start from scratch again. You have to guard yourself against such incidents from happening again, verify every single thing. And basically you can't believe anything they say again. Such situations add unnecessary insecurities- in other words, if I am buying 100 pieces of something and they tell me- don't worry, we will deliver it by this date, you know instead of just sitting and waiting for it, I am going to ask them to give me tracking information every day, give proof to me and basically that kind of thing but it does add unnecessary costs and hassles.

*So how do you safeguard yourself from such incidents happening again, I mean not just for this supplier but other suppliers as well?*

Well, I guess you can put several mechanisms in place to verify what it is, the information that is coming to you. You kind of question everything that is coming from the supplier- whether it is a price quote, a delivery date commitment, a buying commitment- everything. And how do you safeguard- well you basically put in additional activities to verify every single piece of information. That's one. No. 2- you basically minimize the amount of business you do with that supplier.

*Well, you know you had earlier talked about a healthy level of trust? What did you mean by that and how do you propose to have that "healthy level"? Do you combine it with something else?*

Oh, there's always the business controls, basically whatever metric it is, you have to measure the success of the activity, i.e. You always deliver on time; you always deliver at the lowest possible cost, whatever it is or a combination of everything. Basically, whatever is important to you- you track their performance on those metrics so you can go back and look at those. This is better than having to verifying everything they say.

*So you are talking about business controls- what are those?*

It is just a measurement. I was referring to controls, review on a more weekly basis. One of the things we track is – well we buy parts, keep buying those parts. And one of the things important to us is the continuity of supply. So we need them every day or every other day. And this tool will tell us how the supplier is doing on that supply,

whether we have enough in our inventory. A quarterly business review is done every three months and more to look at a supplier's performance, to tell them these are some areas they need to improve on and so on. This is a mechanism that is easy to track and doesn't require many resources to make sure they are delivering to keep their commitments. And like I said, I monitor the inventory they keep; I monitor the production runs, to make sure that the daily output is whatever it needs to be. Once they have demonstrated that that they can deliver what they have promised, it becomes easier to deal with them.

*So you track three things- the inventory they keep, the amounts they deliver and timely delivery?*

Uh huh

*Is there anything else you track?*

Umm, we also look at quality, but of course. In fact, that's the no. 1 metric. And also the cost target. You are buying commodities and you understand what the circumstances are- for e.g. the price of gas and fuel is up, so we track those too. So basically the cost element. Let's say we buy 100 pieces of something and you have decided on a cost for it but then the supplier comes back to you and says- you know what, we need to charge you more. Then you determine if it's legitimate and then take an action accordingly.

*So you use these controls to evaluate the suppliers. Well, that's very interesting. Thanks so much for explaining this to me further.*



### C. Measurement Items for Study Constructs (Study 1)

**Buyer Relationship Specific Investments: 0.81** (adapted from Rokkan, Heide and Wathne 2003)

1. We have made significant investments in equipment dedicated to our relationship with this supplier.
2. Our production system has been tailored to meet the requirements of dealing with this supplier.
3. Training our people to deal with this supplier has involved substantial commitments of time and money.
4. We have made extensive internal adjustments in order to deal effectively with this supplier.

**Supplier Relationship Specific Investments: 0.89** (adapted from Rokkan, Heide and Wathne 2003)

1. This supplier has made significant investments in equipment dedicated to the relationship with our company.
2. This supplier's production system has been tailored to meet the requirements of dealing with our company.
3. Training their employees to deal with our company has involved substantial commitments of time and money on the part of this supplier.
4. This supplier has made extensive adaptations in physical plant and equipment in order to deal effectively with our company.

**Relational Norms: 0.76** (adapted from Palmatier, Dant and Grewal 2007)

1. We consider this supplier to be our business partner.
2. We conscientiously try to maintain a cooperative relationship with this supplier.
3. Our relationship with this supplier is more important to us than profits from individual transactions.
4. Even if costs and profits are not evenly shared between us in a given time period, they balance out over time.
5. We each benefit and earn in proportion to the efforts we put in.
6. Our company usually gets a fair share of the rewards and cost savings in doing business with this supplier.
7. We would willingly make adjustments to help out this supplier when faced with special problems or circumstances.
8. We would gladly set aside the contractual terms in order to work through difficult situations with this supplier.
9. This supplier gladly sets aside the contractual terms in order to work with us in difficult times.

\* Reliability

**Buyer Dependence: 0.79** (adapted from Jap and Ganesan 2000).

If our relationship was discontinued with this supplier...

1. It would be difficult for us to replace this supplier.
2. We are quite dependent on this supplier.
3. We do not have a good alternative to this supplier in our area of business.

**Supplier Dependence: 0.90** (adapted from Jap and Ganesan 2000).

If we discontinued our relationship with this supplier...

1. It would be difficult for this supplier to replace us.
2. This supplier is quite dependent on us.
3. This supplier does not have a good alternative to us in their area of business.

**Supplier Opportunistic Behaviors: 0.90** (adapted from Heide, Wathne and Rokkan 2007).

1. In working with its partners, this supplier alters facts in order to meet their own goals and objectives.
2. This supplier does not negotiate from a good faith bargaining perspective.
3. This supplier breaches formal or informal agreements to benefit themselves.
4. This supplier does not always act in accordance with our contract.

**Cognitive Trust: 0.87** (adapted from Ganesan 1994)

This Supplier...

1. Has been frank in dealing with us.
2. Makes reliable promises.
3. Is knowledgeable regarding its products?
4. Does not make false claims.
5. Is honest about problems that may arise.
6. Is not open in dealing with us.
7. Has problems answering our questions.

**Affective Trust: 0.90** (adapted from Ganesan 1994)

This Supplier...

1. Has made sacrifices for us in the past.
2. Cares for us.
3. Has gone out on a limb for us in times of shortage.
4. Is like a friend.
5. Has been on our side.

**Monitoring: 0.63** (adapted from Noordewier, John and Nevin 1990)

1. We advise this supplier of its performance in relation to that of other suppliers.
2. We assess this supplier's performance through a formal supplier evaluation program.
3. We monitor this supplier's inventory levels.
4. We conduct quality training for this supplier's personnel.
5. We insist on clear communication between our company and this supplier.
6. We emphasize on information sharing between our company and this supplier.
7. The relationship we have with this supplier makes use of many controls.

**Perceived Supplier Relationship Orientation: 0.88** (adapted from Palmatier, Scheer, Evans and Arnold 2008)

1. This supplier desires a close relationship with our company to ensure the success of his business transaction.
2. A close relationship with our company is important to this supplier's success.
3. This supplier considers a strong relationship with us, as being helpful in selling this product.

**Performance: 0.88** (adapted from Cannon, Achrol and Gundlach 2000).

Please rate this supplier's performance on the following metrics:

1. Product quality
2. Delivery performance
3. Sales, service, and /or technical support
4. Total value received

**Switching intentions: 0.68** (adapted from Palmatier, Scheer, Evans and Arnold 2008)

1. For our next purchase of this product, we will consider this supplier as our first choice (R)\*\*
2. We will do less business with this supplier over the next few years.
3. We will terminate the relationship with this supplier over the next few years.

**Share of wallet:** (adapted from Palmatier, Scheer, Evans and Arnold 2008)

1. Of all the potential products you could buy from this supplier, what % do you currently buy from this supplier? \_\_\_\_%

\*\* Reverse-coded

**D. Email and Brief Survey Sent by eLab to Consumer Panel  
(to solicit respondents for study 2)**

Dear Panel member,

We will shortly be conducting a study in a business-to-business context, and wanted to solicit your participation in the study if you have any experience in buyer – seller relationships.

We request you to fill out a short survey (it will take approximately 2 minutes to complete it), so that we can determine your eligibility to participate/ your experience in this area. If you meet our criteria, we will send you more details about the study and send you a link to the survey.

Thank you for your time in advance.

Regards,

Sanjukta Kusari/ Professor Steve Hoeffler  
Owen Graduate School of Management,  
Vanderbilt University

**Survey**

1. Are you currently involved in either a buyer / purchase/ procurement role?  
 Yes  No
  
2. If yes, how long have you been involved in this role?  
 0-2 years  3-5 years  More than 5 years  Not Applicable
  
3. How many suppliers/ vendors do you deal with at any given time?  
 0-2 years  3-5 years  More than 5 years  Not Applicable
  
4. Are you responsible for maintaining and developing your relationship with the vendors or customers?  
 Yes  No  Not Applicable
  
5. What line of business is your company in? \_\_\_\_\_
  
6. Please describe your responsibilities in brief, below-  
-----  
-----

***Thank you for your time!***

## **E. Measurement Items for Study Constructs (Study 2)**

**Buyer Relationship Specific Investments: 0.88** (adapted from Rokkan, Heide and Wathne 2003)

1. We have made significant investments in equipment dedicated to our relationship with this supplier.
2. Our production system has been tailored to meet the requirements of dealing with this supplier.
3. Training our people to deal with this supplier has involved substantial commitments of time and money.
4. We have made extensive internal adjustments in order to deal effectively with this supplier.

**Supplier Relationship Specific Investments: 0.92** (adapted from Rokkan, Heide and Wathne 2003)

1. This supplier has made significant investments in equipment dedicated to the relationship with our company.
2. This supplier's production system has been tailored to meet the requirements of dealing with our company.
3. Training their employees to deal with our company has involved substantial commitments of time and money on the part of this supplier.
4. This supplier has made extensive adaptations in physical plant and equipment in order to deal effectively with our company.

**Buyer Dependence: 0.85** (adapted from Jap and Ganesan 2000)

If our relationship was discontinued with this supplier...

1. It would be difficult for us to replace this supplier.
2. We are quite dependent on this supplier.
3. We do not have a good alternative to this supplier in our area of business.

**Supplier Dependence: 0.91** (adapted from Jap and Ganesan 2000)

If we discontinued our relationship with this supplier...

1. It would be difficult for this supplier to replace us.
2. This supplier is quite dependent on us.
3. This supplier does not have a good alternative to us in their area of business.

**Relational Norms: 0.87** (adapted from Heide and John 1992)

1. We provide any information that might help this supplier.
2. We provide frequent information to this supplier.
3. We keep this supplier informed about events or changes that may affect them.
4. We are flexible when dealing with this supplier.
5. We are open to making adjustments in dealing with this supplier when needed.
6. When some unexpected situation arises, we prefer to re-write our contract with this supplier than hold them to the original terms.
7. We try to help when this supplier incurs problems.
8. We jointly resolve problems that arise in the course of our exchanges.
9. We are committed to improvements that benefit our mutual relationship with this supplier.

**Supplier Opportunistic Behaviors: 0.94** (adopted from Heide, Wathne and Rokkan 2007).

1. In working with its partners, this supplier alters facts in order to meet their own goals and objectives.
2. This supplier does not negotiate from a good faith bargaining perspective.
3. This supplier breaches formal or informal agreements to benefit themselves.
4. This supplier does not always act in accordance with our contract.

**Cognitive Trust: 0.88** (adapted from Ganesan 1994)

1. We have confidence in this supplier's competence.
2. We have no doubts regarding this supplier's knowledge about the products they supply.
3. This supplier makes reliable promises.

**Affective Trust: 0.85** (adapted from Ganesan 1994)

1. We feel that this supplier cares for us.
2. This supplier has gone out on a limb for us in times of difficulty.
3. We can freely share our ideas and plans with this supplier.

**Monitoring: 0.88** (adapted from Noordewier, John and Nevin 1990)

1. We track this supplier's performance through weekly reports and inspections.
2. We assess this supplier's performance through a formal supplier evaluation program.
3. We monitor this supplier's activities on critical factors including order accuracy, delivery timeliness and quality control.
4. We use various metrics to evaluate this supplier's performance.

**Perceived Supplier Relationship Orientation: 0.86** (adapted from Palmatier, Scheer, Evans and Arnold 2008)

1. This supplier desires a close relationship with our company to ensure the success of this business transaction.
2. A close relationship with our company is important to this supplier's success.

**Relationship Phase** (Jap and Ganesan 2000)

Relationships typically evolve through a number of phases over time. Which of the following best describes your firm's *current* relationship with this supplier (Check *only one*)

- Exploration*: Both firms are discovering and testing the goal compatibility, integrity, and performance of the other, as well as potential obligations, benefits, and burdens involved with working together on a long-term basis.
- Build-up*: Both firms are receiving increasing benefits from the relationship, and a level of trust and satisfaction has been developed such that they are more willing to become committed to the relationship on a long term basis.
- Maturity*: Both firms have an ongoing, long-term relationship in which both are receiving acceptable levels of satisfaction and benefits from the relationship.
- Decline*: One or both members have begun to experience dissatisfaction and are contemplating relationship termination, considering alternative partners, and beginning to communicate an intent to end the relationship.

**Performance= 0.87** (Cannon, Achrol and Gundlach 2000)

Please rate this supplier's performance on the following metrics:

1. Product quality
2. Delivery performance
3. Sales, service, and /or technical support
4. Total value received

**Relationship Satisfaction: 0.88** (Jap 2001)

1. We are satisfied with the relationship we have with this supplier.
2. Our relationship with this supplier has more than fulfilled our expectations.

**Switching intentions: 0.89** (adapted from Palmatier, Scheer, Evans and Arnold 2008)

1. For our next purchase of this product, we will consider other alternatives to this supplier.(R)\*\*
2. We will do less business with this supplier over the next few years.
3. We will terminate the relationship with this supplier over the next few years.

\*\* Reverse-coded

**Share of wallet:** (adapted from Palmatier, Scheer, Evans and Arnold 2008)

1. Of all the potential products you could buy from this supplier, what % do you currently buy from this supplier? \_\_\_\_\_ %

**Net Promoter Score** (adapted from Reichheld 2003)

1. How likely is it that you would recommend this supplier to a friend or colleague who buys similar products?



## REFERENCES

- Agustin, Clara and Jagdip Singh (2005), "Curvilinear Effects of Consumer Loyalty Determinants in Relational Exchanges," *Journal of Marketing Research*, 42 (February), 96- 108.
- Anderson, Erin and Barton Weitz (1989), "Determinants of Continuity in Conventional Industrial Channel Dyads," *Marketing Science*, 8 (4), 310-323.
- Anderson, Erin and Richard Oliver (1987), "Perspectives on Behavior-Based Versus Outcome Based Salesforce Control Systems," *Journal of Marketing*, 51 (October), 76-88.
- Anderson, Erin and Sandy D. Jap (2005), "The Dark Side of Close Relationships", *Sloan Management Review*, 46 (3), 75-82.
- Anderson, James C. and James A. Narus (1984), "A Model of the Distributor's Perspective of Distributor-Manufacturer Working Relationships," *Journal of Marketing*, 48(Fall), 62-74.
- Anderson, James C. and James A. Narus (1990), "A Model of the Distributor Firm and Manufacturer Working Partnerships," *Journal of Marketing*, 54 (January), 42-58.
- Atkinson, Sally and David Butcher (2003), "Trust in Managerial Relationships," *Journal of Managerial Psychology*, 18 (4), 282-304.
- Aulakh, Preet, Masaaki Kotabe and Arvind Sahay (1996), "Trust and Performance in Cross- Border Marketing Partnerships: A Behavioral Approach", *Journal of International Business Studies*, Special Issue, 1005-32.
- Axelrod, R (1984), *The Evolution of Cooperation*. New York: Basic Books.
- Bagozzi, Richard P. and Lynn W. Phillips (1982), "Representing Testing Organizational Theories: A Holistic Construal," *Administrative Science Quarterly*, 27 (3), 459-89.
- Baron, Reuben M. and David A. Kenny (1986), "The Mediator-Moderator Variable Distinction in Social Psychological Research: Conceptual, Strategic and Statistical Considerations," *Journal of Personality and Social Psychology*, 51 (6), 1173-82.
- Blau, P. M. (1964), *Exchange and Power in Social Life*. New York: John Wiley.
- Brashear, Thomas G., James S. Boles, Danny N. Bellenger and Charles M. Brooks (2003), "An Empirical Test of Trust-Building Processes and Outcomes in Sales Manager- Salesperson Relationships", *Journal of the Academy of Management Science*, 31 (2), 189-200.
- Bromily, P. and L. L. Cummings (1995), "Transaction Costs in Organizations with Trust", In *Research on Negotiation in Organizations*, R. Bies, B. Sheppard and R. Lewicki, eds. Vol. 5, Greenwich, CT: JAI, 219-247.
- Browne, Michael W. and Robert Cudeck (1992), "Alternative ways of assessing Model Fit", *Sociological Methods and Research*, 21 (November), 230-58.

- Burt, R. S. and M. Knez (1995), "Kinds of Third party Effects on Trust", *Rationality and Society*, 7, 255-92.
- Cannon, Joseph P. and W. D. Perreault, Jr. (1999), "Buyer-Seller Relationships in Business Markets," *Journal of Marketing Research*, 36, 439- 60.
- Cannon, Joseph P., Ravi S. Achrol, and Gregory T. Gundlach (2000), "Contracts, Norms and Plural Form Governance," *Journal of the Academy of Management Science*, 28 (2), 180- 94.
- Cloke, K. and J. Goldsmith (2000), *Resolving Personal and Organizational Conflict*. San Francisco: Jossey –Bass.
- Cohen, J., P. Cohen, S. G. West, and L. S. Aiken (2003), *Applied Multiple Regression- Correlation Analysis for the Behavioral Sciences*. Mahwah, NJ: Lawrence Erlbaum.
- Coleman, J. S (1990), *Foundations of Social Theory*. Cambridge, MA: Harvard University press.
- Cook, Karen (2001), *Trust in Society*. New York: Russell Sage Foundation.
- Creed, W. E. and R. E. Miles (1996), "Trust in Organizations: A Conceptual Framework Linking Organizational Forms, Managerial Philosophies and the Opportunity Costs of Control. In *Trust in Organizations: Frontiers of Theory and Research*. R. M. Kramer and T. R. Tyler, eds. Thousand Oaks, CA: Sage, 16-39.
- Crosby, L and N. Stephens (1987), "Effects of Relationship Marketing on Satisfaction, Retention, and Prices in the Life Insurance Industry", *Journal of Marketing Research*, 24, 404-411.
- Crosby, Lawrence A., Kenneth R. Evans and Deborah Cowles (1990), "Relationship Quality in Services Selling: An Interpersonal Influence Perspective", *Journal of Marketing*, 54 (2), 68-81.
- Das, T. K. and Bing-Sheng Teng (1998), "Between Trust and Control: Developing Confidence in Partner Cooperation in Alliances," *Academy of Management Review*, 23 (3), 491-512.
- De Wulf, K., Odekerken-Schroder, G. and Dawn Iacobucci (2001), "Investments in Consumer Relationships: A Cross-Country and Cross-Industry Exploration," *Journal of Marketing*, 65, 33-50.
- Deutsch, M (1958), "Trust and Suspicion", *Journal of Conflict Resolution*, 2, 265-279.
- Dirks, Kurt (1999), "The Effects of Interpersonal Trust on Work Performance," *Journal of Applied Psychology*, 84, 445-55.
- Dirks, Kurt D. and Donald L Ferrin (2001), "The Role of Trust in Organizational Settings," *Organization Science*, 12 (4), 450-467.
- Doney, Patricia M and Joseph P. Cannon (1997), "An Examination of the Nature of Trust in Buyer-Seller Relationships," *Journal of Marketing*, 61 (2), 35-56.
- Dwyer, F. Robert, Paul H. Schurr, and Sejo Oh (1987), "Developing Buyer-Seller Relationships," *Journal of Marketing*, 51 (2), 11-27.

Dyer, Jeffrey H. and Harbir Singh (1998), "The Relational View: Cooperative Strategy and Sources of Interorganizational Competitive Advantage," *Academy of Management Review*, 23 (4), 660- 679.

Fornell, Claes and David F. Larcker (1981), "Evaluating Structural Equation Models with Unobservable Variables and Measurement Error," *Journal of Marketing Research*, 18 (February), 39-50.

Fukuyama, F. (1996), *Trust: The Social Virtues and the Creation of Prosperity*. New York: Free Press.

Gambetta, D. G (1988), "Can We Trust Trust?," *In Trust: Making and Breaking Cooperative Relations*, D.G. Gambetta, ed, New York: Basil Blackwell, 213-37.

Ganesan, Shankar.(1994), "Determinants of Long-Term Orientation in Buyer-Seller Relationships," *Journal of Marketing*, 58 (2), 1-19.

Ganesan, Shankar and Ron Hess (1997), "Dimensions and Levels of Trust: Implications for Commitment to a Relationship," *Marketing Letters*, 8 (4), 439- 448.

Garbarino, Ellen and Mark Johnson (1999), "The Different Roles of Satisfaction, Trust and Commitment in Customer Relationships," *Journal of Marketing*, 63 (April), 70- 87.

Gefen, David and Paul A. Pavlou (2006), "An Inverted U Theory of Trust: The Moderating Role of Perceived Regulatory Effectiveness of Online Marketplaces", *Twenty Seventh International Conference on Information Systems*, Milwaukee 2006.

Gilbert, C. (2005), "Unbundling the Structure of Inertia: Resource vs. Routine Rigidity," *Academy of Management Journal*, 48 (5), 741-63.

Gouldner, Alvin W. (1960), "The Norm of Reciprocity: A Preliminary Statement," *American Sociological Review*, 25 (2), 161-78.

Granovetter, M (1985), "Economic Action and Social Structure: The Problem of Embeddedness", *American Journal of Sociology*, 91, 481-510.

Grayson, Keny and Tim Ambler (1999), "The Dark Side of Long-Term Relationships in Marketing Services," *Journal of Marketing Research*, 36 (1), 132-141.

Gulati, R. (1995), "Does Familiarity Breed Trust? The Implications of Repeated Ties for Contractual Choice in Alliances", *Academy of Management Journal*, 38, 85-112.

Gundlach, Gregort T., Ravi S. Achrol and John T. Mentzer (1995), "The Structure of Commitment in Exchange", *Journal of Marketing*, 59 (1), 78-92.

Hardin, R (1991), "Trusting persons, Trusting Institutions", *In Strategy and Choice*, R.J. Zeckahuser, Cambridge, MA: MIT, 487- 494.

Heide, Jan B. and George John (1992), "Do Norms Matter in Marketing Relationships," *Journal of Marketing*, 56 (2), 32-44.

Heide, Jan B., Kenneth H. Wathne, and Aksel I. Rokkan (2007), "Interfirm Monitoring, Social Contracts and Relationship Outcomes," *Journal of Marketing Research*, 44 (August), 425- 433.

Herzberg, Frederick (1966), *Work and the Nature of Man*. Cleveland: World Publishing Company.

Hewett, Kelly and William O. Bearden (2001), "Dependence, Trust, and Relational Behavior on the Part of Foreign Subsidiary Marketing Operations: Implications for Managing Global Marketing Operations," *Journal of Marketing*, 65 (4), 51-66.

Houston, Franklin S. and Jule B. Gassenheimer (1987), "Marketing and Exchange," *Journal of Marketing*, 51 (4), 3 – 19.

Hu Li-tsze, Peter M. Bentler and Yutako Kano (1992), "Can Test Statistics in Covariance Structure Analysis be Trusted", *Psychological Bulletin*, 112 (September), 351-62.

Iacobucci, Dawn (2008), *Mediation Analysis*. Sage Publications, Inc.

Jap, Sandy D. (1999), "Pie Expansion Efforts: Collaboration Processes in Buyer-Supplier Relationships," *Journal of Marketing Research*, 36 (November), 461- 475.

Jap, Sandy D. and Erin Anderson (2003), "Safeguarding Interorganizational Performance and Continuity Under Ex Post Opportunism," *Management Science*, 49 (12), 1684-1701.

Jap, Sandy D. and Shankar Ganesan (2000), "Control Mechanisms and the Relationship Life Cycle: Implications for Safeguarding Specific Investments and Developing Commitment," *Journal of Marketing Research*, 37 (May), 227-245.

Jeffries, Frank L. and Richard Reed (2000), "Trust and Adaptation in Relational Contracting," *Academy of Management Review*, 25 (4), 873-82.

John, George (1984), "An Empirical Investigation of Some Antecedents of Opportunism in a Marketing Channel," *Journal of Marketing Research*, 21 (August), 278- 89.

Johnson, Devon and Kent Grayson (2005), "Cognitive and Affective Trust in Service Relationships", *Journal of Business Research*, 58, 500-7.

Johnson-George, C., and W. Swap (1982), Measurement of Specific Interpersonal Trust: Construction and Validation of a Scale to Assess Trust in a Specific Other", *Journal of Personality and Social Psychology*, 43, 1306-17.

Joreskog, Karl G., Dag Sorbom, Stephen du Toit and Mathilda du Toit (2001), *LISREL 8: New Statistical Features*. Hillsdale, NJ: Lawrence Erlbaum Associates.

Kotabe, Masaaki, Xavier Martin, and Hiroshi Domoto (2003), "Gaining from Vertical Relationships: Knowledge Transfer, Relationship Duration, and Supplier Performance Improvement in the U.S. and Japanese Automobile Industries," *Strategic Management Journal*, 24 (4), 293-316.

- Kramer, Roderick M. (1999), "Trust and Distrust in Organizations: Emerging Perspectives, Enduring Questions," *Annual Review of Psychology*, 50, 569-98.
- Lagace, Rosemary R., (1991), "An Exploratory Study of Reciprocal Trust Between Sales Managers and Salespersons," *Journal of Personal Selling and Sales Management*, 11 (Spring), 49-58.
- Langfred, Claus W. (2004), "Too Much of a Good Thing: Negative Effects of High Trust and Individual Autonomy in Self-Managing Teams," *Academy of Management Journal*, 47 (3), 385-399.
- Lewicki, R. J. and B. B. Bunker (1995), "Trust in Relationships: A Model of Trust Development and Decline", In *Conflict, Cooperation and Justice*, B. B. Bunker, J. Z. Rubin (eds), San Francisco: Jossey-Bass.
- Lewicki, Roy J., Daniel J. McAllister and Robert J. Bies (1998), "Trust and Distrust: New Relationships and Realities," *Academy of Management Review*, 23, 438-458.
- Lewicki, Roy J., Edward C. Tomlinson, and Nicole Gillespie (2006), "Models of Interpersonal Trust Development: Theoretical Approaches, Empirical Evidence and Future Directions," *Journal of Management*, 32 (6), 991-1022.
- Lewis, J. D. and A. Weigert (1985), "Trust as a Social Reality," *Social Forces*, 63, 967-85.
- Luhmann, N (1988), "Familiarity, Confidence and Trust: problems and Alternatives", In *Trust: Making and Breaking Cooperative Relations*, D.G. Gambetta, ed. New York: Basil Blackwell, 94-107.
- Lusch, Robert F. and James R. Brown (1996), "Interdependency, Contracting and Relational Behavior in marketing Channels", *Journal of Marketing*, 60 (4), 19-38.
- Macauley, S. (1963), "Non-contractual Relations in Business: A Preliminary Study", *American Sociological Review*, 28, 55-67.
- Mayer, Roger C., James H. Davis, and F. David Schoorman (1995), "An Integrative Model of Organizational Trust", *Academy of Management Review*, 20 (3), 709-34.
- McAllister, Daniel J (1997), "The Second Facet of Trust: Reflections on the Dark Side of Interpersonal Trust in Organizations," *Research on Negotiation in Organizations*, 6, 87-111.
- McAllister, Daniel J. (1995), "Affect- and Cognitive- Based Trust as Foundations for Interpersonal Cooperation in Organizations", *Academy of Management*, 38 (1), 24-59.
- McEvily, Bill, Vincenzo Perrone, and Akbar Zaheer (2003), "Trust as an Organizing Principle", *Organization Science*, 14 (1), 91-103.
- Moorman, Christine, Gerald Zaltman and Rohit Deshpandé (1992), "Relationships between Providers and Users of Market Research: The Dynamics of Trust within and between Organizations," *Journal of Marketing Research*, 29, 314-328.

- Moorman, Christine, Rohit Deshpande, and Gerald Zaltman (1993), "Factors Affecting Trust in Market Research Relationships", *Journal of Marketing*, 57 (January), 81-101.
- Morgan, Robert, M. and Shelby D. Hunt (1994), "The Commitment and Trust Theory in Relationship Marketing," *Journal of Marketing*, 58 (July), 20-38.
- Narayandas, Das and Kasturi V. Rangan (2004), "Building and Sustaining Buyer-Seller Relationships in Mature Industrial Markets," *Journal of Marketing*, 68 (July), 63-77.
- Noordewier, Thomas G., George John, and John R. Nevin (1990), "Performance Outcomes of Purchasing Arrangements in Industrial Buyer- Vendor Relationships," *Journal of Marketing*, October, 80- 93.
- Nooteboom, B. (2002), *Trust: Forms, Foundations, Functions, Failures and Figures*. Cheltenham, U.K.: Edward Elgar Publishing.
- Nooteboom, Bart, Hans Berger, and Niels G. Noorderhaven (1997), "Effects of Trust and Governance on Relational Risk," *Academy of Management Journal*, 40 (2), 308- 338.
- Nunnally, Jum C. (1978), *Psychometric Theory*, New York: McGraw-Hill.
- Ouchi, William G. (1979), "A Conceptual Framework for the Design of Organizational Control Mechanisms", *Management Science*, 25 (9), 833- 848.
- Palmatier, Robert W., Rajiv P. Dant, Dhruv Grewal, and Kenneth E. Evans (2006), "Factors Influencing the Effectiveness of Relationship Marketing: A Meta Analysis," *Journal of Marketing*, 70 (4), 136-153.
- Palmatier, Robert W., Rajiv P. Dant, and Dhruv Grewal (2007), "A Comparative Longitudinal Analysis of Theoretical Perspectives of Interorganizational Relationship Performance", *Journal of Marketing*, 71 (4), 172-194.
- Palmatier, Robert W., Lisa K. Scheer, Kenneth R. Evans, and Todd J. Arnold (2008), "Achieving Relationship Marketing Effectiveness in Business-to-Business Exchanges," *Journal of the Academy of Marketing Science*, 36, 174-90.
- Palmatier, Robert W., Cheryl Burke Jarvis, Jennifer Bechkoff, and Frank Kardes (2009), "The Role of Customer Gratitude in Relationship Marketing", *Journal of Marketing*, 73 (September), 1-18.
- Ping, R. A. (1996), "Improving the Detection of Interactions in Selling and Sales Management Research", *Journal of Personal Selling and Sales Management*, 16 (Winter), 53-64.
- Podsakoff, P., S. MacKenzie, R. Moorman and R. Fetter (1990), "Transformation leader Behaviors and their Effects on Follower's Trust in Leader, Satisfaction, and Organizational Citizenship behaviors", *Leadership Quarterly*, 1, 107-42.
- Powell, W. W (1996), "Trust-Based Forms of Governance", In *Trust in Organizations: Frontiers of Theory and Research*, R. M. Kramer and T. R. Tyler (eds), Thousand Oaks, CA: Sage, 51-67.

- Reichheld, Frederick F. (2003), "The One Number you Need to Grow," *Harvard Business Review*, December, 46-54.
- Rempel, John K., John G. Holmes and Mark P. Zanna (1985), "Trust in Close Relationships," *Journal of Personality and Social Psychology*, 49 (1), 95- 112.
- Rich, Gregory A. (1997), "The Sales Manager as a Role Model: Effects on Trust, Job Satisfaction, and Performance of Salespeople", *Journal of the Academy of Marketing Science*, 25 (4), 319-28.
- Rokkan, Aksel I., Jan B. Heide, and Kenneth H. Wathne (2003), "Specific Investments in Marketing Relationships: Expropriation and Bonding Effects," *Journal of Marketing Research*, 40 (May), 210- 224.
- Rotter, J. B (1971), "Generalized Expectancies for Interpersonal Trust", *American Psychology*, 26, 443-52.
- Rousseau, Denise M., Sim B. Sitkin, Ronald S. Burt, and Colin Camerer (1998), "Not So Different After All: A Cross-Discipline View of Trust," *Academy of Management Review*, 23 (3), 393-404.
- Selnes, Fred and James Sallis (2003), "Promoting Relationship Learning," *Journal of Marketing*, 67 (July), 80-95.
- Shapiro, D., B. H. Sheppard and L. Cheraskin (1992), "Business on a Handshake", *Negotiation Journal*, 8, 365-77.
- Shapiro, Susan (1987), "The Social Control of Impersonal Trust", *American Journal of Sociology*, 93(3), 623-58.
- Siguaw, Judy A., Penny M. Simpson, and Thomas L. Baker (1998), "Effects of Supplier Market Orientation on Distributor Market Orientation and the Channel Relationship: The Distributor Perspective," *Journal of Marketing*, 62 (July), 99-111.
- Singh, Jagdip and Deepak Sirdeshmukh (2000), "Agency and Trust Mechanisms in Consumer Satisfaction and Loyalty", *Journal of Academy of Marketing Science*, 28(1), 150-167
- Sirdeshmukh, Deepak, Jagdip Singh and Berry Sabol (2002), "Consumer Trust, Value and Loyalty in Relational Exchanges," *Journal of Marketing*, 66 (January), 15-37.
- Sitkin, Sim B. and Nancy L. Roth (1993), "Explaining the Limited Effectiveness of Legalistic "Remedies" for Trust/Distrust," *Organization Science*, 4, 367-392.
- Sitkin, Sim B. and Elizabeth George (2005), "Managerial Trust Building Through the Use of Legitimizing Formal and Informal Control Mechanisms", *International Sociology*, 20 (3), 307- 335.
- Smith, J. Brock and Donald W. Barclay (1997), "The Effects of Organizational Differences and Trust on the Effectiveness of Selling Partnerships," *Journal of Marketing*, 61 (January), 3-21.

- Strauss, Anselm and Juliet Corbin (1998), *Basics of Qualitative Research* (2<sup>nd</sup> edition), Sage Publications.
- Swan, John E., Michael R. Bowers and Lynne D. Richardson (1999), "Customer Trust in the Salesperson: An Integrative Review and Meta-Analysis of the Empirical Literature," *Journal of Business Research*, 44, 93- 107.
- Tyler, T. R. (1994), "Psychological Models of the Justice Motive", *Journal of Personality and Social psychology*, 57, 830-38.
- Uzzi, Brian (1997), "Social Structure and Competition in Interfirm Networks: The Paradox of Embeddedness", *Administrative Science Quarterly*, 42, 35-67.
- Vlaar Paul W. L., Frans Van den Bosch and Henk W. Volberda (2007), "On the Evolution of Trust, Distrust, and Formal Coordination and Control in Interorganizational Relationships," *Group and Organization Management*, 32 (4), 407-429.
- Wathne, Kenneth H. and Jan B. Heide (2000), "Opportunism in Interfirm Relationships: Forms, Outcomes and Solutions," *Journal of Marketing*, 64 (October), 36 51.
- Weitz, Barton A. and Sandy D. Jap (1995), "Relationship Marketing and Distribution Channels," *Journal of the Academy of Marketing Science*, 23 (4), 305-320.
- Wicks, Andrew C, Shawn L. Berman and Thomas M. Jones (1999), "The Structure of Optimal Trust: Moral and Strategic Implications", *Academy of Management Review*, 24(1), 99-116.
- Williamson, Oliver. E (1993), "Calculativeness, Trust and Economic Organization", *Journal of Law and Economics*, 36 (1), 453-86.
- Williamson, Oliver. E (1975), *Markets and Hierarchies: Analysis and Antitrust Implications*. New York: The Free Press.
- Zaheer, A., B. McEvily and V. Perrone (1998), "Does Trust Matter? Exploring the effects of Interorganizational and Interpersonal Trust on Performance", *Organization Science*, 9, 141-59.
- Zand, D. E (1972), "Trust and Managerial Problem Solving", *Administrative Science Quarterly*, 17, 229-39.
- Zucker, L. G (1986), "Production of Trust: Institutional Sources of Economic Structure 1840-1920", In B.M. Staw and L. L. Cummings (Eds), *Research in Organizational Behavior*, 8, Greenwich, Ct: JAI Press, 53-111.