EXPLAINING BUYER OPPORTUNISM IN BUSINESS-TO-BUSINESS RELATIONSHIPS

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The interaction among firms in the supply chain is necessary for business process execution and relationship success. One phenomenon of great significance to buyer-supplier relationships is opportunism. Opportunism is defined as behavior that is self-interest seeking with guile. It is manifested in behaviors such as stealing, cheating, dishonesty, and withholding information.

Opportunism negatively impacts relational exchange tenets such as trust, commitment, cooperation, and satisfaction. Furthermore, perceptions of opportunism negatively affect firm performance. In lieu of the known negative effects of opportunistic behavior on buyer-supplier relationships, why do agents continue to engage in opportunistic tactics with their exchange partners?

A comprehensive examination is necessary in order to understand why sourcing professionals engage in acts of opportunism. Understanding why opportunism occurs will reveal how to deter it, and this remains a gap in the literature.

Based on theories in economics, marketing channels, supply chain management, decision science, and psychology, a comprehensive model tested a set of factors hypothesized to drive the use of opportunistic tactics. Factors include buyer-supplier relationship-specific factors, environmental factors, individual personality-related factors, and situational factors. Data was collected via internet survey of sourcing professionals from private industry and government agencies. Common to many studies of ethics, respondents made choices based on two hypothetical vignettes. Two logistic

regression models were used to test the hypotheses. Factors found to affect buyer opportunism included buyer power, corporate ethical values, pressure to perform, leadership opportunism, business sector, honesty/integrity, and subjective expected utility.

This research contributes to theory by combining several disparate theories to best explain opportunism. A comprehensive evaluation should determine which theory explains the most variance in decision making. The study contributes to practice by identifying those important factors contributing to a sourcing professional's decision to use opportunistic tactics. The ability to manage these factors should improve the probability of relationship success. Additionally, the identification of these factors should help leaders to make more accurate estimates of transaction costs - key knowledge required to make an informed make or buy governance decision.

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The views expressed in this dissertation are those of the author and do not reflect the official policy or position of the United States Air Force, Department of Defense, or the US Government

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CHAPTER I

OVERVIEW

Interaction among firms in the supply chain is necessary for business process execution, and therefore, occurs frequently. Such interaction is interdependent and dynamic. Each decision or action of a firm affects other members of the supply chain. Notwithstanding, numerous internal and external factors constantly evolve and affect the interaction among firms. Not only do firms interact, but fundamentally the interaction occurs among agents of the firms (i.e. individual employees). Thus, there is firm-level interaction and individual-level interaction, each of which is explained by different antecedent conditions.

One phenomenon in buyer-supplier relations that spans both levels of interaction is opportunism. Opportunism is defined as behavior that is self-interest seeking with guile (Williamson 1975). It differs from simple self-interested behavior due to its guile component. Hence, not only is opportunism selfish, it also causes harm to another party. Opportunism is manifested in behaviors such as stealing, cheating, breach of contract (Williamson 1993), distorting data, obfuscating issues, purposefully confusing transactions, making false threats and promises, cutting corners, cover ups, disguising attributes or preferences (Williamson 1981), withholding information (Wathne and Heide 2000), deceiving, and misrepresenting (Anderson 1988).

Background

Specific instances of opportunistic behaviors (e.g., deceit and cheating) have been examined on an individual level in the ethics literature, where the unit of analysis

is the individual person. However, opportunism, as a comprehensive construct encompassing many behaviors, has received little attention in the ethics literature. Opportunism has also been examined on an inter-firm level under the theoretical foundation of transaction cost economics (TCE), where the unit of analysis is the firm. Each level of analysis entails different antecedents and outcomes. While firm-level analysis has been exhaustively explored in the channels literature, individual-level analysis has received scant attention (Romar 2004). Similarly, while instances of opportunism have been examined in the ethics literature, buyer-supplier relationship-specific factors have been ignored. These two levels of analysis have not been integrated into a single study. Researchers have called for an integration of ethics research with other areas (Loe et al. 2000). More specifically, Robin and Reidenbach (1987) suggested that ethics be integrated with marketing strategy.

Opportunism is an important phenomenon, receiving substantial research attention from many distinguished economics and marketing scholars. Moreover, opportunism is embedded in several of these two disciplines' most notable theoretical achievements in the realm of buyer-supplier relationships including:

- Trust-commitment theory of relationship marketing (Morgan and Hunt 1994)
- Relational exchange (MacNeil 1980)
- Transaction cost economics (Williamson 1975)
- Marketing channels

As evidenced, opportunism is an important phenomenon in buyer-supplier relationships, one that has widespread implications for theory and practice. It is not a stretch to conclude that continued pursuit of its understanding is not only warranted, but demanded.

The most common inter-firm-level determinants of opportunism include dependence (Provan and Skinner 1989; Ping 1993; Anderson 1988; Rokkan et al. 2003; Joshi and Arnold 1997; Achrol and Gundlach 1999; Deeds and Hill 1998; Joshi and Stump 1999; Lai et al. 2005), formalization (John 1984; Provan and Skinner 1989; Gilliland and Manning 2002; Achrol and Gundlach 1999; Dahlstrom and Nygaard 1999; Cavasgil et al. 2004; Deeds and Hill 1998), relational norms (Gundlach et al. 1995; Achrol and Gundlach 1999; Brown et al. 2000; Joshi and Stump 1999; Lai et al. 2005), and uncertainty (Sako and Helper 1998; Lee 1998; Schilling 2002; Skarmeas et al. 2002; Joshi and Stump 1999). More than 30 empirical studies support the effects of multiple antecedents to opportunism. In all cases, the unit of analysis has been the firm, not the agent.

In contrast, the ethics literature identifies individual-level determinants of ethical decisions, of which opportunism is an example. These factors are assumed to be embedded within and influence the ethical decision-making process. Broadly, these factors include social, cultural, economic, organizational, characteristics of the moral issue, significant others, individual-difference variables, situations, and opportunity (Jones 1991). Hence, when deciding whether to utilize an opportunistic tactic, individual agents employ all four types of factors: buyer-supplier relationship-specific, environmental, individual difference variables (e.g., traits), and situational factors. As evidenced, multiple broad categories of factors affect the decision-making process of an individual contemplating an act of opportunism. While the ethics literature offers comprehensive theories of ethical decision making, it thus far has ignored buyer-supplier relationship-specific factors. “Management and business ethics scholars…do

not address [opportunism] in depth, if at all" (Romar 2004, p. 663). Research on ethics in a business-to-business context appears scarce (Reid and Plank 2000). And, while the marketing channels and supply chain literatures have thoroughly examined (and continue to examine) the inter-firm factors driving opportunism, they have generally not considered the individual-level factors. Thus, a comprehensive examination involving all relevant factors is absent. This conclusion was confirmed by Das (2006), who called attention to an inadequate awareness of the antecedents of opportunism. By bridging this gap, tremendous opportunity exists to enhance our understanding of supply chain dynamics.

Although research exploring the consequences of unethical behavior is scant (Baker et al. 2006), the same cannot be said for research on opportunism between firms. Research has demonstrated the negative impact of opportunism on relational exchange norms such as trust, commitment, cooperation, and satisfaction (Morgan and Hunt 1994; Kwon and Suh 2005; Lee 1998; Joshi and Stump 1999). Additionally, relational exchange tenets are known to improve firm performance (Skarmeas et al. 2002; Gassenheimer et al. 1996). Furthermore, perceptions of opportunism directly and negatively affect performance (Nunlee 2005; Parkhe 1993; Rindfleisch and Heide 1997). In lieu of the known negative effects of opportunistic behavior on buyer-supplier relationships and firm performance, to behave opportunistically seems illogical. But the current literature offers little guidance. Why agents choose to engage in opportunistic tactics with their exchange partners is unknown.

A comprehensive examination driven by the goal of understanding why agents engage in acts of opportunism appears necessary, and should yield theoretically and

practically significant insights. Understanding why opportunism occurs will reveal how to deter it, and this remains a gap in the literature (Luo 2006). Such a comprehensive exploration is important to business in general, and to the sourcing discipline in particular. Sourcing professionals are frequently responsible for forging and managing supplier relationships. Firms generally source a large majority of their revenue volume to purchase goods and services (Monczka et al. 2002). With such a critical role in the supply chain, *sourcing* is an optimal boundary-spanning activity from which to study opportunism. Though the ethicalness of sourcing professionals increased during the 1990s (Landeros and Plank 1996), their use of opportunistic tactics remains a concern (Robertson and Rymon 2001).

The proposed conceptual model addresses this gap in understanding the use of opportunism by examining the psyche of sourcing professionals when contemplating opportunistic actions. Ultimately, an individual, rather than an organization, contemplates and decides for or against opportunism. Thus, the unit of analysis within this study is the individual agent in the context of an exchange relationship. Examining individual agents' rationale and behavior may provide insight into both levels of opportunisms' antecedents, individual and inter-firm. Based on a review of the literature and discussions with industry practitioners, it is posited that relationship-specific factors, environmental factors, individual-difference factors, and situational factors (Beu et al. 2003) drive sourcing professional's decision process regarding whether to utilize an opportunistic tactic.

Problem Statement and Research Questions

It is important to understand the factors that might influence a sourcing professional to engage in behaviors that: (1) represent the organization to the external public, and (2) affect relationships with other supply chain entities. Opportunism is one such a behavior, a crucial one at that. The problem with the body of knowledge, as it stands, is that we don't know why sourcing professionals continue to engage opportunistic tactics despite the obviously negative consequences that are frequently associated with the behavior. This lack of understanding gives rise to the following research questions:

- What factors contribute to a sourcing professional's decision to behave opportunistically?
- Which factors are most determinant in sourcing professionals' decisions to act opportunistically?
- Do differences exist in the factors that predict strong-form versus weak-form opportunism?

Purpose of the Study

The purpose of this study, therefore, is to enhance our understanding regarding why sourcing professionals engage in opportunistic tactics with their suppliers. Factors explored are identified in the conceptual model presented below.

Conceptual Model

Herein, a comprehensive model is proposed that explains the behavior of sourcing agents seeking to further the interest of their principal. The model integrates multiple theories from the fields of psychology, economics, marketing, supply chain management, and management. These theories include: the path-goal theory of

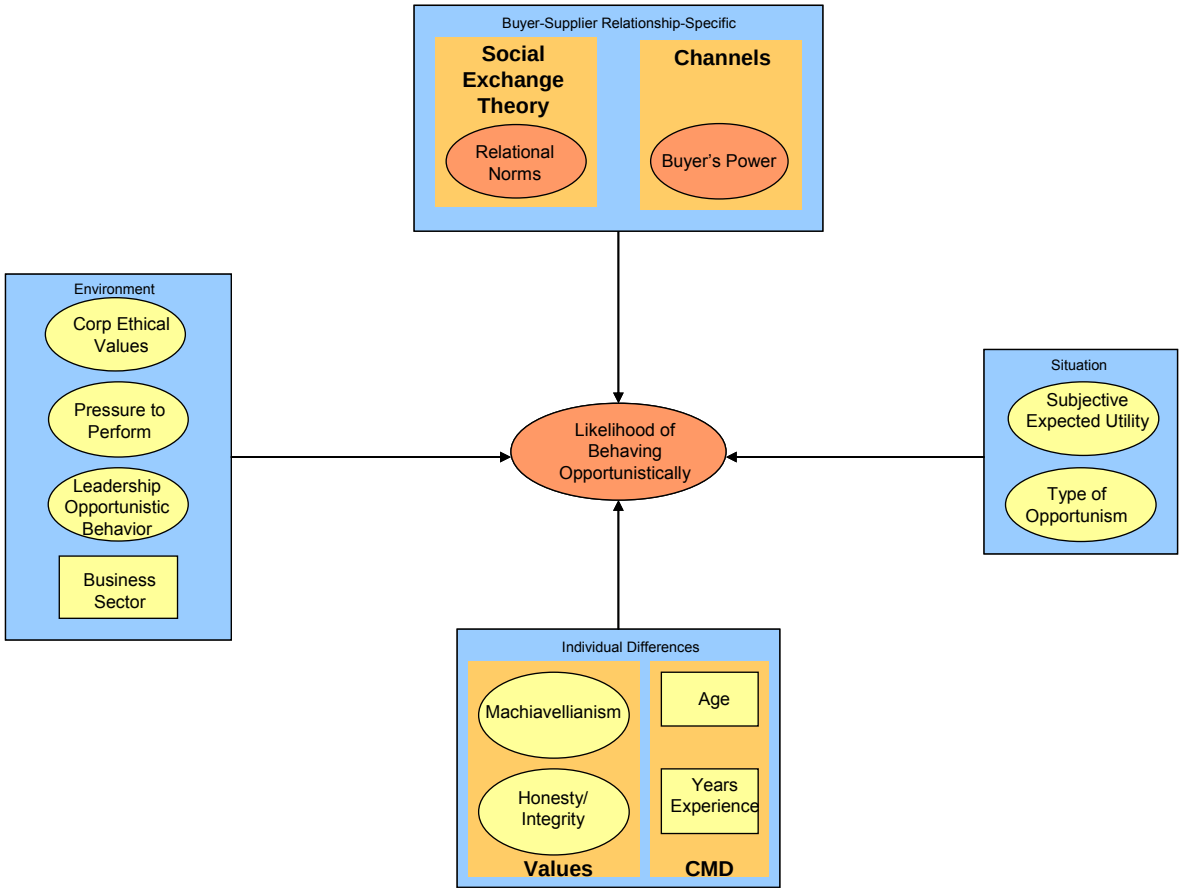
leadership, firm culture, goal-setting theory, the theory of planned behavior, decision theory, trait theory, social exchange theory, dependency theory (power and conflict), and transaction cost economics. The basic premise underlying the model is that a sourcing professional, in deciding to act opportunistically, deliberately weighs: (1) their firm's power position within the supply chain, (2) the extant relational norms governing the relationship with the particular supplier, and (3) the expected utility of the opportunistic behavior under consideration. Subconsciously, sourcing professionals should be affected by environmental factors such as corporate ethical values, pressure to perform, and opportunistic behavior demonstrated by the sourcing professionals' superiors. Characteristics of the sourcing professional also should impact his or her decision. These individual-difference variables include Machiavellianism, honesty/integrity, age, and years of experience. Certainly, other factors may weigh on a decision to act opportunistically; however, for the sake of parsimony, factors were restricted to the critical few likely to explain the greatest variance.

Opportunistic behavior is a moral issue. "The complexity of doing research on moral motivation is that more than one determinant may be operating in a person at any given point in time, and therefore the researcher's task is not to prove one theory right and all the others wrong, but to figure out how to assess the motive strength of a particular source (or sources) in a given situation" (Rest 1986, p. 14). This explains the necessity of the breadth of the conceptual model. Although it may appear broad, given the four overarching categories of factors and the few, necessary constructs in each category required to examine buyer-supplier dynamics in an ethical context, the model

should achieve a reasonable balance between parsimony and providing value-added explanatory power.

FIGURE 1.1

Factors Affecting a Sourcing Professional's Decision to Behave Opportunistically



Research Design

First, qualitative methods were employed to facilitate the development of the conceptual model. A thorough literature review identified the underlying theories and key constructs, and helped form a preliminary conceptual model. Discussions with

government and industry experts were conducted to reinforce and validate the principle constructs thought to drive opportunistic behavior.

Following the qualitative effort, a survey of sourcing professionals was used to collect cross-sectional data for later quantitative analysis. Purchasing is an ideal discipline in which to study opportunistic behavior due to its interaction with suppliers and frequency of negotiations. The survey was deployed on the Internet. The sample consisted of sourcing professionals who were members of the Institute of Supply Management (ISM) and members of the National Contract Management Association (NCMA), as discussed in Chapter III. The ISM membership population consisted primarily of private-sector sourcing professionals. Though the ISM population is ample to generate a sufficient sample, the additional sampling of NCMA members facilitated data collection from government sourcing professionals, a requirement of the proposed hypothesis testing. The survey was pilot tested on a small sample to bolster construct validity.

Since survey response rates are deteriorating (Larson 2005), data was collected via two methods. First, a population was selected randomly from ISM's and NCMA's membership lists. These sourcing professionals were invited, via email (with an embedded Web link), to complete the survey online. The second method utilized a convenience sample. An email directly invited purchasing executives of the United States-based Fortune 500 firms to support the research. This email message requested their support in forwarding an invitation to complete the survey to all of their sourcing professionals. This method increased generalizability by enabling the inclusion of sourcing professionals who may not be members of ISM or NCMA – to

include international buyers who may be members of non-U.S. based professional purchasing associations (e.g., Purchasing Management Association of Canada).

Following data collection, latent constructs were assessed for reliability and validity. Specific elements of validity were assessed such as construct validity, convergent validity, and discriminant validity. Additionally, threats to validity such as non-response bias and socially desirable responding (SDR) were assessed. Next, hypothesized relationships were tested using two logistic regression models, one for each of two hypothetical vignettes. The use of vignettes is explained in Chapter III. Each vignette posed a question to the respondent whose response indicated his or her likelihood of engaging in an opportunistic act. Either the respondent was likely to choose the act of opportunism or was not. This design is well-suited for analysis using a logistic regression model. Notwithstanding, this approach is commonly used in ethics-related research (Street and Street 2006).

Theoretical Implications

This study of buyer opportunism is important to the disciplines of marketing, ethics, purchasing, and supply chain management. The findings should enhance our understanding of buyer-supplier dynamics as people and organizations interact with situations. Several implications for theory are at stake. First, this research effort examines, in one study, literature streams known to impact ethical decisions in context of buyer-supplier relationships – ethics, individual difference variables, environmental factors, power, & relational norms. Second, the study supplements TCE theory by: (1) analyzing opportunism at the individual's psyche level and (2) determining the factors

that lead to a decision to employ opportunistic tactics. The identification of drivers of opportunism should help senior leaders forecast the behavior when they detect the emergence of these factors. With this enhanced awareness of risk factors of opportunism susceptibility, leaders should be able to make more-informed decisions as to whether to insource or outsource a product or service. Hence, more awareness of opportunism will facilitate a more accurate explanation of firm boundaries since, as predicted by TCE theory, defending against opportunism drives the costs of activities and is thus a major deciding factor in a make or buy strategy determination. Third, this research supplements the ethics literature by considering buyer-supplier relationship factors - whose potential effects are presently unaccounted for in the ethics literature. Fourth, this dissertation examined, empirically, the distinction between strong and weak-forms of opportunism (Luo 2006). Fifth, the study demonstrated whether an environment of high performance pressure coupled with high buyer power can overcome ethical values prompting a sourcing professional to behave opportunistically. Finally, the study examined differences between government and for-profit-sector sourcing professionals with respect to their propensity to engage in opportunistic behaviors toward suppliers.

Management Implications

In addition to contributions to theory, the practices of sourcing and supply chain management will benefit. First, the identification of the factors leading to opportunism helps decision-makers make more informed judgments of what *should be* insourced rather than outsourced. Organizations will engage in monitoring and controlling

activities in an attempt to mitigate or prevent opportunism, and these activities increase the costs of transacting in the market (outsourcing). A more accurate estimate of the probability of opportunistic behavior, given conducive circumstances, should yield a more accurate estimate of monitoring and control costs. A more-informed decision should help decision makers to determine whether it is appropriate to make versus buy. Second, an understanding of individual factors that influence opportunistic behavior helps in hiring and assigning sourcing professionals to manage particular groups of company spend. *Non-critical* spend is conducive to transactional governance; whereas, *strategic* spend is suitable to relational exchange. Third, the identification of specific individual and situational factors driving opportunism helps sourcing professionals to manage supplier relationships by knowing which factors to monitor. Hence, maintaining a pulse on these factors should increase the probability of relationship success. Fourth, this study highlights the important role of developing ethical values in employees, and explicates the importance of corporate ethical values. Fifth, this research highlights the impact of a stressful workplace on sourcing professionals' decisions. Finally, the study reveals how leaders' opportunistic behaviors affect sourcing professionals' decisions.

Scope and Limitations

This research design faced certain limitations – some due to methodological limitations, and others resulting from the complex nature of ethical behavior. Correlation-based analysis was used to identify relationships among constructs and variables. Thus, statistically-inferred relationships served only as distant indicators of causality. Another limitation pertains to the population of interest. The study primarily

involved sourcing professionals based in the United States. Generalizations thus are restricted to sourcing professionals from the United States. Finally, cross-sectional survey data was relied upon. This limits the findings to a particular point in time, and does not capture any fluctuations in relationships among constructs attributable to time.

The remainder of the dissertation is organized as follows. Chapter II describes the relevant literature surrounding opportunism and ethical decision making and behavior. Underlying theories are identified and explained. Additionally, relevant constructs are introduced and defined. From this, logical and theoretically-grounded hypotheses are proposed that identify factors that will help explain buyer opportunism. Chapter III describes the research methods and sample to be used in testing the hypotheses. Chapter III also discusses how constructs and variables were measured, and how they were determined to be reliable and valid. Chapter IV presents the results of testing whether the hypothesized factors affect a sourcing professional's likelihood of behaving opportunistically. Finally, in Chapter V, results are discussed. This discussion addresses the theoretical and practical implications associated with the findings. The study's limitations and recommendations for future research are also discussed.

CHAPTER II

REVIEW OF THE LITERATURE

Opportunism is succinctly described as aggressive selfishness due to its *guile* component. At worst, the use of opportunism is intended to cause harm; at best, it completely disregards the impact to others (Lai et al. 2005; Macneil 1981; Williamson 1975). Opportunism has also been defined to "include behavior contrary to a party's implicit understanding of an exchange but not necessarily contrary to any explicit agreement, which leads to a transfer of wealth from one party to another" (Gundlach et al. 1995, p. 84). This definition strays from the overt forms of opportunism to allow for more benign forms such as withholding information, misleading, distorting, disguising, obfuscating, and confusing information. Wathne and Heide (2000) categorized four forms of opportunism into a 2x2 matrix in terms of whether the behavior is passive or active and whether the circumstance is new or existing. They classify acts of opportunism as either "evasion," "refusal to adapt," "violation," or "forced renegotiation."

Examples of opportunistic behavior toward stakeholders are found in the well-known cases of Enron, Worldcom, and Adelphia. Another example may be found in a fraud case involving a Manhattan jewelry supplier, Cosmopolitan Gem Corporation (CGM). CGM deceived their lender, Capital Factors, Inc., by overstating their accounts receivables, and thus, defrauded Capital Factor's holding company of $20 million (Bray 2004). Conversely, a less-obvious example of opportunism may be found in Wal-Mart's treatment of its suppliers. Consider its price squeeze on Vlasic for its gallon jar of pickles. Although the increased sales boosted revenue for Vlasic, the lower price of $2.97 (forced renegotiation) eroded margins for Vlasic pickles by 25% (Murphy and

Laczniak 2006, p. 65). Other fouls of opportunism from a procurement organization have been documented in the procurement realm. For example, during a source selection and following the receipt of proposals, buyers have altered the selection criteria without disclosure to the prospective suppliers. Additionally, a recent purchasing practice has unilaterally extended the payment terms from net 30 days to net 45 and beyond to the supplier's cash-flow detriment (Arminas 2001).

Wathne and Heide (2000, p. 40) posit that "for a given behavior to qualify for the opportunism label, there must be a norm in place, in the sense that the parties share expectations regarding subsequent behavior." Hence, if a norm of sharing information and timely adapting to changes is established between trading partners, then if one party suddenly refuses to either share or adapt, they could be accused of passive opportunism. Such norms may originate from one's ethics or moral standards.

To explain and substantiate these positions, Chapter II is organized as follows. First, the conceptual model depicting the factors affecting a sourcing professional's decision to either behave or not to behave opportunistically is illustrated in Figure 2.1. Next, the underlying theories that explain why and how the particular antecedents affect the decision-making process are presented. Finally, each hypothesized relationship among constructs is identified and discussed.

Theoretical Foundations

Research investigating opportunism relies primarily on transaction cost economics (TCE) and relational exchange theory (Lai et al. 2005). Additionally, theories of ethical decision making are pertinent to the research questions. Thus, TCE,

relational exchange (encapsulated in social exchange theory), and ethical decision-making theories are discussed next.

Transaction Cost Economics

Opportunism is an important phenomenon in exchange relationships. It is one of two key behavioral assumptions underlying TCE, an interdisciplinary (Williamson 1981) and highly-influential theory of economic organization (Hill 1990). "The theory is a blend of institutional economics and organizational and legal analysis" (Heide and John 1992, p. 32). TCE theory explains the organization's boundaries by examining the transaction as the unit of analysis. Hence, when it is too costly to transact within the market (i.e., outsource), the firm will make the product or service in its own hierarchy. What is considered "too costly" is not determined by market price; rather, it is a function of the costs of guarding against opportunism from trading partners.

The other primary behavioral assumption of TCE is *bounded rationality* – the concept that there are limitations on human cognitions, and that humans cannot possibly know all the facts (Williamson 1980). Hence, contracts cannot be written that cover all possible contingencies; they are always incomplete. Thus, throughout the relationship, the parties will face opportunities to take advantage of one another – to behave opportunistically. TCE theory suggests people will behave opportunistically when it is feasible and profitable (John 1984). Thus, reliance on suppliers is costly in terms of opportunism prevention (e.g. supplier monitoring costs, performance bonds, contract formulation and negotiation costs).

Social Exchange Theory

While TCE views governance structures in terms of safeguarding against costs of opportunism, social exchange theory (SET) relies upon relationship interdependence that develops over time (Lambe et al. 2001). Two tenets of SET follow "that parties enter into and maintain relationships with the expectation that doing so will be rewarding" and that "parties will remain in the relationship as long as satisfactory rewards continue" (Lambe et al. 2001, p. 12). "[Business-to-business] relational exchange is motivated by the mutual recognition of the parties to the exchange that the outcomes of such exchange exceed those that could be gained from either another form of exchange or exchange with a different partner" (Lambe et al. 2001, p. 12). Other tenets include the pinnacle roles of trust, commitment, cooperation, satisfaction, and relational norms that develop over time and tend to govern the relationship rather than reliance on written contracts (Heide and John 1992). The establishment of norms is particularly important in SET due to its constraining effect on uses of power by exchange members. These tenets of SET are firmly established by empirical research. Lambe et al. (2001), in their literature review of SET, identified 23 empirical studies involving either trust, commitment, dependence, satisfaction, norms, cooperation, or long-term orientation. Finally, SET refutes *universal* opportunism. Instead, humans will use discretion in deciding to behave opportunistically, and included in their evaluation processes are behavioral norms that have developed. SET explains the continuous, satisfactory exchange relationships governed by something other than a contract.

Ethical Decision-Making Theory

Ethics concerns "inquiry into the nature and grounds of morality where the term morality is taken to mean moral judgments, standards, and rules of conduct" (Taylor 1975, p. 1). Morality provides the guidelines for resolving human conflicts and optimizing mutual benefit of societies (Rest 1986). According to Beu et al. (2003, p. 88), "US business must be predicated on ethical business practices otherwise it would cease altogether." Sparks and Hunt (1998, p. 93) posit that "an ethical issue exists when a decision situation involves one or more alternative courses of action (including no action) that are differentially consistent or inconsistent with some formal or informal ethical rule, code, or norms."

Ethical decision making is a complicated subject (Beu et al. 2003) with roots in fundamental philosophical assumptions about human motivation and behavior. Differing philosophical assumptions drive different theories of morality. Three such philosophies are utilitarianism, rights, and justice (Beauchamp and Bowie 1979). Fundamentally, moral theories differ based on two, and only two, factors: (1) whether there exist absolute moral standards of behavior (i.e., a definitive right and wrong) to guide decision-making, and (2) whether a moral decision should consider the consequences of the act. The former is called deontological theory, whereas the latter is known as teleological (Beauchamp and Bowie 1979). The teleological philosophy of utilitarianism posits that ethical decisions are those that provide for the greatest good to the greatest number. However, this philosophy is plagued with controversy over whose greatest good should be sought. Conversely, deontological philosophies such as rights and justice provide prescriptive rules to determine what is ethical.

One example is Kant's categorical imperative. Kant's philosophy, at least in part, posits that human beings should never be treated solely as a means; rather, they should be treated as ends that have value in and of themselves. Further, humans should only act such that their behavior could become a universal law - a law that upholds moral obligations and good will (Beauchamp and Bowie 1979). Under this philosophy, there are no exceptions based on a particular situation. If one chooses to deceive another, then in order to qualify as moral behavior, such deceit must be viewed as acceptable behavior from all people. Consistent with its title, Kant's philosophy applies to us all at all times, and thus is mandatory without exception.

People often rely on different moral philosophies. With differing moral philosophies, two individuals facing the same decision to make, under the same circumstances, may reach different conclusions. For this reason, we might expect significant variance in decision making to exist across individuals and firms. Further complicating the study of the effects of ethical decision making is the difference between *what is* (positive, or descriptive) and *what ought* to be (normative, or prescriptive). Developing a defendable normative theory is difficult, particularly when considering a moral dilemma – situations where two or more moral principles are at odds and one must be sacrificed for the other, abound in both business and life.

Normative theories face two additional challenges. First, they are not designed to predict or explain. Second, normative theories lack face validity (Trevino 1986). A reconciliation of positive versus normative ethical theory is beyond the scope of this project. Generally, however, in attempting to explain the greatest variance in ethical decision making, business researchers have gravitated toward the use of positive

theories (i.e., theories that describe *what is* decided versus theories that pontificate on *what should be* decided given an ethical situation). This study follows suit by utilizing the positive approach.

Models of Ethical Decision Making

Several situational, or contingency, models of ethical decision making have been presented in the marketing and management literatures (Rest 1986; Ferrell and Gresham 1985; Hunt and Vitell 1986; Trevino 1986; Jones 1991). These contingency theories describe the decision as a process. The ethical decision making process begins with consideration of environmental factors such as culture, industry, organization, personal, social, and economic. These environmental factors affect the recognition of a moral issue, perceived alternatives, and consequences. Next, an ethical judgment is decided as to what is right, wrong, and what should (or should not) be done. An individual's moral judgment is impacted by individual factors (e.g., traits, values, beliefs), situational factors (e.g., opportunities, rewards/punishments) and significant others (family, coworkers, leaders, organizational culture). This judgment affects behavioral intentions which, in turn, drive behavior. Researchers posit that situational, environmental, and individual constructs impact the moral judgment. Therefore, they adopt a compromise between the deontological and the teleological philosophies by accommodating both. In fact, "any positive theory of ethics must account for both the deontological and teleological aspects of the evaluation process" (Hunt and Vitell 1986, p. 7). Business ethics researchers acknowledge that humans are guided by certain intrinsic rules (e.g. norms, values, or beliefs) which are largely

culturally derived (Ferrell and Gresham 1985). However, they also posit that humans are calculating and deliberate in their efforts, and that they consider the consequences of their actions.

The contingency processes of ethical decision making provided by researchers (Ferrell and Gresham 1985; Hunt and Vitell 1986; Trevino 1986; Jones 1991), although containing idiosyncrasies, are similar. For example, some models (Dubinsky and Loken 1989; Hunt and Vitell 1986; Jones 1991) clearly fit within the ubiquitous decision-making framework of the theory of planned behavior (Ajzen 1991) whereby attitudes toward a specific behavior affect behavioral intentions. These behavioral intentions, in turn, affect behavior. Ajzen's theory also considers how socialization affects decision making by positing that subjective norms (the decision makers' assessment of how the people they care about will perceive the behavior) affect behavioral intentions. The crux of Ajzen's theory of planned behavior, previously titled the theory of reasoned action (Fishbein and Ajzen 1975), is that people consider the likely consequences of their behavior when making a decision.

Ethical Sensitivity

Another common denominator found in some of the ethical decision-making processes is that an individual decision maker must recognize that a situation involves an ethical issue (Rest 1986; Hunt and Vitell 1986; Jones 1991; Ferrell and Gresham 1985). There is significant variability among different individuals' ability to recognize ethical issues, and this recognition is a function of the individual's degree of ethical sensitivity (Sparks and Hunt 1998). In Rest's model, ethical sensitivity occurs in

Component 1 “Interpreting the Situation” (Rest 1986, p. 5) of his four-component model. Therein, an individual identifies alternative courses of action and considers the likely consequences of each alternative as they affect the interests, welfare, or expectations of each party involved. Importantly, ethical sensitivity is a personal characteristic that is learned through socialization (Sparks and Hunt 1998).

Ethical Judgment: Cognitive Moral Development

After recognizing a moral issue, the next stage of the decision-making process involves an ethical judgment. One consideration of judgment is an individual’s level of cognitive moral development (CMD) (Jones 1991; Rest 1986; Trevino 1986). The greater the CMD, the more likely an individual is to behave morally. There are six stages of CMD (Kohlberg 1976) through which people develop sequentially: (1) obedience and punishment orientation, (2) instrumental purpose and exchange, (3) interpersonal accord, conformity, mutual expectations, (4) social accord and system maintenance, (5) social contract and individual rights, and (6) universal ethical principles. Each subsequent stage is cumulative; it encompasses its preceding stages. Most adults do not develop beyond stage four (Kohlberg 1976; Weber 1990). According to Trevino (1986, p. 608), ”the [CMD] model provides a well-developed theoretical basis for understanding how individuals think about moral dilemmas and how thoughts and actions appear to be related.” Since stages three and four of the CMD posit that managers look to others and to the situation to help determine what is right and wrong, and since most adults operate in these two stages, a contingency model of ethical decision making is likely to provide the best explanation of behavior.

According to Hunt and Vitell's (1986) model of marketing ethics, the *ethical judgment* stage in the decision-making process is where the trade-off between the deontological evaluation and the teleological evaluation is made. Whether one evaluation will be more heavily weighted over the other is a function of the individual and the situation. Similarly, in Rest's model (1986), this reconciliation occurs in Component 3 where the individual prioritizes his or her values.

All models examined identified internal and external factors that affect the ethical judgment as displayed in Table 2.1.

TABLE 2.1

Summary of Factors Affecting Ethical Judgments

Factor	Model						
	Rest	Hunt and Vitell	Trevino	Jones	Beu et al.	Ferrell and Gresham	Dubinsky and Loken
Individual	X	X	X	X	X	X	X
Knowledge						X	X
Values	X					X	
Attitudes						X	X
Intentions						X	X
Ego Strength			X				
Locus of Control			X		X		
Field Dependence			X				
CMD			X	X	X		
Personality					X		
Accountability			X		X		
Compliance			X		X		
Ethical Sensitivity	X	X					
Significant Others			X	X		X	X
Differential Association						X	
Role Set Configuration						X	
Opportunity		X		X	X	X	
Professional Codes						X	
Corporate Policy					X	X	
Rewards/ Punishment		X			X	X	

(table continues)

Table 2.1 (*continued).*

Factor	Model						
	Rest	Hunt and Vitell	Trevino	Jones	Beu et al.	Ferrell and Gresham	Dubinsky and Loken
Situation		X	X	X	X		
Reinforcement			X				
Other Pressures			X				
Normative Structure (Culture)			X	X			
Role Taking			X		X		
Resolution of Moral Conflict			X				
Moral Intensity				X	X		

Together, the components of these various models of ethical decision-making help researchers identify the pertinent phenomenon that should be considered in their examination. What follows is a discussion of a subset of these factors. The following factors are posited to be highly-relevant to a decision maker in the context of buyer-supplier interactions.

Buyer-Supplier Relationship Factors

Buyer Power

Power is among the most significant phenomena in buyer-supplier relationships. It is defined as the ability to cause someone to do something that he or she would not have done otherwise (Gaski 1984). Power emerges from its five sources: coercive, reward, expert, legitimate, and referent (French and Raven 1959). The four sources other than coercive power were later categorized into *non-coercive* power (Hunt and Nevin 1974). Coercive power has to do with punishments; non-coercive power coincides with rewards. The two types of power generally have opposite effects on other important constructs such as conflict and satisfaction (Gaksi 1984).

The effects of power vary depending on whether the power is exercised or not. A firm that refrains from exercising available power earns favor from supply chain partners almost as if unexercised power is a form of cooperation. A positive relationship exists between the amount of power attained and performance. Some researchers (Cox 2001) go so far as to suggest that power is at the heart of all business-to-business (B2B) relationships. Evidence of its importance is the fact that the Institute of Supply Management (ISM) specifically warns its members to be cognizant of their power position and to use it ethically (Principles and Standards of Ethical Supply Management Conduct, ISM).

Power and dependence are two sides of the same coin (Gaski 1984). Emerson (1962) first examined these constructs and concluded that the power of A over B is equal to, and based on, the dependence of B on A, which is: (1) directly proportional to B's motivational investment in goals mediated by A and (2) inversely proportional to the availability of those goals to B outside A-B relation. The most-frequently studied construct affecting opportunism is *dependence*. Dependence may be defined as existing when the rewards sought and received in a relationship are not available outside the relationship (Lambe et al. 2001; Thibaut and Kelley 1959). Several studies (Provan and Skinner 1989; Ping 1993; Anderson 1988; Rokkan et al. 2003; Joshi and Arnold 1997; Achrol and Gundlach 1999; Deeds and Hill 1998; Joshi and Stump 1999; Lai et al. 2005) found relationships between forms of dependence and opportunism.

Following TCE, one factor that contributes to dependence is a *transaction-specific asset* (TSA), a non-transferable investment whose utility is unique to a specific relationship. Forms of TSAs include site specificity, physical asset specificity, and

human asset specificity (Williamson 1980). Essentially, TSAs create a lock-in situation among trading partners that reduces the investor's propensity to behave opportunistically, yet simultaneously putting them at risk to opportunism from their trading partner via hold-ups.

Situations of dependence give rise to power. Power is included in the conceptual model herein, but dependence is not. Since the underlying construct *power* is included, dependence is not examined directly. For the sake of parsimony in an otherwise complex ethical topic, the concept of dependence is captured in the examination of power. Power has been found to affect inter-firm opportunism (Lothia 1991; John 1984). Where power is symmetric, unethical behavior will be reduced (Brass et al. 1998). Extending this, it is reasonable to expect that given a power imbalance, unethical behavior will increase. As such,

H_1: There is a positive relationship between buyer power and a sourcing professional's decision to behave opportunistically.

Relational Norms

Relational norms "are expectations about behavior that are at least partially shared by a group of decision makers" that "have been shown to govern individual exchange relationships between firms" (Heide and John 1992, p. 34). Such norms are multi-dimensional, typically operationalized as *solidarity* (common responsibilities and interests), *mutuality* (mutual benefit and trust), *flexibility* (good faith modification), *role integrity* (dyadic roles extend beyond transactions), and *harmonization of conflict* (attempt to reach mutually-satisfactory compromise) (Gundlach et al. 1995).

Research shows that relational norms reduce opportunism (Gundlach et al. 1995; Achrol and Gundlach 1999; Brown et al. 2000; Joshi and Stump 1999; and Lai et al. 2005). Achrol and Gundlach (1999) found that while asymmetric resource investments create an incentive for opportunistic behavior from the under-vested party, social safeguards (i.e., relational norms) suppressed opportunism more effectively than did contractual safeguards. This finding reinforces the limitations of TCE theory due to its silence on relational matters.

Anderson (1988) and Rokkan et al. (2003) found support for the role of TSAs in driving opportunism; however, the strength of the relationship varied by norms of solidarity and by the expected duration of the relationships. Where relationships are weak in norms of solidarity, TSAs promote opportunism from the asset receiver. However, according to Rokkan et al. (2003, p. 221), "in relationships characterized by a strong norm of solidarity, specific investments actually decrease the receiver's opportunism." Furthermore, from a buyer's perspective, the effect of TSAs on opportunism became negative as the expectation of the relationships' continuance into the future strengthened. Consequently, a buyer's tendency to act opportunistically should lessen as expectations of a long-term relationship increase.

Joshi and Arnold (1997) examined the impact of buyer dependence on buyer opportunism under varying levels of relational norms. Their research found that dependence positively related to opportunism under conditions of low relational norms. Conversely, dependence decreased opportunism in the presence of high relational norms. Firms sharing high relational norms exhibited a willingness to: (1) react to

contract changes in good faith; (2) freely and continually exchange information; and (3) strive for the benefit of the relationship rather than individual interests.

Similar findings have been reported in the ethics literature. Where a relationship is strong, unethical behavior will be reduced (Brass et al. 1998). Therefore, it is posited that:

H_2: There is a negative relationship between relational norms and a sourcing professional's decision to behave opportunistically.

Environmental Factors

Firms do not make decisions or behave; rather, they are represented by a conglomeration of decisions and behaviors of their agents. Therefore, when examining opportunism among firms, consideration of an individual employees' perspective is necessary. These employees are likely affected not only by inter-firm factors, but also by their immediate environment - characteristics of their own organization. Hosmer (1987, p. 441) termed these "structural causes" and "managerial processes," based on the premise that employers can increase unethical behavior by influencing an employee's motivation toward self-interest. Hence, the firm's structure and processes such as reward systems, pressure to perform, and compensation (Derry 1989) can motivate employees toward unethical behavior that benefits the firm, and subsequently, by benefiting the firm, rewards trickle down to the employee. Attention now turns to these structural factors.

Corporate Ethical Values

The ethical context of the organization is an important environmental factor

expected to affect individuals' judgments, attitudes and behaviors. This concept has been explored and operationalized under different - and somewhat overlapping - constructs. For example, some researchers examine organizational culture, whereas others explore organizational climate. Some studies are more tailored to ethics by examining either ethical culture, ethical climate, or corporate ethical values (CEV). An overview of these constructs follows.

Organizational culture is a significant phenomenon affecting employee behavior and firm performance (Deshpandé et al. 1993). It represents a firm's history, norms, and values, and is shaped by its employees' beliefs, expectations, and behaviors (Deshpande and Webster 1989). According to Trevino et al. (1998, p. 452), "organizational culture is thought to provide direction for day-to-day behavior." In contrast, organization *climate* is an individual's assessment of the congruency between the organization's expectations and actual behavior (Deshpande and Webster 1989). These constructs have been tailored to the ethical context of the organization, represented by *ethical culture* and *ethical climate*. Ethical climate characterizes "organizations in terms of broad normative characteristics and qualities that tell people what kind of organization this is - essentially what the organization values" (Trevino et al. 1998, p. 453). In contrast, ethical culture is a more tangible manifestation of the ethical climate. Ethical culture entails the organization's formal and informal control systems such as rules, codes of conduct, norms of behavior, and reward systems (Trevino et al. 1998).

Clearly, these constructs are not synchronized. For instance, Deshpande and Webster's (1989) conception of *organizational culture* seems to resemble the tailored

ethical climate. Furthermore, the construct *organizational climate* seems to differ greatly from the tailored *ethical climate* construct. These deviations may be due to origins in separate academic disciplines such as marketing and organizational behavior. Nonetheless, "questions remain about how best to conceptualize the ethical context of organizations and its relationship with attitudes and behaviors" (Trevino et al. 1998, p. 470). For the sake of parsimony, another construct is introduced that is likely to sufficiently represent the organization's ethical context - the firm's CEV.

One important aspect of corporate culture is the firm's ethical values (Hunt et al. 1989; Trevino et al. 1998). CEVs represent the amount of attention afforded to ethical issues by the firm, and the degree to which the firm behaves ethically (Hunt et al. 1989). They can be manifested in firm policies, processes, codes of conduct, employee compensation and recognition systems (Baker et al. 2006), the words and actions of authorities, and the degree of enforcement of policies and codes (Trevino and Ball 1992). Even the motivational art work lining the walls of common areas may convey CEV. Anything that communicates norms or expectations of behavior, intended or unintended, may constitute CEV.

Firms often develop and publish codes of ethics. Additionally, it is not uncommon to find procurement functions within firms that publish procurement-specific codes of ethics or ethics policies. A 2004 study by ISM showed that 83% of 952 respondents abide by a formally endorsed set of standards of ethical conduct (Social Responsibility and the Supply Management Profession: A Baseline Study 2004). The public sector is regulated more extensively. From the Procurement Integrity Act (41 U.S.C. 423) to the Federal Acquisition Regulation and the Defense Department's 203-

page Joint Ethics Regulation, federal sourcing professionals are responsible for extensive content of many statutes, regulations, and policies.

Likewise, many professional associations, particularly those serving the purchasing discipline such as ISM, the Purchasing Management Association of Canada (PMAC), and the National Contract Management Association (NCMA), publish codes of ethics. Some are sparse (Code of Ethics, NCMA), while others are specific (Principles and Standards of Ethical Supply Management Conduct, ISM). Only the PMAC explicitly prohibits dishonest and misleading behavior, and prescribes penalties to violating members (Code of Ethics, PMAC).

Admitting that gray areas exist in these codes, Schildhouse (2005) apportioned responsibility to companies to clearly delineate right from wrong. She also called on firms to share their ethics standards with suppliers. One industry report stated that only 11% of firms provide ethics training to their suppliers (MAPI Survey 2004). With this variance in guidance, we might expect a similar variance in behavior of associations' constituents.

Codes of ethics may not be effective suppressants of unethical behavior (Allen and Davis 1993). Allen and Davis (1993) contend that the firm's ethical culture, including punishments and rewards for (un)ethical behavior, is a better predictor of behavior than is a code of ethics alone. These aspects of ethical culture are well-represented by Hunt et al.'s (1989) construct, CEV.

The theory of planned behavior (Ajzen 1991) partially explains how CEVs eventually affect employee behavior. According to Ajzen, behavior results from behavioral intentions. Intentions are affected by three phenomena: (1) attitude toward

the behavior, (2) subjective norms, and (3) perceived behavioral control. Based on an individual's behavioral beliefs about the likely consequences of the behavior, an attitude toward the behavior is formed that is either favorable or unfavorable. However, this attitude does not act alone in driving behavioral intentions. A decision maker also examines his or her ability to perform the anticipated behavior. Additionally, an individual considers how others are likely to view the behavior if he or she were to engage in it. These subjective norms are a result of normative expectations of others. CEVs, developed over time through communications and actions of firm authorities, likely shape these expectations that others have of the individual. Simply stated, if the firm communicates expectations of ethical behavior, and punishes those violating the previously communicated expectations, then others will eventually expect everyone to behave ethically. When an individual contemplates a certain questionable behavior, he or she will consider what others expect him or her to do. These expectations of others can curtail an intention to behave unethically, even though the individual: (1) has the ability to perform the behavior and (2) has a favorable attitude toward it. This theory of reasoned action (Fishbein and Ajzen 1975) has been empirically supported in the context of ethical decision making (Dubinsky and Loken 1989).

CEVs are important because the level of CEVs affects ethical judgments (Douglas et al. 2001) and ethical behavior (Baker et al. 2006) of employees. CEVs also positively relate to employee commitment to the firm (Hunt et al. 1989). This is important because employee commitment also leads to ethical behavior (Baker et al. 2006). Due to the close proximity of the definition of organizational climate and the operationalization of CEVs (Hunt et al. 1989), the effects of organizational climate

should not be excluded from this discussion of outcomes. Organizational climate can reduce deviant behavior of employees (Boye and Jones 1997). It decreases the frequency of use of deceptive tactics because a known organizational climate clarifies an otherwise gray area as to what behavior is acceptable and what is not (Aquino 1998). According to Loe et al. (2000, p. 187), "culture and climate have been found to be pervasive in influencing and adapting organizational ethics."

Given this wide variance in codes of ethics and enforcement, variances in employee behavior should be expected. The presence of variance has given rise to a separate construct in ethics research, that of *ethical ambiguity*. Ethical ambiguity represents the amount of uncertainty that an individual has with respect to their daily behavior in endeavoring to be ethical on the job (Robertson and Rymon 2001). With the known effects of corporate culture, corporate climate, and corporate ethical values, coupled with variance in their magnitudes across firms, we should expect that:

H_3: There is a negative relationship between corporate ethical values (CEV) and a sourcing professional's decision to behave opportunistically.

Pressure to Perform

Another environmental factor affecting a sourcing professional's decision to behave opportunistically is *pressure to perform*. Often, conflict arrises between time, personal resources, personal capabilities, and the demands of the job making the individual's work objectives extremely difficult or even unattainable (Grover 1993). Employees are repeatedly told to do more with less. In 1997, the Ethics Officer Association and the American Society of Chartered Life Underwriters and Chartered Financial Consultants conducted a survey on workplace pressures (Petry et al. 1999).

Sixty percent of respondents reported feeling a substantial amount of pressure on the job. Of all industries, manufacturing reported the highest level of pressure to act unethically or illegally. This is ominous for the purchasing function, as much of the input (e.g. raw materials or components) into a manufacturers' goods and services are procured from suppliers. In the study, 20% of mid-level managers felt a high degree of pressure to behave illegally or unethically. The study identified over 24 unethical or illegal actions taken in response to workplace pressure. The most frequent actions include: cutting corners on quality control, cover ups, abused sick days, deceived customers, pressured others, falsified reports, deceived superiors, withheld important information, and misused company property.

The purchasing function is particularly susceptible to such pressures due to its direct and visible impact to firm profits by mitigating the costs of supplies and services. Under excessive pressure to deliver results, employees may be willing to compromise personal values to meet organizational demands (Brenner and Molander 1977; Robertson and Rymon 2001; Posner and Schmidt 1987). This effect may be more severe among lower-level and more-junior managers. Schweitzer et al. (2004) found that people with unmet goals were more likely to behave unethically than those who were simply trying to do their best. As junior and middle managers struggle to climb the career ladder attempting to achieve unmet goals, they may find themselves in moral conflicts (Posner and Schmidt 1987), situations where personal values disagree with organizational values.

Paradoxically, the same organization that attempts to create and sustain CEVs may also encourage unethical behavior by demanding extremely high performance

outcomes of its employees (Robertson and Rymon 2001). This problem is likely magnified when considering that in many work process designs, a single focal outcome is outside of the control of any single employee. These findings suggest that under extreme pressure to perform, junior and middle managers may be susceptible to using opportunistic tactics. Notwithstanding, research has shown that perceived pressure to perform results in a greater use of deception by purchasing agents, regardless of the severity of the deception (Robertson and Rymon 2001). Additional evidence may be found in a study of ethics of 1,245 supply professionals conducted by ISM. Therein, pressure to perform was identified as a potential barrier to ethical behavior. A related barrier that surfaced was an organizational culture that focused on short-term, bottom-line gains (Ethical Practices, Drivers & Barriers: Supply Professionals and Their Peers Weigh In 2006). As such:

H_4: There is a positive relationship between pressure to perform and a sourcing professional's decision to behave opportunistically.

Leadership Opportunistic Behavior

Horvath (1995) suggested that *leadership* may be able to bridge organizational behavior and ethics. Executive purchasing and supply chain leaders are very likely to influence sourcing professionals' decisions. Extending the concept presented in House and Mitchell's 1974 article, "The Path-Goal Theory of Leadership," *leadership opportunistic behavior* is defined as the extent to which executive decision makers support and promote the use of opportunistic tactics in supplier relationship management. House and Mitchell (1974) explain that influencing behaviors demonstrated by leaders affect a follower's motivation. Influencing behaviors are

characterized as directive, supportive, participative, or achievement-oriented. The leader identifies the subordinate's behavior (path) most likely to lead to the desired rewards (goals), and then reinforces it with demonstrative behavior. Leadership opportunistic behavior might consist of explicit direction to sourcing professionals, communicating expectations, and aggressive goal setting (commonly referred to as stretch goals). Schweitzer et al. (2004) found that goal setting can cause unethical behavior when employees fail to meet the goals.

Research on corporate ethics may explain the leader's willingness to influence subordinates to compromise ethics. Two surveys of business people, one by Baumhart (1968) and a replication by Brenner and Molander (1977), found that one of two key drivers of unethical behavior was the behavior patterns of leaders. Brenner and Molander (1977) found that most of those surveyed felt the greatest responsibility toward their customers - more so than toward their shareholders and employees. Thus, leaders may walk over employees and suppliers for the ultimate benefit of the downstream customer. A separate study (Badenhorst 1994) ranked the behavior of company's managers as the number one factor affecting unethical decisions. Notwithstanding, research shows that a decision maker's motivation to comply with referent others (e.g., company leaders) affects his or her decision (Dubinsky and Loken 1989). Similarly, research found that obedience to authority is a solid predictor of unethical conduct (Trevino et al. 1998). These findings inspire the following proposition:

H_5: There is a positive relationship between leaders' opportunistic behavior and a sourcing professional's decision to behave opportunistically.

Business Sector

The use of opportunistic tactics may be a function of the business sector in which a sourcing professional works. Business-to-business exchange has been thoroughly studied in the marketing channels literature, but very little is known about marketing to the government (Reid and Plank 2000). Nonetheless, evidence of the nature of government procurement and how it might differ from industry procurement may be found by examining the underlying structure of each type of procurement. Government procurement is highly regulated via federal contracting statutes (e.g., the Competition in Contracting Act of 1984) and regulations (e.g. the Federal Acquisition Regulation) that discourage either close or long-term relationships with suppliers. The expected long-term duration of the relationship between a buyer and supplier decreases opportunism (Joshi and Stump 1999; Jap and Anderson 2003; Johnson et al. 1996; Gundlach et al. 1995). The numerous regulatory boundaries encircling government procurement encourage a perspective of discrete transactions versus relational exchange (Webster 1992; Dwyer et al. 1987). Furthermore, government procurement's rigidity devalues, and in many cases explicitly prohibits, the principle tenets of buyer-supplier relations such as durability, consistency, expansion, trust, and commitment (Dwyer et al., 1987; Morgan and Hunt, 1994). Since these relational norms are: (1) structurally suppressed in government procurement, and (2) prevalent among for-profit business relationships, and since these norms reduce opportunism, it is not unreasonable to conclude that government sourcing professionals overall might tend to think and behave more opportunistically than their industry counterparts. This may seem counterintuitive due to the government sector's lack of a profit motive; however, evidence suggests otherwise.

If government sourcing professionals behave opportunistically, evidence of such behavior should exist. Traces of opportunism should be found in both pre-award (supplier selection) and post-award (contract administration) interactions with bidders and suppliers. In search of some preliminary support, the researcher investigated bid protests decisions issued by the U.S. Government Accountability Office (GAO). Bid protest cases examined were decided between January, 2004 and October, 2006 and included only decisions that were sustained. Hence, the source selections reviewed were only those where an impropriety in the sourcing process was discovered. Between 2004 and 2005, an average of 22% of federal government bid protests were sustained (GAO Bid Protest Annual Report to the Congress for Fiscal Year 2005). From a listing of sustained bid protests obtained from the GAO, the researcher reviewed 79 sustained bid protest decisions. Of those 79, 16 (20.3%) involved overt opportunistic behavior by the buyer (federal agency). Opportunistic behavior demonstrated included: withholding information, misrepresenting, dishonesty, cheating, shirking obligations, cover ups, disguising preferences, and deceit. Reference Appendix A for details associated with each source selection. There is little doubt that this investigation was imperfect. However, bid protests qualified as involving opportunistic behavior only where the behavior was readily apparent in the language of the GAO ruling. Thus, 20% represents a conservative count of what, in reality, is likely to be a more-frequent occurrence.

Further evidence that government sourcing professionals may behave more opportunistically may be found in their education and training. A direct excerpt from a U. S. Department of Defense acquisition training course provided by the Defense

Acquisition University (DAU) - a flagship formal education and training system for the government - advises contract managers as follows.

> (1) Never volunteer information that would weaken your negotiating position or enhance the bargaining position of the contractor. Although this rule is only common sense, it is often overlooked because most people are candid and forthright by nature. Be honest but be careful. Honesty and ethical behavior are always paramount in any government negotiating session. However, you do not have to be dishonest to avoid volunteering weaknesses. (DAU n.d.)
>
> (2) [Y]ou can use patience to increase the stress on the contractor's negotiator (DAU n.d.)

While an ample amount of other DAU course material espouses the benefits of honesty, collaboration, relationships, and win-win strategies with suppliers, these excerpts encourage withholding information and applying pressure - both types of opportunism that potentially may cause distrust.

Given the rich theoretical support coupled with the empirical evidence of (1) opportunistic behavior in source selection processes revealed during bid protests and (2) the nature of government procurement education and training content, it is reasonable to posit that:

> H_6: Overall, government sourcing professionals are more likely to behave opportunistically than are sourcing professionals employed in private industry.

Individual-Difference Factors

Rest (1986, p. 1) contends that "morality is rooted in the social condition and the human psyche." Just as environmental factors are likely to affect a decision to behave opportunistically, so too are individual-difference factors such as personality traits (Knouse and Giacaolone 1992). Of all factors examined empirically, individual difference factors have been the most frequent (Loe et al. 2000). The following

discussion substantiates investigation of the effects that personal values - Machiavellianism and honesty/integrity - may exercise on a sourcing professional's choice to behave opportunistically toward his or her supplier. The possible influence of other personal characteristics - age and experience - is explored.

Values play an important role in ethical decision-making (Hunt and Vitell 1993; Moser 1988; Glover et al. 1997; Steenhaut and Kenhove 2006). Values are "the individual's prescriptive beliefs concerning the desirability of certain modes of conduct or end-states of behavior" (Glover et al. 1997, p.1320). Values affect attitudes (Finegan 1994; Mowen and Minor 2001), and attitudes influence behavior (Finegan 1994; Ajzen 1991).

Moral-related individual differences "may influence choice of ethicality of action" (Razzaque and Hwee, 2002, p. 309). We may expect significant differences in values across different people (Finegan 1994; Glover et al. 1997) because individuals prioritize different values based on their unique experiences and culture (Rokeach 1973). This point is reinforced by McDevitt and Van Hise (2002, p. 261) who derived several "spheres of influence" on an individual's belief system. Included were the workplace, the legal system, religion, profession, community, and family. Since values are: (1) difficult to change (Landeros and Plank 1996), (2) similar to attitudes that predict behavior, and (3) different across individuals, they likely offer a source of explanation of behavior and are researchable. ISM's study on ethics identified employee values as potential antecedents to lower levels of deceitful practices (Ethical Practices, Drivers & Barriers: Supply Professionals and Their Peers Weigh In 2006). Due to their unquestionable influence on ethical decision making, scholars urged the inclusion of

values in ethics research (Hunt and Vitell 1993). The specific values explored in this study were Machiavellianism and honesty/integrity.

Machiavellianism

In contrast to the previously postulated individual value, some values are not so virtuous. Machiavellianism represents an amoral means of manipulating others in order to achieve one's objectives (Hunt and Chonko 1984). Qualifying behaviors include aggression, manipulation, exploitation, and deviousness (Calhoon 1969). Machiavellianism has achieved the status of a personality trait. Those high in Machiavellianism (high Machs) will tend to persuade others more, and be persuaded less. Thus, more often than not, they will win. They also attempt to manipulate others more (Christie and Geis 1970), and are less easily detected when lying (Geis and Moon 1981). High Machs, in general, disregard accepted moral principles (Hunt and Chonko 1984). They perceive ethical issues as less serious than do low Machs (Singhapakdi and Vitell 1990). However, high Machs are not reckless sociopaths. Rather, they are more-accurately represented as people who remain emotionally detached from others (Singhapakdi and Vitell 1990). They simply prioritize what they believe to be important, and remain detached to ease decisions that significantly and negatively impact other people.

Several empirical studies have found relationships between Machiavellianism and unethical behavior (Hegarty and Sims 1978; Verbeke et al. 1996; Beu et al. 2003). Since ethics is concerned with what is morally right, based on fairness, rights, justice, and respect for others (Beauchamp and Bowie 1983), and since Machiavellianism is

based on psychological egoism (self-interest maximization), Machiavellianism is anti-ethical. As such, Machiavellianism and opportunism should coincide. Therefore, it is posited that:

> H_7: There is a positive relationship between a sourcing professional's Machiavellianism and his or her decision to behave opportunistically.

Honesty & Integrity

> On a personal level, everyone must answer the following question: What is my highest aspiration? The answer might be wealth, fame, knowledge, popularity, or integrity. But if integrity is secondary to any of the alternatives, it will be sacrificed in situations in which a choice must be made. Such situations will inevitably occur in every person's life. (Smith and Smith 2003, p. 5)

One important value is honesty/integrity, an individual's beliefs about the way he or she ought to tell the truth and do what he or she thinks is right (Ravlin and Meglino 1987). An individual's honesty/integrity has been found to affect his or her moral judgment (Finegan 1994; Landeros and Plank 1996). People who value honesty higher than average are more likely to perceive a given situation as immoral (Finegan 1994). These findings coincide with the deontological philosophy of ethics where absolute moral standards are developed then used in decision-making.

Hopwood (1976) identified the dilemma faced by employees whose ethical values conflict with formal or informal codes of conduct expected by the employer. According to McDevitt and Van Hise (2002, p. 264), "if business decisions must be made in a setting of conflicting signals from top management, other interested parties, and personal beliefs, responsibilities and aspirations, then ethical dilemmas arise." These dilemmas may pressure employees to compromise their personal standards (Bowman 1976; Carroll 1975). Nonetheless, one means to resolve the cognitive

dissonance caused by an ethical dilemma in the mind of a conscientious individual is to simply choose not to engage in the questionable behavior (Moser 1988). However, not everyone agrees; some people choose to rely upon deceptive practices rather than upon honesty. There exists a plethora of variation on people's reliance on honesty (Provis 2000). Therefore, it is posited that:

H_8: There is a negative relationship between a sourcing professional's honesty/integrity and his or her decision to behave opportunistically.

Buyer Age

Age consistently relates positively to ethical decision making (Loe et al. 2000; Ruegger and King 1992). In similar findings, older workers interpret ethical standards more strictly (Serwinek 1992), and, in general, have greater ethical concern (Vitell and Muncy 1992). Notwithstanding, younger individuals are more Machiavellian than their elders (Hunt and Chonko 1984). As an explanation of these findings, younger individuals may be driven more by self-interest. They are more focused in the pre-conventional stage of the cognitive moral development (CMD) model (Rest 1986) where the focus is on consequences. Multiple studies supported by two meta analyses have found convincing evidence that moral judgment changes with age (Rest 1986). Younger individuals simply have not had the opportunity to mature and learn to respect societal norms or intrinsic values. Younger individuals will be more inclined to use deceit to obtain power (Grover 1993). Therefore:

H_9: Younger sourcing professionals are more likely to behave opportunistically than are older sourcing professionals.

Years of Experience

A previous literature review revealed mixed findings with respect to the relationship between work experience and ethical decision making (Loe et al. 2000). Vitell and Hunt (1990), in a test of their general theory of marketing ethics, found that the number of years of experience in one's current position moderated the relationship between deontological evaluations and ethical judgments. Glover et al. (1997) found a relationship between years of work experience and higher degrees of ethical behavior. Years of experience may also serve as a surrogate for CMD. According to Rest (1986), specific experiences do not affect moral judgment per se. Rather, individuals mature over time such that they can discern their place in the social world. This broad awareness, informed by many experiences, impacts moral judgment. The greater the experience, the more apt an individual is to have developed context-specific, personal morals about how interactions with suppliers should be conducted. These morals that guide behavior regardless of consequences are found in stages five and six of the CMD model.

H_{10}: Less experienced sourcing professionals are more likely to behave opportunistically than are seasoned sourcing professionals.

Situation Factors

Notwithstanding buyer-supplier relational factors, environmental factors in the firm, and individual-difference factors, the characteristics of the situation at hand are key considerations during ethical decision-making. In fact, often, the expected outcomes of decisions (i.e., the situation) supplant one's personal values as the most reliable predictor of behavior (Allen and Davis 1993). Hence, people tend to compromise their

values depending on the consequences at stake in a particular situation. As such, any model of ethical decision-making should include consideration of the situation at hand. One effective measure of the situation is subjective expected utility (SEU).

Subjective Expected Utility

The corporate purchasing function is driven by results. In light of the fact that manufacturers typically spend 55% of their revenue on purchased goods and services (Monczka et al. 2002), the purchasing function has a material impact on the firm's bottom line. The criticality of its outputs, coupled with the elevated, strategic nature of strategic sourcing (Ellram and Carr 1994; Ellram and Siferd 1998; Kraljic 1983) make procurement highly visible to firm leadership and key stakeholders. With so much attention on work outputs, sourcing professionals concentrate their behaviors toward the most probabilistic and rewarding outcomes. This calculated decision making is predicted by expectancy theories of motivation (Vroom 1964).

Concepts from the "rational cheater" model of motivation found in employer-employee relations may offer insights into behaviors. Therein, "employees will be opportunistic whenever they perceive that the marginal benefit of [opportunism] exceeds the marginal costs" (Nagin et al. 2002, p. 852). Researchers have documented the effect of opportunity on ethical decisions (Zey-Ferrell et al. 1979). The influences of costs, benefits, and opportunities are represented well in the ethics literature. Several positive models of ethical decision making suggest that individuals evaluate the possible consequences during their processes of making choices (Hunt and Vitell 1986; Jones 1991; Ferrell and Gresham 1985; Ajzen 1990). This consideration of consequences

boils down to a cost-benefit analysis of the decision by the decision maker - all within a particular situational context.

One theory of situational analysis dealing with costs and benefits is subjective expected utility (SEU) (Kamat and Kanekar 2001), a concept derived from behavioral decision theory (Edwards 1954; Fischhoff et al. 1981). As a stand-alone decision theory, SEU holds that individuals will choose alternatives that provide the maximum expected value (i.e. the one that will maximize his or her gain) (Gray 1975; Mitchell and Biglan 1971). Hunt and Vitell's (1986) general theory of marketing ethics incorporates SEU, which is a product of the *desirability of a consequence* and the *probability of its occurrence* (Kamat and Kanekar 2001; Nettles and Bayton 2001). The SEU of a choice is expressed as:

$$SEU = P_1U_1 + P_2U_2 + ...+ P_nU_n,$$

where P represents the assessed probability of an event occurring and U represents the magnitude of the positive or negative utility of the consequence (Gray 1975).
Both of these components of SEU affect moral judgments. Consequences need not be restricted to economic measures; emotional consequences may also be accommodated by SEU (Kamat and Kanekar 2001). SEU, because of its tractability and simplicity, is a preferred model of decision-making under conditions of uncertainty (Lo 2000). It has been applied both as a normative guide for decision prediction and a positive theory to explain decisions.

SEU is not without its critics (Frisch and Clemen 1994; Fischhoff et al. 1981). It has received scrutiny as a stand-alone theory of decision making. In this model, a stand-alone approach is not posited. Instead, SEU is depicted as a factor integrated

into the larger conceptual model (Figure 2.1). SEU has been successfully and validly applied to empirical ethics research (Farrington and Knight 1979). Researchers (Holmstrom and Beach 1973) concluded that decisions can be decomposed into probabilities and utilities. Furthermore, subjects are capable of rating their perceived utilities and indicating their subjective probabilities of realizing those utilities (Holmstrom and Beach 1973). Therefore, SEU is a useful construct in ethical decision-making (Kamat and Kanekar 2001).

The business press is replete with examples of how opportunistic tactics result in at least short-term gains. Empirical evidence also shows that negotiators operating in an ethical climate achieved less favorable outcomes than those not working in an ethical climate (Aquino 1998). Since opportunism results from perceived positive utility, and due to SEU's empirical support in decision theory and in Hunt and Vitell's (1986) model of marketing ethics, it is posited that:

> H_{11}: There is a positive relationship between subjective expected utility and a sourcing professional's decision to behave opportunistically.

Types of Opportunism and Moral Intensity

The next hypothesis posits distinctions between *strong-form* and *weak-form* opportunism. However, prior to discussing these types of opportunism, an understanding of another concept - moral intensity - is necessary. The following discussion proceeds in this fashion by first explaining moral intensity, then by discussing the various forms of opportunism that have been introduced in the literature.

The Issue-Contingent Model of ethical decision making (Jones 1991) introduces another consideration to the ethical decision-making process, the characteristics of the

ethical issue itself. The main thrust of this model is based on an empirical finding that marketing managers behave more ethically as the negative consequences of the behavior become more severe (Fritzsche and Becker 1983), a finding supporting the teleological view of ethical decision making. According to Jones (1991), moral issues differ on six dimensions of moral intensity. The differences in these six dimensions affect individuals' ethical decisions. Dimensions include: (1) probability of effect, (2) concentration of effect, (3) social consensus, (4) magnitude of the consequences, (5) temporal immediacy, and (6) proximity. The *probability of effect* is accounted for in the model's construct subjective expected utility; thus, it merits no further elaboration. Additionally, the *concentration of effect* seems to be a nuance of the *magnitude of the consequences;* thus, it will be subsumed in the discussion below of the latter component of moral intensity.

Social consensus is the degree of public agreement that a proposed act is bad or good. This corresponds to organizational culture factors in Trevino's (1986) model. In a business-to-business relationship context, social consensus encompasses what the parties accept as norms of behavior. For example, if during negotiations, both parties fully expect the other to withhold information (an example of weak opportunism), then this behavior is more acceptable and consequently has a lower moral intensity.

In addition to social consensus, the magnitude of the consequences affects ethical decision making (Weber 1996). That consequences matter supports the teleological evaluation of moral judgment. Weber (1990) found empirical support for differences in levels of reasoning depending on the type of moral issue presented. As a possible explanation for this finding, Weber posited that moral issues encountered in an

employment context (versus a personal context) tend to evoke lower stages (Kohlberg 1976) of moral reasoning. Alternatively, Weber suggested that independent of the employment context, the severity of the consequence alone may account for the different levels of moral reasoning. Based on his finding, Weber called for additional research to explore whether there is a "hierarchy of moral issues" (Weber 1990, p. 699).

Additionally, temporal immediacy, the time it takes for consequences to materialize, is significant (Jones 1991). If during negotiations, a sourcing professional alters the facts slightly and never expects this to be discovered, then the temporal immediacy may be indefinite. The resultant moral intensity would be reduced.

Likely the most significant dimension of moral intensity in the context of sourcing professionals' behavior is proximity. According to Jones (1991, p. 376), "the proximity of the moral issue is the feeling of nearness (social, cultural, psychological, or physical) that the moral agent has for victims (beneficiaries) of the evil (beneficial) act." Particularly in transactional relationships where relational norms (e.g., trust, commitment, cooperation) exist at lower levels - if at all - the supplier may be viewed by the buyer as distant. Consequently, moral intensity, ceteris paribus, may be low. Beu et al. (2003, p. 91) stipulated that "If the focal individual perceives that the organization really needs his/her help in order to achieve a powerful organizational goal, then s/he will be more likely to evaluate the ethical issue in terms of the magnitude of the consequences and the proximity of those affected by the decision."

Differences in moral intensity have important implications to the ethical decision-making process. First, moral intensity affects whether an individual *recognizes* a situation as involving ethics (Jones 1991). Therefore, the decision-making schemata

activated may bypass ethical considerations where moral intensity is low (Jones 1991). Second, moral intensity may affect the moral *judgment* of an individual. The six dimensions of moral decision-making affect how important an individual perceives a moral issue to be. According to Jones (1991, p. 392), "people generally behave better when the moral issue is important than they do when it is unimportant." Thus, as the level of moral intensity of an issue differs, we can expect different decisions.

Jones' model has received ubiquitous empirical support (Singhapakdi et al. 1996; Beu et al. 2003; Douglas et al. 2001; Morris and McDonald 1995; Vitell et al. 2003; DeConinck 2004; Leitsch 2006; Weber 1996; Paolillo and Vitell 2002). Further support for differing effects for differing levels of moral intensity may be found in a comparison of buyers' and sellers' perceptions of ethical behaviors (Inks et al. 2004). Buyers and sellers are more sensitive to direct deceit than to indirect deceit. Additionally, buyers were found to be less ethically sensitive to their own use of deceitful behaviors compared to similar behavior initiated by the seller.

Wathne and Heide (2000) provided a qualitative review of opportunism's forms, outcomes, and solutions. Their review ignored the ethics literature and relied instead on the marketing and economics literatures covering relational exchange and TCE theories, respectively. Notably, within this theoretical realm, they posited a difference in types of opportunism - classified as either *active* or *passive*. Active opportunism involves contract (written or unwritten, social) violations and forced renegotiations; whereas, passive opportunism entails evasion or refusal to adapt to changing situations. Although the line of demarcation between the two was indicated only via examples and not directly explicated, presumably the difference hinges on the activity of the

perpetrator. If the perpetrator deliberately commits an act of opportunism, it is said to be active. If, however, opportunism occurs from inaction, it is said to be passive. For each type of opportunism, Wathne and Heide (2000) identified associated positive and negative consequences to both exchange members in terms of effects on revenues and costs. It is unclear whether one or the other form of opportunism results in more severe negative consequences. While this distinction may be useful for classifying types of opportunism, its theoretical underpinnings are clouded. Hence, we do not know the significance of classifying opportunism this way.

A more promising conceptual distinction recently emerged. Luo (2006, p. 121) classified opportunism as either "strong-form (Type I)" or "weak-form (Type II)." The differences between the two forms are clear, and grounded in SET as well as Jones' theory of moral intensity (1991). Strong-form opportunism violates explicit contractual agreements (terms and conditions); whereas, weak-form opportunism violates unwritten (but understood) relational norms. The distinction in Luo's (2006) taxonomy may be found in how the opportunistic actor views the consequences. Strong-form opportunism violates a legally-binding contract thereby affording formal remedies to the victim. Weak-form opportunism, conversely, offers no formal remedy. However, due to its impact on trust (Morgan and Hunt 1994; Kwon and Suh 2005), commitment (Gundlach et al. 1995), and cooperation (Morgan and Hunt 1994; Joshi and Stump 1999), these violations may result in consequences as bad as, or perhaps worse than, those associated with strong-form opportunism, particularly over the long term. Nevertheless, consequences of weak-form opportunism are cloaked and may appear to be less of an immediate threat (Luo 2006). Furthermore, they may not be easily traced to a specific

infraction. Therefore, accountability of the actor may appear reduced. Hence, the actor may perceive a latitude to use weak-form opportunistic tactics without putting the firm at immediate risk, explicitly.

It is appropriate, now, to synthesize the concepts of moral intensity and types of opportunism. Moral intensity will not be measured and tested per se; rather, it is relied upon as a theoretical basis to explain why Luo's (2006) distinction between strong and weak opportunism may indeed be observed in buyers' uses of opportunistic tactics. Two dimensions of moral intensity are particularly revealing, social consensus and temporal immediacy. Since violations of contracts are understood to bring clear manifestations of distributive justice (e.g., lawsuits), it is likely that the social consensus of peers will be unfavorable. In contrast, the ramifications resulting from violations of weak-form opportunism (violations of relational norms) are unknown. Thus, the social consensus of peers should be much less intense. Furthermore, since the ramifications of contractual violations include clear distributive justice, the temporal immediacy of the ramifications is somewhat known. In contrast, the timing of any ramifications of weak-form opportunism (violations of relational norms) is unclear. In fact, the ramifications themselves are unknown. Together, these two dimensions of moral intensity suggest that weak-form opportunism should be perceived by sourcing professionals as less morally intense than is strong-form opportunism. As such, it is posited that:

H_{12}: It is expected that the significant predictors of strong-form opportunism will be different than will be the significant predictors of weak-form opportunism.

Government sourcing professionals will be more apt to believe that the contract represents the totality of the agreement, and discount the existence of unwritten

contractual terms. The sanctity of the contract coupled with the structurally-inhibited relational norms suggests that government sourcing professionals will not behave opportunistically where the contract is violated, but are inclined to do so where the contract is not violated. Therefore,

H_{13}: Government sourcing professionals are less reluctant than are private-sector sourcing professionals to engage in weak-form opportunism.

Government procedures and regulations are centered on ensuring contractors are treated fairly and according to the contract. Justice is a central tenet. Therefore, it is posited that:

H_{14}: Government sourcing professionals are more reluctant than are private-sector sourcing professionals to engage in strong-form opportunism.

In this chapter, the relevant literature was reviewed providing support to the conceptual model introduced in chapter one. Factors that best explain a sourcing professional's decision to engage in opportunistic behavior emerged and directional hypotheses were developed. Similar to prior studies of channel relationships and ethics, factors were grouped as either relationship-specific, environmental, individual-difference variables, or situational. Chapter III will explicate precisely how the research will be designed to test the hypotheses.

CHAPTER III

METHOD

This chapter addresses the qualitative and quantitative methods employed in an attempt to address the research questions posed in Chapter I, and more specifically, the hypotheses posed in Chapter II. The discussion begins with an overview of the research design. Next, the procedure for accessing the target population of sourcing professionals is discussed. Following a discussion of the sample, the process of developing the questionnaire is explained to include how constructs were measured. A procedure for ensuring integrity of the research, including reliability and validity, is outlined. Finally, the data collection process and analysis techniques are discussed.

Research Design

Qualitative

In order to better understand the phenomenon of opportunism, the study commenced with a basic qualitative inquiry. Qualitative research is appropriate where the objective is to describe, interpret, verify, and/or evaluate (Peshkin 1993). Rather than a complex description or interpretation of phenomenon, the purpose of the qualitative portion of this mixed design (Creswell 2003) was twofold. First, it was used to verify what was suggested by the diverse streams of literature (i.e. channels, ethics, and decision-making). Hence, the researcher sought an answer to the question: "In deciding whether to act opportunistically, are sourcing professionals simultaneously affected by buyer-supplier relationship factors, organizational environment factors, individual-difference factors, and situational factors?" Additionally, the qualitative

approach sought, in an exploratory fashion, to understand to what extent ethics theory explains buyer behavior. Second, the qualitative interviews were used to enhance the succeeding survey-based quantitative research. Since the subsequent survey used vignettes to position respondents into a decision-making context, and since original vignettes had to be developed, the interview participants helped to improve the quality of the vignettes. The following discussion first outlines the interview process employed. Next, the results of the theoretical portion of the interview are synopsized. The results of the vignette reviews are presented later under the sub-heading *manipulation check*.

Interview Design

A convenience sample of four well-qualified professionals was selected for the semi-structured interviews. Participants were deemed qualified due to their years of sourcing experience and breadth of procurement types (i.e., dollar values, types of product and services, and complexity). Because one aspect of the research was to examine differences in opportunistic behavior among government and for-profit sourcing professionals, sourcing professionals holding positions in procurement in government and for-profit organizations (two each) were chosen to participate. One participant, with seven years of experience, worked for a large Fortune 500 firm in the logistics services industry purchasing direct and indirect materials and services. The other for-profit participant who had 16 years of experience worked for a small distributor purchasing passive, connector and electromechanical components. One government participant, with 25 years of experience, worked for a small procurement group purchasing supplies, services, and construction in support of one U.S. Air Force installation. The other

government participant, with 10 years of experience, worked for a large procurement group contracting for a multi-billion dollar weapon system acquisition.

Interviews were conducted via email, telephone, and face-to-face. First, a set of structured questions (Appendix B) were provided. Participants provided written responses to the questions. Following receipt and review of responses, participants were engaged in follow-on dialogue for further clarification and elaboration. The follow-up communication occurred by a combination of email, telephone, and face-to-face sessions. Note that the word opportunism was not presented until the conclusion of the interview when participants were debriefed as to the purpose and scope of the research.

As expected, all four participants believed that ethics is an important topic in procurement. When asked why they held this belief, respondents commented:

- "Good ethics is the foundation of a good working relationship."
- "Ethics establishes the foundation for appropriate business practices and sourcing methods. Without ethics, objectivity and fair decision making are not part of procurement."
- "The general public depends on US military and government workers to uphold the highest levels of ethical standards. If we don't exercise sound ethics in procuring goods and services to support our national security, we would not have, nor deserve, the respect of our citizens."
- "You should be honest, fair and impartial in your dealings with suppliers to promote mutual success and prolonged business relationships."

Similarly, when asked, all four participants affirmed that a buyer's choice of tactics used in communicating with suppliers can be an ethical decision. Participants were then asked to consider the list of tactics found in Table 3.1, and state whether the tactic is bad, somewhat bad, or whether it depends on the situation. Additionally, participants were later asked whether each tactic is considered an ethical issue. Finally, they were

asked whether they believed that anyone will engage in the tactics if the stakes are sufficiently high. Table 3.1 displays the results. A noticeable difference emerged between participant numbers one and four versus participants two and three, with participants one and four clustering closer toward virtuosity. These two seemingly different camps of participants each included a government and a for-profit business sector, and they included disparate levels of experience and different genders suggesting that other factors may better account for the differences in attitudes.

Situational factors such as subjective expected utility (SEU) emerged from two participants' statements: "I believe all of the examples of ethical issues you've listed can be considered questionable. The extent of their impact would mainly be determined by the circumstances of their use," and "Each [tactic] is open for interpretation based on the situation. The [tactics]…could vary from ethical to gray to unethical depending on the situation." Furthermore, one participant emphasized an aspect of SEU - magnitude of the consequences to others - when questioned about what factors he considers when making an ethical decision. He also stated that he would consider his individual key values suggesting that, in addition to SEU, individual-difference variables (personality characteristics) might account for variance in the decision to behave opportunistically. Another participant added that he would consider organizational policy and how the decision might be viewed by management and the legal department. Finally, one participant proclaimed the "golden rule" as the sole consideration when facing an ethical decision - do unto others as you would have them do unto you.

TABLE 3.1

Participants' Attitudes Towards Opportunistic Tactics

Tactic	Participant Number (1-4)				
	Very Bad	Somewhat Bad	Whether Bad Depends	Ethical Issue	If Stakes High, Anyone Will:
Lying	1,2,3,4			1,2,3,4	2,3
Stealing	1,2,3,4			1,2,3,4	2,3
Cheating	1,2,3,4			1,2,3,4	2,3
Breach of contract	1,4		2,3	1,2,3,4	2,3
Dishonesty	1,3,4	2		*	*
Distorting data	1,2	3,4		*	*
Obfuscating issues	1	2,3,4		*	*
Confusing transactions	1,2	3,4		*	*
False threats	1,2,4		3	1,4M	1,2,3,4
False promises	1,3,4	2		*	*
Cutting corners	1	2,3,4		*	*
Cover ups	1,2,3,4			1,2,3,4	2,3
Disguising attributes or preferences	1,3	2,4		*	*
Withholding information	2		1,3,4	1M,2,3M, 4M	1,2,3
Deception	1,2,3,4			1,2,3,4	2,3
Misrepresentation	1,2,3,4			*	*
Using a situation to further own interest at supplier's expense	1,4	3	2	*	*
Exaggerating damage caused by the supplier	1,2,4	3		*	*
Not willing to adapt contract to changes	4		1,2,3	*	*
Not sharing information with suppliers	2		1,3	*	*
Altering the facts slightly in order to get what you need	1,3,4	2		1,3,4	2,3
Shirk contractual obligation	1,2,3,4			1,2,3,4	2,3
Neglect responsibilities when supplier is not likely to notice	1,2,3,4			*	*
Violate an unwritten understanding with a supplier	*	*	*	1,2,3,4	2,3

*Information Not Solicited
M = Maybe

A final round of questions asked participants whether they believed that the constructs hypothesized in Chapter II might influence an individual to use opportunistic tactics listed in Table 3.1. Table 3.2 summarizes the results. Overall, there is some support that each construct may be involved in decisions to behave opportunistically. Two inquires regarding individual-difference variables, in general, and Machiavellianism, specifically, were unanimously supported.

TABLE 3.2

Participant's Beliefs About Hypothesized Factors

Construct	Tally of Participants	
	Will Influence Decision To Use Tactic	Will Not Influence Decision To Use Tactic
SEU	II	II
Pressure To Perform	I	III
Leadership Opportunism	I	III
Corporate Ethical Values	I	III
Individual-Difference Variables	IIII	
Machiavellianism	IIII	

In summary, a sufficient amount of dissonance emerged across interviews - in some cases confirming and in others, refuting hypotheses. However, any refutations were not unanimous. These results warranted further investigation as to the source of variance. Notwithstanding, within single interviews, some inconsistencies emerged. For instance, the same individual that reported: "You should be honest, fair and impartial in your dealings with suppliers…" also stated in a follow-up conversation that: "A good buyer is a good liar." Another participant stated: "I believe in doing what's right and legal regardless of the professional or personal outcome," but in the very next question, agreed that the magnitude of the payoff (benefit) of using the tactics in Table

3.1 might influence the decision to use those tactics. These contradictions suggested the presence of socially-desirable responding. This situation poses a threat to validity that will be addressed later in this chapter.

Quantitative

An experimental design best establishes causality due to its assurance of the following principles: (1) temporal precedence, (2) a relationship between the cause and the effect, (3) the elimination of alternative plausible explanations, and (4) that the cause should never occur without the presence of the effect (Cook and Campbell 1979). However, laboratory experimental conditions involving relationships among firms or government agencies are not plausible. An alternative approach employs vignettes to represent reality. However, this design would be confounded in a model exploring 11 independent variables. A completely randomized factorial design of 11 independent variables with at least two levels each (e.g., high and low) would require at least: 2^{11} = 2,048 treatment combinations. Such a design would be untenable in terms of managing the experiment and the required sample size per treatment group.

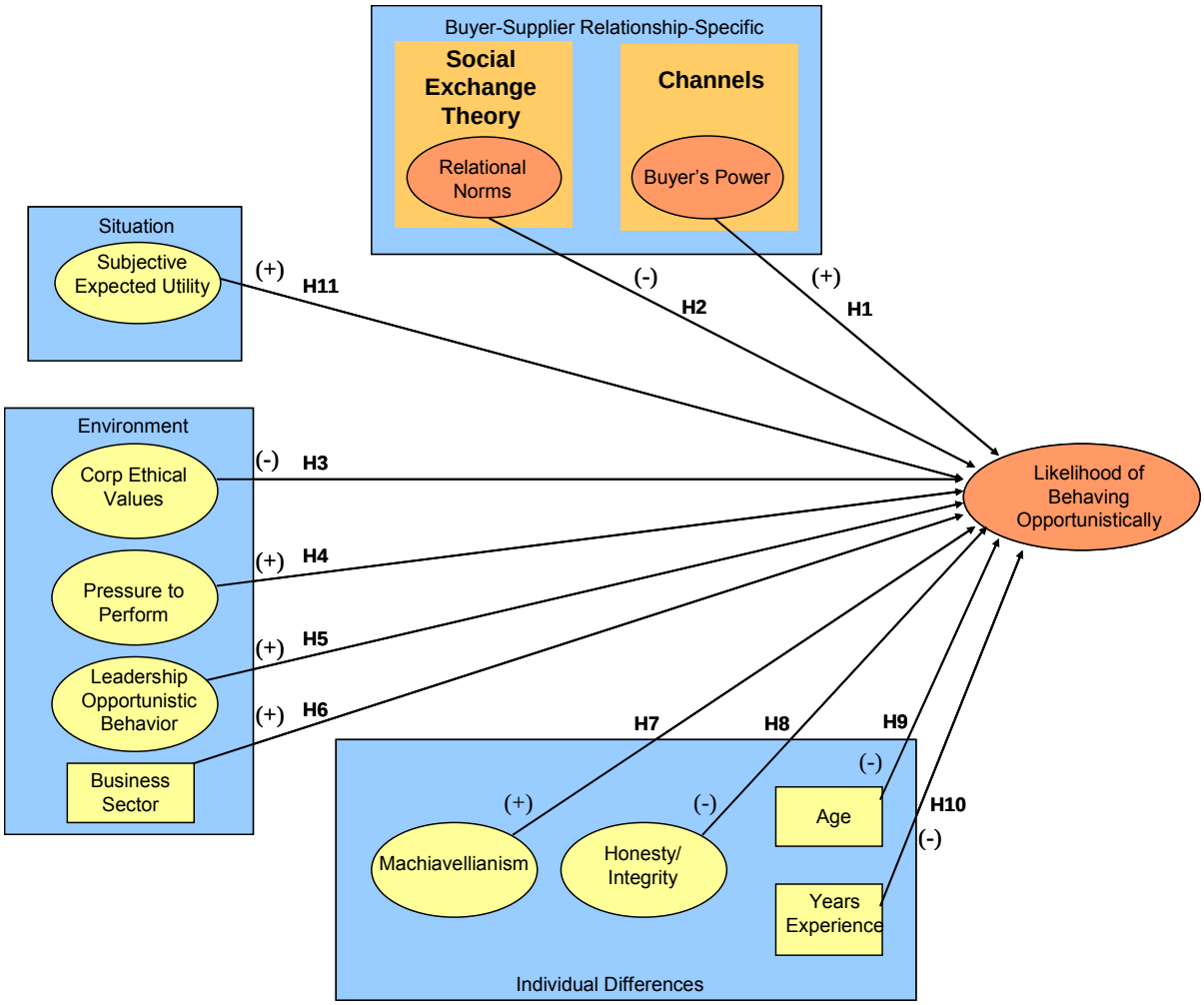
Rather than an experiment, this research employed a multivariate statistical model using cross-sectional survey data in order to test the hypotheses developed in Chapter II. The hypotheses were tested using two logistic regression models, one for each of two hypothetical vignettes. Logistic regression is the multivariate procedure of choice where the dependent variable is categorical and involves only two groups (Hair et al. 1998). Logistic regression can accommodate non-metric and metric independent variables - both of which are characteristic of the research at hand. One vignette will

represent strong-form opportunism and the other will represent weak-form opportunism. To measure the dependent variable, each vignette posed a question to the respondent whose response was a probability (on a scale of one to eight) that he or she would engage in the opportunistic behavior. As in Glover et al. (1997), the probability scale was converted to a binary variable via median split. This research design permits a multi-variate analysis of indicators of a sourcing professional's likelihood of behaving opportunistically.

The use of hypothetical, realistic vignettes in ethics research is not only commonplace (Hunt and Vitell 1986; Ameen et al. 1996; Street and Street 2006; Beu et al. 2003; Glover et al. 1997), but is urged (Hunt and Vitell 1993). Additionally, the use of scenarios in combination with logit models is routine. Due to the non-linear nature of the dependent variable, this study is well-suited for analysis using a logistic regression model. Reference Figure 3.1 for a graphical representation of the logistic regression model.

FIGURE 3.1

Logistic Regression Model of Factors Affecting A Sourcing Professional's Decision To Behave Opportunistically



Sample

The targeted population included purchasing practitioners from private and public sectors, with the individual buyer as the unit of analysis. Chapter I explained how sourcing professionals are optimally suited for research on opportunism due to the criticality of procurement to firm performance, and their key boundary-spanning role. Respondents were accessed by lists of sourcing professionals provided by the Institute

for Supply Management (ISM) and the National Contract Management Association (NCMA), and by directly contacting sourcing executives in Fortune 500 firms and in government buying agencies.

Questionnaire Design and Construct Measurement

Approximately 90% of empirical studies of business ethics published in academic journals rely upon self-report data (Randall and Gibson 1990). This research design followed suit, utilizing cross-sectional survey data. The research design utilized, therefore, was consistent with accepted practice in the discipline.

Latent constructs measured with the survey instrument included: relational norms, buyer power, corporate ethical values, pressure to perform, leadership opportunistic behavior, honesty/integrity, Machiavellianism, and subjective expected utility. Additionally, the survey captured other key variables such as business sector, age, and experience. Notwithstanding, several demographics were collected. Each latent construct was assessed using multiple items (questions) in order to maximize the reliability of variable human inputs (Churchill 1979). These items originated from existing scales that have been successfully employed in previous research. In order to ensure content validity, the survey items were reviewed by industry experts and academicians to ensure that they capture the universe of the meaning of the phenomenon (Kerlinger and Lee 2000). Each survey item pertaining to a latent construct was assessed on a seven-point Likert-type scale. The survey instrument is displayed in Appendix D.

In the following section, the measures for each latent construct are presented. Each will be described to include the rationale for its use and previous research utilizing the measure. Reliability of each construct will be reported from studies using the construct.

Decision to Behave Opportunistically

The dependent variable, *Decision To Behave Opportunistically,* is measured using a single item asking the respondent, given a vignette and a chosen buyer-supplier relationship, to indicate the probability that they would behave opportunistically. This *"embedded vignette approach"* was employed by embedding a hypothetical situation into the context of a real buyer-supplier relationship of the respondent's choosing. The benefit of "embedding" the vignette into an existing buyer-supplier relationship is the ability to: (1) simplify the research design, and (2) reduce the length of the vignette and the survey. The research design was simplified because the different levels of the relationship-specific independent variables (relational norms and buyer power) did not have to be manipulated experimentally. Rather, the researcher relied on the natural and realistic variability inherent in existing buyer-supplier relationships. Rather than having multiple vignettes with different combinations of treatment levels of relational norms and buyer power, information regarding those constructs need not be provided in the vignette if embedded naturally. Therefore, the length of the vignettes was abridged. A shorter survey helps maximize the response rate (Dillman 2000).

Many studies in ethics research (Ameen et al. 1996; Street and Street 2006; Beu et al. 2003; Glover et al. 1997) utilize hypothetical, realistic vignettes in order to facilitate

decisions by the respondent. Those decisions are commonly used as the dependent variable in a model whose results are intended to explain the decision. As used in this study, the dependent variable is a response to a question of whether or not the respondent's closest coworker in purchasing would likely choose to behave opportunistically. The response represented a dichotomous choice; either the respondent was likely to choose the act that is considered opportunistic or not.

Recall that the second objective of the qualitative interviews was to critique a set of three draft vignettes, two of which would be used in the survey. The final two vignettes are found in Appendix C. The eliminated vignette follows.

> Your organization has recently experienced a cash-flow crisis, and therefore, cash flow has become an important emphasis by senior leadership in all functional areas. Each employee is expected to help improve the cash-flow crisis. You could help by altering the payment terms in the contract with Supplier X. Currently, the contract states that payment terms are net 30 days, but you consider contacting Accounts Payable (or Finance) and advising them not to pay invoices until at least 60 days from receipt of the invoice. Your annual spend with Supplier X is substantial. Over the course of a year, your firm's delayed payments to Supplier X will likely cost them $300,000 in borrowing costs and lost short-term investment opportunities.

While the situation presented in this vignette is common in for-profit business practice, one of the government interview participants pointed out that it would be uncommon in government contracting. Thus, the vignette was removed from further consideration. The remaining vignettes were reviewed by the four interview participants. All four concluded that the two remaining vignettes were easy to read and understand. Three of the four participants stated that the vignettes did not take too much time to read. These essential characteristics helped ensure: (1) reliability of survey respondent inputs and (2) little impact to the response rate due to excessive survey length.

Buyer-Supplier Relationship Factors

Buyer Power

Power is defined as the ability to cause someone to do something that he or she would not have done otherwise (Gaski 1984). Buyer power was measured using the operationalization of Bunn (1993), and is presented in Table 3.3. Scale items capture the salient indicants of power such as negotiating strength, competition, and sacrifice. Many other measures of power have been used in research; however, these typically drill down to the distinct types of power. For example, French and Raven (1959) differentiated power as coercive, referent, expert, legitimate, or reward. A later distinction made by Hunt and Nevin (1974), classified power as either coercive or non-coercive. However, power, as measured in previous research pertaining to inter-firm relationships and opportunism, was conceptualized using a general measure of power. This general measure of power attempted to measure an organization's amount of leverage over the other party. This measure most appropriately captures the domain of power as intended by Gaski's (1984) definition above. Previous research demonstrated the measure's construct validity and reliability, as reported in Table 3.3.

TABLE 3.3

Buyer Power Measure

Items	Source
1. We had much bargaining power in this purchase situation.	Bunn (1993); Alpha=0.81
2. The suppliers were really competing to make this sale to us.	
3. The vendor we chose gave us a better deal than most of their other customers.	
4. The supplier was really motivated in making this sale to us.	
5. In terms of our negotiating strength, we didn't have much "clout." (R)	

(R) Reverse coded.

Relational Norms

Relational norms are shared expectations about behavior that govern future behavior among firms (Heide and John, 1992). There are many types of relational norms, and researchers have selectively employed various types in their research designs. These multi-dimensional norms are typically operationalized as *solidarity, mutuality*, *flexibility*, *role integrity,* and *harmonization of conflict* (Gundlach et al. 1995). Several researchers (Gundlach et al. 1995; Gundlach 1999) have reliably combined a variety of norms into a single construct. This scale (Table 3.4) was selected for use due to its reliability demonstrated in previous studies, and due to its ability to capture a variety of norms (flexibility, role integrity, harmonization of conflict, mutuality and solidarity).

TABLE 3.4

Relational Norms Measure

	Items	Source
1.	Staying together in the face of adversity/challenge is very important to both firms.	Gundlach et al. (1995), Alpha = 0.90 - 0.94
2.	Relationship is based on mutual benefit and trust.	
3.	Relationship is flexible in accommodating one another if special problems/needs arise.	
4.	Relationship extends across many complex responsibilities and multiple tasks.	
5.	When disagreements arise in the relationship, all facts are reassessed to try to reach a mutually satisfactory compromise.	

Environmental Factors

Corporate Ethical Values

Corporate ethical values (CEV) represent the amount of attention afforded to

ethical issues by the firm, and the degree to which the firm behaves ethically (Hunt et al. 1989). Whereas other scales have been developed to measure similar constructs such as organizational culture (Deshpande et al. 1993) and organizational climate (Victor and Cullen 1987), only one study (Hunt et al. 1989) has developed a scale to specifically measure corporate ethical values. CEV, as measured by Hunt et al. (1989), assesses three aspects of corporate ethics: 1) the (un)ethical behavior of managers, 2) the degree of management's concern about ethical issues in the firm, and 3) whether (un)ethical behavior will be (punished) rewarded (Hunt et al. 1989). Scale items used by Hunt et al. (1989) are shown in Table 3.5. Hunt et al. (1989) achieved a sufficient level of reliability in their sample (Cronbach's alpha 0.78).

TABLE 3.5

Corporate Ethical Values Measure

	Items	Source
1.	Managers in my company often engage in behaviors that I consider to be unethical. (R)	Hunt et al. (1989); Alpha=0.78
2.	In order to succeed in my company, it is often necessary to compromise one's ethics. (R)	
3.	Top management in my company has let it be known in no uncertain terms that unethical behaviors will not be tolerated.	
4.	If a manager in my company is discovered to have engaged in unethical behavior that results primarily in personal gain (rather than corporate gain), he or she will be promptly reprimanded.	
5.	If a manager in my company is discovered to have engaged in unethical behavior that results primarily in corporate gain (rather than personal gain), he or she will be promptly reprimanded.	

(R) Reverse coded

Pressure to Perform

Pressure to perform represents internal and external motivators to achieve challenging performance results. The challenge is derived from a situation that

demands more resources than the individual employee perceives as being available. The concept is similar to job stress, but is distinct from physical ailments such as burnout or other measures more closely associated with traumatic incidents. Rather, pressure to perform represents a work environment where negative consequences result from a failure to meet the employers' expectations. The construct attempts to capture the employee's perspective that the pursuit of the employers' expectations is perpetual. Robertson and Rymon (2001) measured pressure to perform using the first three items appearing in Table 3.6. Two additional items were added to the scale in an effort to enhance its reliability.

TABLE 3.6

Pressure to Perform Measure

Items	Sources
1. My firm has made it clear that I am expendable if I don't deliver.	Robertson and Rymon (2001); Alpha=0.79
2. My compensation is directly tied to my performance.	
3. I won't last long in my job if I don't perform.	
4. In my job, I feel stressed by the requirement to deliver results.	New Item
5. My job is very demanding.	New Item

Leadership Opportunistic Behavior

Leadership opportunistic behavior represents perceptions by employees of their leaders' propensity to behave opportunistically. Indicators of the leaders' propensity to behave opportunistically include: observing the leaders' committed acts of opportunism toward suppliers, the leaders' direction to subordinates to treat a supplier opportunistically, or a leader's expressed advice of what he or she would do if placed in a similar situation. The scale used to assess leadership opportunistic behavior (Table

3.7) is modified from two common scales used to assess opportunism (Ping 1993; Joshi and Stump 1999). The alteration to the scale is subtle; rather than assessing the individual's own opportunism, the same questions are asked about the leader.

TABLE 3.7

Leadership Opportunistic Behavior Measure

Items	Sources
1. My leaders use situations to further their own interests at the expense of a supplier using whatever means.	Adopted from Joshi and Stump (1999); Alpha=0.73
2. My leaders exaggerate the extent of the damage caused to us by the supplier in order to extract concessions from them.	
3. My leaders are not willing to make adjustments to a contract with a supplier in order to cope with a temporary crisis.	
4. My leaders do not volunteer much information regarding their business to their primary suppliers.	Adapted from Ping (1993); Alpha=0.86
5. Sometimes, my leaders alter the facts slightly in order to get what they need from their primary suppliers.	

Individual-Difference Factors

Honesty/Integrity

Honesty/integrity is an individual's belief about the way he or she ought to tell the truth and do what he or she thinks is right (Ravlin and Meglino 1987). Vitell et al. (1993) developed a scale of marketing norms using the code of ethics from the American Marketing Association. They demonstrated convergent and discriminant validity by comparing scores to a criterion measure - the Ethics Position Questionnaire (EPQ). The EPQ measures an individual's moral philosophy on two dimensions: idealism and relativism. These dimensions correspond directly with deontology and teleology discussed in Chapter II. Idealists hold to absolute moral standards, whereas relativists contend that any ethical judgment depends on the situation. In Vitell et al.'s (1993)

research, convergent validity was demonstrated since the marketing norms correlated high and significantly with the ideological dimension of the EPQ. Similarly, the marketing norms scale demonstrated discriminant validity by correlating weakly and negatively with the relativism dimension. Confirmatory factor analysis yielded a respectable model fit that explained 54.2% of the variance. For this reason, the measurement scale used by Vitell et al. (1993) was also used in this research to assess honesty/integrity (Table 3.8).

TABLE 3.8

Honesty/Integrity Measure

Items	Sources
1. One should always adhere to all applicable laws and regulations.	Vitell et al. (1993); Alpha=0.67
2. One should always accurately represent one's education, training, and experience.	
3. One must always be honest in serving consumers, clients, employees, suppliers, distributors, and the public.	
4. One should not knowingly participate in a conflict of interest without prior notice to all parties involved.	
5. When dealing with suppliers, complete honesty is always the best policy.	New Item

Machavellianism

An individual possessing a Machiavellianism personality is one who condones amoral means of manipulating others in order to achieve a desired end (Hunt and Chonko 1984). These individuals will use tactics such as manipulation, persuasion, and deceit. The MACH IV scale (Christie and Geis 1970), originating from Machiavelli's *The Prince* and *The Discourses* (Robinson et al. 1991), assesses these tendencies in three "substantive areas: (1) the nature of interpersonal tactics, (2) views of human nature, and (3) abstract or generalized morality" (Robinson et al. 1991, p. 376). The Mach IV

scale is composed of 20 items. Razzaque and Hwee (2002) measured Machiavellianism using a subset of the original 20 items. The scale was reported to be sufficiently reliable with a Cronbach's Alpha between 0.66 and 0.88. Additionally, factor analysis provided evidence of construct, convergent, and discriminant validity. Thus, the study at hand employed an abridged version of the MACH IV scale as shown in Table 3.9.

TABLE 3.9

Machiavellianism Measure

Items	Source
1. The best way to handle people is to tell them what they want to hear.	MACH IV Christie and Geis (1970); Alpha=0.79
2. Most people are basically good and kind. (R)	
3. It is safest to assume that all people have a vicious streak and it will come out when they are given a chance.	
4. Most people who get ahead in the world lead clean, moral lives. (R)	
5. Anyone who completely trusts anyone else is asking for trouble.	
6. It is hard to get ahead without hurting someone here and there.	

(R) Reverse coded.

Situation Factor

Subjective Expected Utility (SEU)

SEU is a product of the desirability of a consequence and the probability of its occurrence (Kamat and Kanekar 2001; Nettles and Bayton 2001). In this study, SEU was operationalized consistent with Nettles and Bayton (2001). This method has proven to be valid in conjunction with written vignettes (Nettles and Bayton 2001), and is effective in predicting dichotomous choices (Jacoby 1975). Addressing the validity of the SEU model, researchers (Bonoma and Johnston 1979, p. 188) concluded that: "subjects not previously trained in, or exposed to, decision theory do feel comfortable

thinking in probability and worth terms, and…are able, with only minimal and nonmathematical instruction, to make intuitive decisions that conform to the requirements of SEU-like models."

In operationalizing SEU, the qualitative interviews were used to identify a list of the most-likely positive and negative consequences resulting from a decision to behave opportunistically in each vignette. An example of the consequences for the vignette involving weak-form opportunism is exhibited in Table 3.10. For each consequence listed on the survey, the respondent rated the desirability of that consequence on a scale of -5 to +5 (later converted to a scale of 1 to 11). Next, the respondent rated the probability that the consequence will occur on a scale of 10% to 100%, in increments of 10%. The SEU was calculated as the product of the two aforementioned inputs. If the desirability of the consequence was less than zero (undesirable), the probability (P) of the consequence was adjusted by the formula 1-P (Nettles and Bayton 2001). This adjustment prevented the inflation of the expected utility where undesirable consequence were probable. The SEUs for all of the consequences of that vignette were averaged to arrive at a single overall SEU score for that vignette and that respondent. This single-indicator, continuous variable was input into the multivariate models to represent SEU. Table 3.10 shows how SEU was calculated for a notional response to the weak-form opportunism vignette. The SEU score for the strong-form opportunism vignette was calculated the same way, but the list of consequences differed. Reference the questionnaire (Appendix G) for the vignettes and their associated consequences.

TABLE 3.10

Subjective Expected Utility Measure

Consequences	Desirability of Consequence (U)[a]	Probability of Consequence (P)[b]	SEU = (P)(U)
- Decrease in supplier's performance (because your business is less profitable)	Rating = -3 (Converted = 3)	70% (Adjusted = 30%)	0.9
- Positive recognition from your supervisor for avoiding costs	Rating = 2 (Converted = 8)	40%	3.2
- Easier negotiation (can ignore analysis of overhead pool)	Rating = 1 (Converted = 7)	60%	4.2
- Decreased trust from your supplier	Rating = -1 (Converted = 5)	80% (Adjusted = 20%)	1.0
- Cost avoidance to your organization -- maintain a low unit cost of widgets	Rating = 5 (Converted = 11)	100%	11
SEU Score = $\frac{\sum SEU}{5}$			4.06

[a]Measured on a scale from -5 to 5 (Converted to a scale from 0 to 11)
[b]Measured on a scale of 10% to 100%

Type of Opportunism

Hypothesis 12 stipulated that predictors of strong-form versus weak-form opportunism are different. In order to investigate this hypothesis, two separate vignettes were used. One vignette involved a strong-form of opportunism, whereas the other entailed a weak-form. A manipulation check was used to garner confidence that survey respondents would recognize the fundamental difference between the two vignettes - that one scenario represented a contract violation (strong-form opportunism), whereas the other did not (weak-form opportunism).

Manipulation Check

An online survey (Appendix C) was employed to present the two vignettes to

respondents and then asked them to list, in an open text field, what they believed to be the fundamental differences between the two scenarios. Sixty-two sourcing professionals working for government and for-profit organizations were targeted for participation. A convenience sample of 28 sourcing professionals responded (response rate 45%). Of the respondents, 79% correctly identified the fundamental difference that one vignette involved a contract violation, whereas the other 21% did not. Respondents identified this difference without any prompting from the researcher or survey instrument as to the type of difference solicited. This rate of acknowledgement of the difference between strong and weak-form opportunism represented in the two scenarios provides construct validity that the independent variable, type of opportunism, is indeed recognized by the respondents.

Pretest

In order to ensure that the constructs were valid in content and the survey items sufficiently clear, the survey instrument was reviewed by an industry expert, doctoral students, and academicians established in the content domain. The industry expert held a director-level position in the global procurement division of a Fortune 500 company. A convenience sample of eight doctoral students pursuing degrees at the University of North Texas (UNT) also reviewed the survey. Academicians included those from the College of Business at UNT. Notwithstanding, two leading scholars in the realm of marketing channels, outside of UNT, were consulted.

These experts from industry and academia were asked to review the survey instrument. As recommended by Dillman (2000), feedback was solicited regarding

whether the survey items: (1) captured the domain of the construct (content validity), (2) were unambiguous, (3) were simple to understand, and (4) were consistently interpretable. The experts were asked whether the model was sufficiently comprehensive, that is, whether it included all of the relevant constructs. The survey was modified to reflect improvements recommended by the experts.

Pilot Test

In an effort to ensure construct reliability and validity, the survey instrument was pilot tested using a convenience sample of sourcing professionals from for-profit firms and government agencies. The nine organizations, both for-profit and government, varied widely in terms of their mission, industry, number of employees, revenues/budget, and locations throughout the United States. The populations included 221 buyers, from which 56 responded (response rate 25%). Survey recipients from three of the nine participating organizations were contacted directly by the researcher. The other six organizations used internal sponsors as intermediaries to communicate with survey recipients. These intermediaries reported to the researcher the total number of survey recipients. Contingent on the accuracy of the intermediaries' reports, there is some uncertainty that the population of 221 buyers is accurate. Hence, the actual response rate may deviate slightly from the reported 25%. Data from the pilot test was used to assess construct reliability and validity, and to improve measures (Churchill 1979) prior to full-scale survey deployment.

There were seven data elements missing from the entire sample. Values were imputed via mean substitution because the omitted data was determined to be missing

completely at random (Hair et al. 2006).

Measure Assessment

Reliability

Internal consistency reliability for each latent construct was assessed using Cronbach's alpha. Table 3.11 displays the results of the cleansed constructs. Due to a lack of validity of the five-item pressure to perform construct, the scale was reduced to two items. "Cronbach's alpha is a meaningless calculation with a two-item scale" (Mentzer et al. 1999, p. 17); thus, it was not reported. Another construct, Machiavellianism, had a low coefficient alpha (.629). All remaining constructs showed adequate reliabilities greater than 0.7 (Hair et al. 2006).

Validity

To help assess construct validity, single-factor structures were analyzed using exploratory factor analysis (EFA). First, in order to justify the use of factor analysis, each construct was examined to ensure that sufficient correlations existed among the items. For all seven latent constructs, the Bartlett test of sphericity was significant indicating a sufficient amount of correlations among the items. However, one of the seven latent constructs, pressure to perform, had measures of sampling adequacy (MSA) less than the acceptable threshold of 0.5. The MSA for this construct (0.48) indicated too few correlations existed.

Each construct was analyzed via principle-components factor analysis using a Varimax rotation. The criteria for the number of factors to extract was determined by

those having Eigenvalues greater than one. Subsequent factor analysis of the pressure to perform construct revealed that its five items loaded on three factors. Due to its lack of construct validity, three of the five items were replaced in the survey prior to full-scale survey deployment. Table 3.12 displays the dropped and replacement items. From a list of ten possible replacement items, three were selected following a review of all ten items by four academicians and four doctoral students. Reviews encompassed clarity and content validity similar to the pretest process. Of the remaining constructs, buyer power, relational norms, leadership opportunism, and honesty/integrity each demonstrated single-factor structures with adequate reliability. However, two constructs, corporate ethical values (CEV) and Machiavellianism, loaded on more than one factor. After dropping problematic items from the analysis, single factor structures revealed sufficiently-valid, three-item constructs.

TABLE 3.11

Measurement Results - Pilot

Construct	Scale Items	Factor Loadings	Item-total correlations	% Variance Explained	Reliability
Buyer Power	BP3	.800	.631	54.18	.780
	BP4	.768	.581		
	BP2	.748	.579		
	BP1	.726	.552		
	BP5	.626	.457		
Relational Norms	RN1	.892	.815	68.11	.880
	RN2	.882	.800		
	RN3	.839	.726		
	RN5	.811	.691		
	RN4	.686	.548		
Corporate Ethical Values	CEV5	.901	.743	70.88	.789
	CEV4	.841	.632		
	CEV3	.780	.542		
Pressure To Perform	PP4	.858	.471	73.54	N/A
	PP5	.858	.471		

(*table continues)*

TABLE 3.11 (*continued*)

Construct	Scale Items	Factor Loadings	Item-total correlations	% Variance Explained	Reliability
Leadership Opportunism	L1	.872	.771	61.22	.839
	L5	.840	.717		
	L4	.776	.631		
	L2	.763	.621		
	L3	.640	.483		
Machiavellianism	M1	.792	.485	58.21	.629
	M6	.779	.457		
	M3	.716	.398		
Honesty/Integrity	H4	.913	.802	60.72	.791
	H2	.896	.763		
	H3	.789	.601		
	H5	.649	.456		
	H1	.596	.430		

TABLE 3.12

Pressure to Perform Scale – Item Replacements

Pilot Survey Item	Replacement Item
PP1 My firm has made it clear that I am expendable if I don't deliver.	PP6 The possibility of failing to achieve targeted results at work is worrisome.
PP2 My compensation is directly tied to my performance.	PP7 If I don't achieve targeted results people (e.g., co-workers, supervisors, employer) will notice.
PP3 I won't last long in my job if I don't perform.	PP8 If feel pressure to perform well in my job.

Full-Scale Survey Deployment

Data Collection

An online survey (Appendix G) was used to collect the data. Web-based surveys yield slightly higher response rates than do mail surveys and the data exhibits no characteristic differences than that of mail surveys (Griffis et al. 2003). The survey included approximately 85 questions (items) that measured each construct and variable in the model. Additionally, various demographics were collected in order to facilitate an assessment of generalizability (Tables 3.13 - 3.19). An email invitation (Appendix E) was sent to respondents informing them of the purpose and importance of the research. This invitation included an embedded link to the Internet universal resource locator (URL) to facilitate convenient access to the survey. Brief instructions were provided at the beginning of the survey, and were dispersed throughout the survey as appropriate. One follow-up message (Appendix F) served as a reminder to prospective respondents.

In order to maximize the response rate, survey deployment and data collection utilized Dillman's (2000) tailored design method for Internet surveys. Fundamentally,

Dillman's method entails establishing trust with the respondent, increasing the rewards for completing the survey, and mitigating the costs of completing the survey. To establish trust in the current design, sponsorship by a legitimate authority (Dillman 2000) will be used. The NCMA and purchasing executives in industry helped disseminate the survey instrument to the target population. This provided a veil of sponsorship and encouraged respondents to participate. Additionally, the message in the invitation to the survey emphasized the importance of the study (Dillman 2000). Finally, the invitation identified that the research is for the purpose of a doctoral degree, and that UNT's Institutional Review Board will maintain oversight of the research. Together, these measures encircled the research with an aura of trust.

In order to provide rewards, the researcher showed positive regard to the respondent (Dillman 2000). This was accomplished in the email invitation. Therein, respondents were referred to as valued experts whose input is critical to the research. Respondents perceived that the researcher was seeking their advice (Dillman 2000). Notwithstanding, the invitation and the survey thanked the respondents for their consideration and time. Additionally, the invitation showed a support of group values (Dillman 2000). The researcher was identified as a cohort in procurement, one who has procurement experience, and who holds the premier professional certifications in the field. The use of vignettes made the survey interesting (Dillman 2000), which stimulated additional involvement. Finally, the respondents were offered a report of the results of the research.

In order to reduce the perceived costs of completing the survey, the researcher avoided subordinating language, embarrassment, and inconvenience (Dillman 2000).

Additionally, the survey was relatively short and easy (Dillman 2000). The respondent did not have to spend time seeking any information; the respondent could complete the survey armed only with his or her experience, beliefs, and attitudes. Additionally, with the exception of a few demographic questions such as gender, personal information was not requested (Dillman 2000). Finally, the emailed survey invitation offered the respondent the option of receiving a hard copy survey with prepaid return postage.

Sample Characteristics

In order to ensure that the data represented the target population of government and for-profit sourcing professionals with the greatest representation, sampling occurred via two methods, random sampling and convenience sampling. An analysis of the statistical power to detect small effect sizes, given the size and composition of the logistic regression model, a power of 0.80, and a significance level of 0.05, required a sample of approximately 270 respondents. To achieve the required sample size of government and for-profit buyers, the survey was presented to a total of 3,215 sourcing professionals in four populations.

First, 1,496 members were randomly sampled from a membership lists from the ISM. Of these members, five were deemed ineligible and 208 were never contacted due to inaccurate email addresses. Additionally, one respondent forwarded the survey invitation to 13 people. 104 responses resulted from this sub-population for a response rate of 8.0%.

Second, 1,800 members were randomly sampled from the members of the NCMA. Of those contacted, three were deemed ineligible and 270 were not reached

due to inaccurate email addresses. The survey was forwarded to another three people by one of the respondents. This sub-population resulted in 139 responses for a response rate of 9.1%.

Third, the participants in the pilot study were included in the data set. This convenience sample of 56 respondents out of a sub-population of 221 resulted in a response rate of 25%.

Finally, another convenience sample of sourcing professionals from Fortune 500 firms was included. 213 chief procurement officers (CPO) were contacted to help distribute the survey invitation within their companies (Appendix D). Of these, 18 agreed to participate, yielding a *company* response rate of 8.5%. These 18 CPOs forwarded the survey invitation to 168 sourcing professionals within their respective companies. From this sub-population, 55 responses were obtained yielding a response rate of 32.7%.

Combining Samples

Responses from the four populations were collected in four separate databases to facilitate the detection of any differences between the four samples. Testing the homogeneity of the samples was required because it was desired to combine the four samples for the purpose of hypothesis testing. A multivariate analysis of variance (MANOVA) test was run on eight factors - all seven latent constructs and *experience*. The results showed no differences on five of the constructs/variables, but did show differences between the four samples on buyer power, CEV, and pressure to perform at

the .05 level of significance. Additionally, chi-square tests showed differences in gender and business sector.

However, many of these differences were expected because two of the samples differed in their composition. The NCMA list sample consisted of 68.4% government buyers, whereas the ISM list sample, the Fortune 500 sample, and the pilot study sample contained 8.6%, 0%, and 25.8% government buyers, respectively. A MANOVA test exploring differences between business sectors on the same eight factors confirmed that the source of variance was likely due to the business sector rather than the constructs/variables in the populations that would impact the hypotheses. Differences between business sectors were found in CEV and gender.

The remaining unexplained differences on two constructs (buyer power and pressure to perform) between the four samples were examined to ensure that their differences would have no affect on a multivariate model if the four samples were combined. An examination of the descriptive statistics showed that the mean *pressure to perform* score for the pilot study sample was less than half the mean of the other three samples. However, the pilot study sample included only eight organizations and a small fraction of the total data collected.

The only remaining difference between the four samples concerned *buyer power*. To confirm that the combination of the four samples would have no impact on the multivariate hypothesis tests, the same MANOVA test was re-run, but this time, using the polar extremes approach (Hair et al. 2006) to the dependent variables for each of the two vignettes. After removing cases that rated the likelihood of engaging in opportunistic behavior either a three, four, five, or six, the MANOVA test showed no

differences across the four samples on buyer power. This *polar extremes* approach is further explained later in this chapter where it is employed in hypothesis testing.

To further examine the validity of combining the four samples, interaction terms were created to determine whether the sample moderated the relationships between the hypothesized predictors and the dependent variable, likelihood of behaving opportunistically. Three categorical variables were created to represent the four samples. Five latent constructs (buyer power, relational norms, pressure to perform, CEV, and honesty) were tested for interactions in both the weak-form and strong-form opportunism models. For each respondent, the summated value of each construct was multiplied by the three categorical variables (sample), resulting in the testing of 15 interaction terms (sample1*buyer power, sample2*buyer power, sample3*buyer power, sample1*relational norms, sample2*relational norms, sample3*relational norms,… and sample1*honesty, sample2*honesty, sample3*honesty). Since these interaction terms were explored in separate models for weak-form and strong-form opportunism, 30 interactions were examined. When included in the logistic regression models, none of the interaction terms were significant in the strong-form opportunism model. In the weak-form opportunism model, only one sample (NCMA list) was significant in only one of the constructs (CEV). Because only one interaction out of 30 was significant, it is reasonable to conclude that the sample does not moderate the relationships between the hypothesized predictors and the dependent variable.

Given the analyses above, evidence suggested that no differences existed across the four populations that would invalidate hypothesis testing on a combined sample. Therefore, the samples were combined. Across the four sampling

methodologies, the total population included 3,215 sourcing professionals, of which 367 responses were received. This resulted in a combined response rate of 11.4%. Response rates by sample are displayed in Table 3.13. Tables 3.14 through 3.20 provide demographic data regarding the combined sample.

TABLE 3.13
Response Rate by Sample and Population

Sample	Population	Response Rate
Random	ISM List	8%
Random	NCMA List	9.1%
Convenience	Pilot Study	25%
Convenience	Fortune 500	32.7%

TABLE 3.14
Professional Certification

Type	Frequency
C.P.M. or CPCM	91
Other	14
None	223

TABLE 3.15
Age

Group	Frequency
18 - 24	1
25 - 34	42
35 - 44	94
45 - 54	135
55 - 64	53
65 or older	3

TABLE 3.16

Procurement Experience

Years	Frequency
0 - 9	98
10 - 19	96
20 - 29	102
30 - 39	31
40 - 49	1

TABLE 3.17

Gender

Type	Frequency	Percentage
Male	215	65.6
Female	113	34.4

TABLE 3.18

Type of Organization

Sector	Frequency
Private Sector	185
Federal Government - Defense	29
Federal Government - Non-Defense	74
State Government	11
Local Government	8
Not-For-Profit	6
Other	15

TABLE 3.19

Industry

Type	Frequency
Biotechnology/Biomedical	3
Computers/Information Technology	11
Construction	11
Consulting	4
Consumer Products/Retail/Wholesale	10
Education/Training	5
Energy	5
Entertainment	1
Finance/Banking	7
Food & Apparel	10
Government	96
Industrial Technology	6
Insurance	3
Manufacturing	56
Medical/Healthcare	7
Military	11
Non-Profit	3
Telecommunications	20
Transportation	8
Travel/Hospitality	4
Utilities	13
Other	34

TABLE 3.20

Annual Revenue

Annual Sales	Frequency	Percentage
Under $250,000	2	0.6
$250,000 to $999,999	5	1.5
$1 million to $2.4 million	3	0.9
$2.5 million to $4.9 million	5	1.5
$5 million to $9.9 million	9	2.7
$10 million to $19.9 million	9	2.7
$20 million to $29.9 million	5	1.5
$30 million to $49.9 million	8	8
$50 million - $99.9 million	15	4.5
$100 million or more	173	52.4
N/A - Government	94	28.5

Missing Data

Cases were examined for missing data. Twelve cases were deleted because the respondents failed to provide information for at least one entire construct. Of the 12, three failed to assess buyer power. All three of these respondents were government buyers. As indicated by one respondent in the comments field, the buyer may have only placed an order against the basic contract with the supplier. Hence, the ordering buyer was not necessarily involved in the selection of the supplier; thus, may not have been able to assess buyer power at the time of source selection. Seven of the 12 failed to assess SEU for either one or both scenarios. This may have been due to the length of the scenario. The 12 deleted cases were proportionately distributed across the four sampling methods/sub-populations.

In addition to the 12 cases deleted due to omitted constructs, the first 18 cases were deleted from the pilot study data. An error in the survey instrument - the scaling of SEU for the first vignette - resulted in distorted information. This survey error was corrected after the first 18 responses were received. Thus, a total of 30 cases were removed from the data set.

All other cases that sparsely omitted data (0.25% of total data fields) but were not deleted were grouped by construct (seven groups), then compared to groups that were not missing data on that construct (Hair et al. 2006). MANOVA test were run rather than a series of separate ANOVAs in order to prevent artificial inflation of the Type I error rate (Hair et al. 2006). Of the seven MANOVA tests (Appendix H), two, relational norms and honesty/integrity, showed significant differences between cases that were missing values and those that were complete. However, subsequent ANOVA tests revealed that relational norms differed in only one (CEV) of the seven measures. Subsequent ANOVA tests of honesty/integrity identified two differences (relational norms and pressure to perform) out of the seven measures. Overall, these three differences represent a minute portion of possible differences explored; therefore, these differences likely appeared by chance. Since there appeared to be no pattern of differences and the number of differences was minute, the data was determined to be missing completely at random (Hair et al. 2006). As such, missing data in these instances were imputed via mean substitution (Hair et al. 2006). When data was found missing in the SEU probability fields, a neutral probability (50%) was substituted. Similarly, when data was omitted from the SEU desirability fields, a neutral rating of

zero was inserted. In total, ten data elements were missing from each of the SEU ratings for the weak-form and strong-form opportunism vignettes.

Outliers

The data was examined for the presence of outliers in order to prevent unrepresentative data from distorting the analysis. Appendix J displays the results of a univariate analysis of standardized scores. As evidenced from the data, outliers were detected within the *pressure to perform*, *Machiavellianism*, and *honesty/integrity* constructs. However, no single case demonstrated a sufficient pattern of outliers to suggest that the data is not representative of the population (Hair et al. 2006). Therefore, no data was discarded due to outliers.

Normality

First, univariate normality was assessed by observing the constructs' distributions and normal probability plots. Next, tests for skewness and kurtosis (Appendix K) revealed that, except for honesty/integrity, all item z-scores for skewness were less than three and all z-scores for kurtosis were less than eight and, hence, were normally distributed (Kline 1997). The honesty/integrity construct was skewed with a strong negative distribution. This may be indicative of a social desirability bias. Though honesty/integrity failed the test, logistic regression is robust precluding the necessity for a transformation of the data.

Non-Response Bias

A major concern in cross-sectional survey research is response bias, particularly coverage bias, selection bias, non-response bias (Blair and Zinkhan 2006), and socially-desirable responding (SDR). Coverage bias occurs when, due to research methods, a particular group is excluded from the population (Blair and Zinkhan 2006). Hence, this excluded group has no chance of being considered in the sample. This research design mitigated the effects of coverage bias by sampling from four populations. Selection bias occurs when, again due to research methods, a particular group receives a greater chance of representation in the data (Blair and Zinkhan 2006). The research design, while mitigating coverage bias, may have introduced selection bias since one sample (ISM List) afforded respondents from large firms a higher chance of selection. Examination of the demographics in Table 3.20 confirmed a disproportionately-high representation of large businesses. Non-response bias occurs when a particular group(s) fails to respond to the survey. Non-response bias was evaluated by comparing responses from early and late respondents. The rationale for this approach is that late respondents sufficiently resemble non-respondents (Armstrong and Overton 1977). Chi-square tests (Appendix I) explored whether differences existed across key demographic data such as: buyer certification status, gender, business sector, and age. Multivariate analysis of variance (MANOVA) and Box's M tests explored any differences in metric measures (i.e., the constructs).

Because the research design utilized four samples, four separate sets of statistical tests (one for each sub-population) were used to test for non-response bias. Appendix I displays the results. The pilot study sample was the only sample that

showed a multivariate difference between early and late responders on any of the seven latent constructs. The difference appeared only in one (pressure to perform) of seven the constructs. A subsequent ANOVA confirmed the difference. This difference on pressure to perform between early and late responders did not exist in the other three samples. In the pilot study sample, late responders showed greater pressure to perform than did early responders. Additionally, a chi-square test showed differences from expected values for *business sector* ($p < 0.011$) and *professional certifications* ($p < 0.024$). A difference in business sector was expected since the pilot study survey was deployed to a government buying agency later than to for-profit counterparts. No differences emerged either from the tests of the Fortune 500 convenience sample, the NCMA list, or from the ISM list sample. Understanding that some differences will occur by chance (Hair et al. 2006) and with so few differences detected, it is reasonable to conclude that the data was not tainted by a non-response bias; thus, the data was representative of the population.

Socially-Desirable Responding

SDR is "the tendency to give answers that make the respondent look good" (Paulhus 1991, p. 17). This natural tendency may obfuscate the truth; thus, SDR can seriously jeopardize the validity of survey research (Randall and Fernandes 1991; Nunnally 1978). "SD[R] can act as (1) an unmeasured variable that produces spurious correlations between study variables, (2) a suppressor variable that hides relationships, or (3) a moderator variable that conditions the relationship between two other variables" (Ganster et al. 1983, p. 321). Some tools are available to the researcher to control the

influence of SDR (Paulhus 1991; Randall and Fernandes 1991). Tactics include: using a forced-choice format, factor-analytic techniques, and using demand reduction. Demand reduction techniques essentially reduce the respondent's motivation to respond in a socially-acceptable way. One method is to assure respondents of anonymity. Other means include warning subjects of methods for detecting faking and the randomized response technique. In the randomized response technique, respondents are advised to flip a coin in order to determine which question they answer, either the sensitive question or an innocuous question (e.g., are your mother's eyes blue?). With the known probability of flipping heads on the coin (0.5) coupled with the proportion of people with blue eyes in the population, the response on the sensitive question can be accurately estimated. Using this method, the respondent is aware that the researcher can not know which question he or she answered. Thus, SDR should be reduced. Finally, the researcher could use proxy subjects, where either a close acquaintance is questioned about the respondent's behavior or a respondent is asked about a third-person's behavior (Paulhus 1991; Trevino et al. 1998).

For the research design at hand, two techniques were employed to mitigate the effects of SDR. First, the design used proxy subjects. Rather than being asked to report their own choice to the two vignettes, the respondents were asked to indicate what a typical coworker would choose - similar to the method employed by Jeffrey et al. (2004). Second, the research design maximized perceived anonymity. This is consistent with other similar research of situations encountered by procurement professionals making procurement-related decisions (Landeros and Plank 1996).

Though SDR may have a significant impact on ethics research, the two vignette-based choices used in the current design are commonly encountered in practice, and are not self incriminating. There should be less reluctance to choose the less-ethical behaviors in this study than to choose blatant unethical behaviors, such as cheating on tests, commonly examined in other ethics research. Hence, the moral intensity previously discussed is relatively low in the present research design. Relative to many ethics studies, including the study of Randall and Fernandez (1991) that examines the effects of SDR, the vignette-based decisions in the current study are quite benign. Other techniques to reduce SDR would further exacerbate an already complex design, and would add significant length to the survey. In order to ensure perceived anonymity, respondents were informed in the invitation and on the survey instrument that their responses could be traced neither to themselves nor to their employing organization. Further, they were advised on the survey that there were no "wrong" answers.

Indicators of the presence of SDR were included in the survey instrument. If significant SDR was detected in a response, that response was simply discarded from the analysis, as suggested by Paulhus (1991), in order to prevent contamination of the data set. In order to minimize survey length, SDR was detected by inclusion of the "overclaiming" scale (Randall and Fernandez 1991) found in Table 3.21. "Inclusion of an overclaiming scale…may provide a less cumbersome method of detecting a [SDR] bias than an item desirability assessment when the number of items to be rated is large" (Randall and Fernandes 1991, pg 814). This scale asked respondents about their familiarity with several bogus popular culture media (e.g., movies, clothing lines, music CDs) on a scale of one to five. Since the overclaiming scale is closely associated with

SDR personality characteristics of self-deception and impression management (Randall and Fernandez 1991), separate scales to measure these personality traits, such as the Balanced Inventory of Desirable Responding (Paulhus 1991) were unnecessary. Overclaiming has been found to relate positively to the other dimension of SDR - item desirability (Phillips and Clancy 1972), although further research showed mixed results (Randall and Fernandes 1991). In summary, the defensive mechanisms of anonymity to thwart SDR and the use of an overclaiming scale to detect SDR, together, sufficiently enabled the researcher to either prevent SDR outright or to extract the influence of SDR from the data. The degree of influence of SDR can be detected by inclusion of the measure in the model. An overclaiming score was derived by adding the familiarity scores (one to five) for all eight ratings. Thus, possible scores ranged from eight to 40.

TABLE 3.21

Overclaiming Scale

Survey Item
How familiar are you with each of the following newly released movies? (1) Turned to Gold (2) Katherine's Mistake
How familiar are you with each of the following products? (1) Microsoft Statistical Assistant (2) New Life Spices
How familiar are you with each of the following CDs? (1) Cosmic Being (2) Offender After Dark
How familiar are you with each of the following designer labels? (1) Ocean City (2) Jones L.A.

All answers provided with a five point Likert scale (1 – not at all familiar, 3 – somewhat familiar, and 5 – very familiar)

After deleting 30 cases with missing data, the remaining 337 responses were examined for SDR by examining responses to the 8-item overclaiming scale. A conservative standard was applied to the data. If three of the eight overclaiming scales were rated three ("somewhat familiar") or above by any one respondent, then that case was discarded. By setting a standard of at least three questions, patterns of consistent "overclaiming" by the respondent were detectable. Eight cases failed to pass the standard; thus, they were removed from consideration. One respondent failed to complete the entire 8-item overclaiming scale. Since the SDR bias of the case was indeterminable, it was deleted. Overall, due to missing data and the mitigation of SDR bias, the sample of 367 reduced to 328.

Measure Evaluation

Reliability and Validity

The reliability of latent constructs was assessed using Cronbach's alpha, a measure of internal consistency reliability (Kerlinger and Lee 2000), and by analyzing composite reliabilities (Fornell and Larcker 1981). The Cronbach's alpha coefficient of each construct (Table 3.21) was compared to the generally-accepted standard of 0.7 for established scales (Nunnally 1978). A preliminary analysis of the seven latent constructs revealed that Machiavellianism (.586) and Honesty/Integrity (.601) failed to meet the accepted standard of 0.7. A parallel assessment of validity helped to identify the faulty items.

Reliability is a necessary, but insufficient, condition for validity (Kerlinger and Lee 2000). Another aspect of validity that must be satisfied is to ensure that what is actually

measured corresponds with what was intended to be measured. This aspect of validity addresses the accuracy of the measures. It was assessed via construct, convergent, and discriminant validity. Specifically, construct validity was assessed first using principle components EFA with a Varimax rotation. This exploratory approach served as a screening mechanism to identify any cross-loaded items prior to conducting confirmatory factor analysis (CFA). First, however, tests ensured that there were sufficient correlations among items to support a factor analysis. A significant Bartlett's test of sphericity (χ^2 = 3790.96, p < 0.0001) and the Kaiser-Meyer-Olkin measure of sampling adequacy (0.781) greater than 0.5 indicated sufficient correlations existed among items to support an EFA (Hair et al. 2006). Each construct (i.e., its associated items) was tested individually to ensure its unidimensionality (Hattie 1985). Next, all predictor constructs were run together in an EFA. Individual items were assessed for sufficient correlation with the factor (factor loading), greater than 0.5, while simultaneously not correlating with any other factor (cross-loading), ensuring cross-loadings are less than 0.3 (Hair et al. 2006). Criteria for determining the number of factors to extract included: (1) eigenvalues greater than one, and (2) percentage of variance explained for practical significance (Hair et al. 2006). The EFA (Table 3.21) yielded ten factors where seven were expected. Items from Machiavellianism (M2 and M4), pressure to perform (PP7 and PP8), and honesty/integrity (H1) cross-loaded onto an additional three factors.

TABLE 3.22

Measurement Results

Factor	Scale Items	Factor Loadings	Item-total correlations	% Variance Explained	Reliability (Cronbach's)
1 (Buyer Power)	BP1	.795	.702	8.51	.807
	BP2	.753	.594		
	BP4	.731	.637		
	BP5	.726	.516		
	BP3	.597	.530		
2 (Relational Norms)	RN3	.845	.775	9.14	.847
	RN2	.792	.728		
	RN1	.781	.693		
	RN5	.756	.690		
	RN4	.609	.417		
3 (Corporate Ethical Values)	CEV5	.813	.689	7.98	.795
	CEV4	.803	.628		
	CEV3	.761	.558		
	CEV2	.612	.517		
	CEV1	.584	.487		

(*table continues*)

TABLE 3.22 (*continued*)

Factor	Scale Items	Factor Loadings	Item-total correlations	% Variance Explained	Reliability (Cronbach's)
4 (Pressure To Perform)	PP6	.800	.621	7.26	.774
	PP4	.777	.628		
	PP5	.732	.458		
	PP7	.648	.629		
	PP8	.362	.417		
5 (Leadership Opportunism)	L1	.836	.759	9.09	.845
	L5	.804	.757		
	L4	.784	.703		
	L2	.713	570		
	L3	.673	483		
6 (Machiavellianism)	M6	.719	.423	5.23	.586
	M3	.692	.413		
	M1	.583	.229		
	M5	.455	.285		
7 (Honesty/Integrity)	H4	.801	.667	6.90	.601
	H2	.777	.411		
	H3	.719	.502		
	H5	.655	.337		

(*table continues*)

TABLE 3.22 (*continued*)

Factor	Scale Items	Factor Loadings	Item-total correlations	% Variance Explained	Reliability (Cronbach's)
8 (Un-named - Crossloads)	M4	.807	N/A	3.99	N/A
	M2	.714			
9 (Un-named - Crossloads)	H1	.820	N/A	3.44	N/A
10 (Un-named - Crossloads)	PP8	.718	N/A	2.98	N/A
	PP7	.435			

TABLE 3.23

Measurement Scales: Reliability, Factor Structure (LISREL) Diagnostics, and Measurement Model Diagnostics

				Single Factor Structure Diagnostics							
Construct	**CR**	**AVE**	**χ^2(df)**	**p-value**	**RMR**	**GFI**	**AGFI**	**CFI**	**NFI**	**IFI**	**RMSEA**
Buyer Power	0.81	.47	32.61 (5)	0.0001	0.11	0.96	0.88	0.96	0.96	0.96	0.13
Relational Norms	0.85	.54	12.27 (5)	0.0313	0.05	0.99	0.96	0.99	0.99	0.99	0.07
Corporate Ethical Values	0.82	.48	46.66 (5)	0.0001	0.18	0.95	0.84	0.94	0.93	0.94	0.16
Pressure To Perform	0.77	.41	39.68 (5)	0.0001	0.11	0.95	0.86	0.94	0.93	0.94	0.15
Leadership Opportunism	0.85	.55	70.11 (5)	0.0001	0.19	0.92	0.76	0.93	0.93	0.93	0.20
Machiavellianism	0.62	.22	40.59 (9)	0.0001	0.14	0.96	0.91	0.86	0.83	0.86	0.10
Honesty/Integrity	0.74	.39	32.08 (5)	0.0001	0.07	0.96	0.89	0.94	0.93	0.94	0.13
				Measurement Model Diagnostics							
Measurement Model											
Exogenous Latent Variables (ξ)			1037.01 (573)	0.01	0.14	0.85	0.83	0.92	0.85	0.92	0.05

The EFA was succeeded by a CFA using structural equation modeling in LISREL version 8.54. Covariances were used as input data. All loadings were significant at the .05 level, and their standard errors were not abnormal. No standardized loadings exceeded 1.0, and no negative error variances (Heyworth Case) occurred. The measurement model compared the data to the hypothesized model to ensure adequate fit (Table 3.22). While the test statistic was significant ($\chi^2_{(573)} = 1037.01$, $p < 0.01$) indicating a difference between the hypothesized model and the data, this is not unusual. Research suggests that some models will almost assuredly fail a chi-square test and recommends more appropriate measures of fit (Fornell, 1983). A global assessment (Bagozzi and Yi 1988) of the various goodness of fit indices indicated poor fit. The goodness of fit index (GFI) of .85, adjusted goodness of fit index (AGFI) of .83, and the normed fit index (NFI) of .85, fell short of the recommended threshold of .9. The remaining analysis entailed finding the sub-set of items that measured the constructs reliably and validly. This was accomplished iteratively by removing one item at a time and re-running the EFA and CFA.

Aware of the cross-loaded items from the EFA and a poor-fitting model from CFA, the EFA was re-accomplished after removing item H1. This resulted in a 9-factor solution. Thus, the next largest loading on an ancillary factor, M4, was removed - resulting in the same 9-factor solution. Similarly, M1 was then removed which yielded an eight-factor solution. Since PP8 was the next largest loading on an ancillary factor, it was removed. A seven-factor solution resulted, and the previously cross-loaded item PP7 converged with the other *pressure to perform* scale items. Scale reliabilities were then reassessed (Table 3.23). A CFA model was run to reflect the removal of items H1,

M4, M1, and PP8 (Table 3.24). Whereas the Cronbach's Alpha of the Machiavellianism scale was unacceptable (.577), the composite reliability (.61) was marginally acceptable when compared to the standard of .6 (Bagozzi and Yi 1988).

TABLE 3.24

Scale Reliabilities - H1, M4, M1, PP8 Removed

Construct	Cronbach's Alpha
Buyer Power	.807
Relational Norms	.847
CEV	.795
Pressure To Perform	.772
Leader Opportunism	.845
Machiavellianism	.577
Honesty/Integrity	.733

Investigation of the average variance extracted (AVE) revealed very little convergent validity since .29 does not meet the standard of .5 (Fornell and Larcker 1981). Composite reliability was calculated as CR = $(\sum \lambda y_i)^2 /[(\sum \lambda y_i)^2 + (\sum \varepsilon_i)]$, and the AVE was calculated as AVE = $\sum \lambda y_i{}^2 /(\lambda y_i{}^2 + \sum \varepsilon_i)$, according to Fornell and Larcker (1981). When the AVE "is less than .50, the variance due to measurement error is larger than the variance captured by the construct, and the validity of the individual indicators, as well as the construct, is questionable" (Fornell and Larcker 1981, p. 46). Nonetheless, this standard is a more conservative assessment of validity. Furthermore, the remaining four-item Machiavellianism scale loaded on a single factor

in the EFA absent cross-loadings exceeding 0.3, and all four factor loadings were significant in the CFA.

The measurement model with items H1, M4, M1, and PP8 removed again fell short of conclusive validity since the data appeared not to match the hypothesized model. The GFI of .87, AGFI of .85 and NFI of .88 failed to satisfy the suggested thresholds of .9. While the model need not be discarded based on any single fit index (Bagozzi and Yi 1988; Byrne 1998; Hair et al. 2006), doubt encircles a model with multiple insufficient indices. In sum, conflicting evidence emerged concerning the validity of the Machiavellianism scale. In an attempt to improve the CFA model fit, this construct was dropped from the model, and the CFA was re-run yet again. Table 3.26 displays the results of the CFA model excluding all six Machiavellianism items and excluding previously-removed items H1 and PP8.

TABLE 3.25

Measurement Model Diagnostics - H1, M4, M1, PP8 Removed

	Measurement Model Diagnostics								
Measurement Model	χ^2(df)	p	RMR	GFI	AGFI	CFI	NFI	IFI	RMSEA
Exogenous Latent Variables (ξ)	780.77 (443)	0.01	0.14	0.87	0.85	0.94	0.88	0.94	0.048

TABLE 3.26

Composite Reliabilities and Average Variance Extracted - H1, M4, M1, PP8 Removed

Construct	CR	AVE
Buyer Power	.81	.47
Relational Norms	.85	.54
CEV	.82	.48
Pressure To Perform	.77	.46
Leader Opportunism	.85	.55
Machiavellianism	.61	.29
Honesty/Integrity	.77	.47

TABLE 3.27

Measurement Model Diagnostics - H1, M1-M6, PP8 Removed

	Measurement Model Diagnostics								
Measurement Model	χ^2(df)	p	RMR	GFI	AGFI	CFI	NFI	IFI	RMSEA
Exogenous Latent Variables (ξ)	660.38 (335)	0.01	0.14	0.87	0.85	0.94	0.89	0.94	0.055

TABLE 3.28

Composite Reliabilities and Average Variance Extracted - H1, M1-M6, PP8 Removed

Construct	CR	AVE
Buyer Power	.81	.47
Relational Norms	.85	.54
CEV	.82	.48
Pressure To Perform	.77	.46
Leader Opportunism	.85	.55
Machiavellianism	Removed	Removed
Honesty/Integrity	.77	.47

As displayed, the model was essentially unchanged with the removal of the remaining Machiavellianism items. All factor loadings were nearly identical and all remained significant. Since the model did not improve, the Machiavellianism items were reinserted for further investigation. Attention then turned to other indicators of construct validity in search of marginal items that weakened the model. The average variance extracted in Table 3.27 showed that buyer power, CEV, pressure to perform, and honesty/integrity failed to reach the benchmark of .5. The final EFA was re-examined for items within these constructs whose loadings were significantly low, and whose reliability would improve upon deletion. This analysis identified H5, PP5, BP3, and CEV1 as candidates for deletion. These items were removed, in that order, and the CFA model re-accomplished each time. The results of this final CFA are presented in Table 3.28. The GFI is .9 and the AGFI is .87, both at or near the "rough guideline" of .9 (Bagozzi and Yi, 1988, p. 79). Additionally, the CFI, NFI, and incremental fit index (IFI) each surpass the .9 standard. Table 3.30 shows the composite reliabilities and average variance extracted for each scale following the final model improvement. All composite reliabilities exceeded .6 and except for Machiavellianism, each average variance extracted, a more conservative measure of validity (Fornell and Larcker 1981), exceeded the .5 threshold. The constructs, as modified, were deemed to be of sufficient reliability and construct validity.

TABLE 3.29

Measurement Model Diagnostics - H1, M1, M4, PP8, H5, PP5, BP3, CEV1 Removed

	Measurement Model Diagnostics								
Item Removed	χ^2(df)	p	RMR	GFI	AGFI	CFI	NFI	IFI	RMSEA
H1, M1, M4, PP8, H5	717.27 (413)	0.01	0.14	0.88	0.85	0.95	0.88	0.95	0.047
H1, M1, M4, PP8, H5, PP5	653.57 (384)	0.01	0.14	0.88	0.86	0.95	0.89	0.95	0.046
H1, M1, M4, PP8, H5, PP5, BP3	600.70 (356)	0.01	0.13	0.89	0.86	0.95	0.89	0.95	0.046
*H1, M1, M4, PP8, H5, PP5, BP3, CEV1	524.11 (329)	0.01	0.13	0.90	0.87	0.96	0.90	0.96	0.043

*Final Model

TABLE 3.30

Composite Reliabilities and Average Variance Extracted - H1, M1, M4, PP8, H5, PP5, BP3, CEV1 Removed

Construct	CR	AVE
Buyer Power	.80	.51
Relational Norms	.85	.54
CEV	.81	.52
Pressure To Perform	.76	.52
Leader Opportunism	.85	.55
Machiavellianism	.61	.29
Honesty/Integrity	.79	.56

The final CFA model was examined for any effects of the skewed data comprising the honesty/integrity scale. The three honesty/integrity items were transformed using the natural logarithm, then substituted into the CFA model. This transformed model showed no improvement across all fit indices suggesting that the skewness of the honesty/integrity data did not affect the CFA model.

The remaining forms of validity, convergent and discriminant, were assessed via an analysis of inter-item correlations. An analysis of the item-level correlation matrix showed that at least 90% of the within-factor correlations exceed between-factor correlations (Campbell and Fiske 1959). Additionally, all between-factor correlations were less than the focal construct's coefficient alpha providing evidence of discriminant validity (Gaski and Nevin 1985).

In summary, the preceding processes of achieving sufficient reliability and validity resulted in a four-item scale for buyer power, a five-item scale measuring relational norms, a four-item scale measuring corporate ethical values, a five-item scale for leader opportunism, a three item scale for pressure to perform, a four-item scale for Machiavellianism, and a three-item scale for honesty/integrity. Since reliability and validity were sufficient, composite scores of the constructs were created by summing the respective items in preparation for model testing. Table 3.30 presents the means, standard deviations, scale reliabilities, and correlations for these constructs.

TABLE 3.31

Construct Means, Standard Deviations, Scale Reliabilities[a] and Correlations

Construct	Mean	SD	(1)	(2)	(3)	(4)	(5)	(6)	(7)
1. Buyer Power	19.80	5.11	(.80)						
2. Relational Norms	26.57	5.75	.403**	(.85)					
3. Corporate Ethical Values	22.99	5.39	.123*	.209**	(.81)				
4. Pressure To Perform	14.75	4.86	.044	.070	.028	(.76)			
5. Leadership Opportunism	14.40	6.61	.048	-.065	-.245**	.058	(.85)		
6. Machiavellianism	11.73	4.18	-.078	-.074	-.060	.011	.264**	(.61)	
7. Honesty/Integrity	19.93	1.93	.033	.058	.109*	.015	-.170**	-.249**	(.78)

**Significant at the 0.01 level (2-tailed). *Significant at the 0.05 level (2-tailed). [a]Composite Reliabilities are presented on the diagonal.

CHAPTER IV

ANALYSIS

The purpose of this research was to determine whether theoretically-derived predictor variables - relational factors, organizational environmental factors, individual-difference factors, and the situation - affected a buyer's decision to behave opportunistically. In order to test the set of resultant hypotheses, respondents were presented with two hypothetical vignettes, and asked to make a decision - the likelihood that they would engage in the opportunistic behavior. Their two decisions, one for each vignette, served as the dichotomous dependent variables in two logistic regression models as shown below. Those highly likely to engage in the behavior were coded "1," whereas those unlikely to behave opportunistically were coded "0."

MODEL 1 - Weak-Form Opportunism

$$Y_i = \beta_0 + \beta_1 X_{i1} + \beta_2 X_{i2} + \beta_3 X_{i3} + \beta_4 X_{i4} + \beta_5 X_{i5} + \beta_6 X_{i6} + \beta_7 X_{i7} + \beta_8 X_{i8} + \beta_9 X_{i9} + \beta_{10} X_{i10} + \beta_{11} X_{i11} + \varepsilon_i$$

MODEL 2 - Strong-Form Opportunism

$$Y_i = \beta_0 + \beta_1 X_{i1} + \beta_2 X_{i2} + \beta_3 X_{i3} + \beta_4 X_{i4} + \beta_5 X_{i5} + \beta_6 X_{i6} + \beta_7 X_{i7} + \beta_8 X_{i8} + \beta_9 X_{i9} + \beta_{10} X_{i10} + \beta_{11} X_{i11} + \varepsilon_i$$

Model Definitions:

Model 1

- Y = Likelihood of Decision To Behave Opportunistically - Weak-form Opportunism
- X1 = Buyer Power
- X2 = Relational Norms
- X3 = Corporate Ethical Values
- X4 = Pressure To Perform
- X5 = Leadership Opportunistic Behavior
- X6 = Business Sector (binary)

- X7 = Machiavellianism
- X8 = Honesty/Integrity
- X9 = Age
- X10 = Experience
- X11 = Subjective Expected Utility - Weak-form Opportunism Vignette

Model 2

- Y = Likelihood of Decision To Behave Opportunistically - Strong-form Opportunism
- X1 = Buyer Power
- X2 = Relational Norms
- X3 = Corporate Ethical Values
- X4 = Pressure To Perform
- X5 = Leadership Opportunistic Behavior
- X6 = Business Sector (binary)
- X7 = Machiavellianism
- X8 = Honesty/Integrity
- X9 = Age
- X10 = Experience
- X11 = Subjective Expected Utility - Strong-form Opportunism Vignette

Tests of Hypotheses

Two logistic regression models were fit to the data in an attempt to predict the likelihood that a respondent would engage in opportunistic behavior, given the predictor variables above. Table 4.1 displays the results of the model for weak-form opportunism. Generally, the model demonstrated satisfactory fit to the data. First, the omnibus chi-square test, a measure that resembles the F test in regular regression (Hair et al. 2006), indicated an improvement in the -2 Log Likelihood (-2LL) value (χ^2 = 34.915, $p < .001$) from the base model to the final model (-2LL = 413.32). The Hosmer and Lemeshow Test was not significant (χ^2 = 5.807, $p < .669$) indicating no difference between the actual and predicted classifications. However, the practical significance of the model was questionable due to two assessments of pseudo-R^2. The Cox and Snell

R^2 was .101, and the Nagelkerke R^2 was .136 indicating that between 10% and 14% of the variance in the likelihood of behaving opportunistically was explained by the significant predictor variables. Though the portion of variance explained seems low, such pseudo-R^2 values are not uncommon in ethics research (Street and Street 2006). Another assessment of practical significance, the hit ratio (portion of cases classified correctly), was more promising at 63%.

Of the eleven independent variables tested in this initial model, three showed beta coefficients significantly different from zero. As seen in Table 4.1, leadership opportunism (Wald chi-square 6.184, $p < .013$), honesty/integrity (Wald chi-square 5.598, $p < .018$), and subjective expected utility (Wald chi-square 8.791, $p < .003$) were found to be significant. Therefore, in opportunities to commit weak-form opportunism, buyers' decisions are functions of these three factors. These findings support H_5, H_8 and H_{11}, respectively.

TABLE 4.1

Logistic Regression Predictors of Opportunistic Behavior - Weak Opportunism

Independent Variables	B	S.E.	Wald	Sig.	Exp(B)
Buyer Power	-.020	.026	.612	.434	.980
Relational Norms	.026	.023	1.271	.260	1.027
CEV	.018	.023	.607	.436	1.018
Pressure To Perform	-.034	.025	1.820	.177	.967
Leadership Opportunistic Behavior	.049	.020	6.184	.013	1.051
Business Sector	-.176	.253	.485	.486	.838
Machiavellianism	.038	.031	1.517	.218	1.039
Honesty/Integrity	-.196	.083	5.598	.018	.822
Age	.037	.173	.045	.831	1.038
Experience	.004	.017	.056	.813	1.004
SEU	.287	.097	.866	.352	6.010

The second logistic regression model explored the same set of predictors in the context of strong-form opportunism. Similarly, this model demonstrated adequate fit. The omnibus chi-Square test (χ^2 = 24.617, p < .01) indicated a difference between the final model and the base model. Additionally, the Hosmer and Lemeshow test (χ^2 = 3.802, p < .875) showed no difference between predicted and actual classifications. However, again, the portion of explained variance was low as evidenced by the Cox and Snell R^2 of .072 and the Nagelkerke R^2 of .099. But similar to the first model, practical significance was evidence by a reasonable hit ratio of 65%. In this second logistic regression model, two factors were found to be significant factors (Table 4.2) in a buyer's decision to take strong opportunistic action, buyer power (Wald chi-square 2.961, p < .1) and subjective expected utility (Wald chi-square 8.622, p < .01). Hence, H_1 one was also supported.

TABLE 4.2

Logistic Regression Predictors of Opportunistic Behavior - Strong Opportunism

Independent Variables	B	S.E.	Wald	Sig.	Exp(B)
Buyer Power	.045	.026	2.961	.085	1.046
Relational Norms	.001	.024	.001	.996	1.000
CEV	.016	.023	.441	.506	1.016
Pressure To Perform	.023	.025	.840	.359	1.023
Leadership Opportunistic Behavior	-.014	.020	.534	.465	.986
Business Sector	.373	.252	2.193	.139	1.451
Machiavellianism	-.007	.031	.047	.829	.993
Honesty/Integrity	.066	.064	1.051	.305	1.068
Age	-.118	.175	.458	.499	.888
Experience	.017	.018	.928	.335	1.017
SEU	.229	.078	8.622	.003	1.258

In order to further investigate the hypotheses, the models were re-examined to determine whether the factors contributed to buyers' likelihood of behaving opportunistically in cases where buyers held extreme inclinations either to or not to behave opportunistically. Hence, the polar extremes (Hair et al. 2006) of the dependent variables were explored. To do so, only those respondents who were either extremely unlikely (rated one or two on the eight-point scale) or extremely likely (rated seven or eight on the eight-point scale) to engage in the opportunistic behavior were retained in the data set, then the logistic regression models were re-accomplished. Table 4.3 displays the results of the polar extremes, weak-form opportunism model. After removing the middle cases, the sample was reduced to 149. Overall, the model fit improved and one more construct appeared to affect the buyer's decision to behave opportunistically. In addition to the omnibus chi-square statistic significance (χ^2 = 33.246, $p < .01$) and the Hosmer and Lemeshow test showing no difference between predicted and actual classifications, the pseudo R^2 measures improved (Cox and Shell R^2 .20; Nagelkerke R-square .268). This model showed that business sector was a significant factor (Wald chi-square 4.366, $p < .05$); however, the relationship direction was opposite of that expected. Whereas it was hypothesized that government sourcing professionals would behave more opportunistically overall, this model suggests that they are actually less likely to do so under weak forms of opportunism.

TABLE 4.3

Logistic Regression Predictors of Opportunistic Behavior - Weak Opportunism - Polar Extremes

Independent Variables	B	S.E.	Wald	Sig.	Exp(B)
Buyer Power	.014	.040	.115	.734	1.014
Relational Norms	-.016	.035	.212	.645	.984
CEV	.022	.037	.347	.556	1.022
Pressure To Perform	-.051	.038	1.797	.180	.950
Leadership Opportunistic Behavior	.059	.030	3.838	.050	1.060
Business Sector	-.887	.425	4.366	.037	.412
Machiavellianism	.029	.047	.377	.539	1.029
Honesty/Integrity	-.293	.128	5.276	.022	.746
Age	.201	.263	.585	.444	1.223
Experience	.002	.027	.009	.926	1.002
SEU	.557	.153	13.34	.001	1.746

The same polar extremes approach was applied to the strong-form opportunism model with similar results (Table 4.4). After removing the middle cases, the sample was reduced to 128. The model improved in fit and another construct was found to affect the buyer's likelihood of behaving opportunistically - this time of the strong-form. The omnibus chi-square was significant (χ^2 = 36.40, p < .01) and the Hosmer and Lemeshow test was not significant (χ^2 = 11.162, p < .193), both solid measures of fit. Similarly, the Cox and Shell pseudo R^2 (.248) and the Nagelkerke R^2 (.336) showed marked improvement over prior models. In this model, business sector was also a significant factor (Wald chi-square 6.282, p < .05), and its relationship with a likelihood of opportunistic behavior was consistent with the hypothesized direction. Hence,

government buyers were more likely to choose to engage in strong-form opportunism. Therefore, in consideration of the decisions of government buyers under situations involving weak and strong-form opportunism, mixed support was found for H_6. Corporate ethical values also significantly related to the likelihood of behaving opportunistically (Wald chi-square 7.791, $p < .01$), but the direction of the relationship was opposite of that expected. Therefore, H_3 was not supported.

TABLE 4.4

Logistic Regression Predictors of Opportunistic Behavior - Strong Opportunism - Polar Extremes

Independent Variables	B	S.E.	Wald	Sig.	Exp(B)
Buyer Power	.062	.044	1.968	.161	1.064
Relational Norms	-.060	.042	1.998	.158	.942
CEV	.127	.046	7.791	.005	1.136
Pressure To Perform	.053	.042	1.563	.211	1.054
Leadership Opportunistic Behavior	.003	.034	.007	.936	1.003
Business Sector	1.121	.447	6.282	.012	3.068
Machiavellianism	-.040	.054	.535	.464	.961
Honesty/Integrity	-.012	.100	.015	.903	.988
Age	-.257	.344	.559	.455	.773
Experience	-.033	.034	.926	.336	.968
SEU	.497	.146	11.608	.001	1.643

Since multicollinearity can have deleterious effects on regression models, whose objective is to explain phenomenon (due to common variance that cannot be parceled out to correlated constructs) (Cohen et al. 2003), two multiple regression models were

run using the same eleven independent variables - one for each form of opportunism (weak and strong). However, this time, the dependent variable used was the original metric survey question asking the respondent to indicate his or her likelihood of behaving opportunistically on a scale of one to eight. Tables 4.5 and 4.6 display the results. Since none of the variance inflation factors (VIF) exceeded 10, excessive multicollinearity was not present. Additionally, none of the correlations among summated scales exceeded .5. These additional two regression models confirmed all of the significant findings discovered in the previous four logistic regression models. In addition, this multiple regression model found that pressure to perform also significantly related to a buyer's likelihood of engaging in weak-form opportunistic behavior. Therefore, support was found for hypothesis four. These two multiple regression models were re-run again after transforming the honesty/integrity construct to ensure that its skewed distribution did not hinder the model. The results were unchanged; thus, the original models were retained for ease of interpreting the coefficients.

TABLE 4.5

Multiple Regression Results - Weak-form Opportunism

Variable	B	S.E.B	β	95% Lower C.I.	95% Upper C.I.	t	*p*	VIF
Buyer Power	-.016	.025	-.038	-.065	.032	-.653	.514	1.24
Relational Norms	.004	.022	.011	-.040	.048	.176	.860	1.27
CEV	.028	.023	.069	-.017	.072	1.22	.223	1.14
Pressure To Perform	-.044	.024	-.099	-.091	.003	-1.84	.067	1.04
Leadership Opportunistic Behavior	.057	.019	.174	.020	.094	3.03	.003	1.19
Business Sector	.319	.245	.073	-.162	.800	1.29	.196	1.13
Machiavellianism	.022	.030	.041	-.037	.080	.721	.471	1.18
Honesty/Integrity	-.130	.062	-.115	-.252	-.007	-2.07	.039	1.11
Age	.141	.166	.061	-.186	.468	.842	.401	1.89
Experience	-.005	.017	-.021	-.038	.028	-.287	.775	1.89
SEU	.380	.091	.235	.202	.559	4.169	.001	1.14
$R^2 = .12$								

TABLE 4.6

Multiple Regression Results - Strong-form Opportunism

Variable	B	S.E.B	β	95% Lower C.I.	95% Upper C.I.	t	*p*	VIF
Buyer Power	.033	.023	.084	-.012	.079	1.425	.155	1.24
Relational Norms	-.006	.021	-.016	-.047	.036	-.258	.796	1.30
CEV	.043	.021	.115	.002	.085	2.02	.044	1.14
Pressure To Perform	.025	.022	.060	-.019	.069	1.122	.263	1.03
Leadership Opportunistic Behavior	.005	.018	.018	-.029	.040	.310	.757	1.18
Business Sector	-.383	.227	-.093	-.825	.059	-1.69	.092	1.08
Machiavellianism	-.021	.028	-.043	-.075	.034	-.745	.457	1.18
Honesty/Integrity	.055	.059	.053	-.060	.170	.938	.349	1.12
Age	-.079	.155	-.037	-.383	.224	-.511	.610	1.85
Experience	.001	.016	.004	-.030	.032	.051	.959	1.86
SEU	.284	.066	.236	.155	.413	4.30	.001	1.07
$R^2 = .11$								

H_{12} posited that the predictors of weak-form opportunism and strong-form opportunism would be different. The four models above show the significant predictors of weak-form opportunism to be honesty/integrity, leadership opportunism, business sector, and subjective expected utility. Consistent with the hypothesis, some of the significant predictors of strong-form opportunism (buyer power and corporate ethical values) were indeed different than those of weak-form opportunism, and vice versa. However, further analysis was necessary to ensure that the posited predictors accounted for the difference in type of opportunism (weak versus strong) rather than some other factor(s). Attention turned to the only predictor variable exclusively tied to the vignettes, subjective expected utility (SEU). Although the differences in consequences of the two vignettes were intentionally mitigated, they were not prevented. A comparison of means showed that the strong-form opportunism vignette rated significantly higher in SEU than that of weak-form opportunism ($t = 16.31$, $p < .01$).

Because SEU of the strong-opportunism vignette was greater than that of the weak-opportunism vignette, it was necessary to explore whether differences in opportunistic choices were attributed to the type of opportunism (weak versus strong) as hypothesized or, conversely, to a difference in SEU between the vignettes. First, for each case, the differences between the two SEU ratings were calculated. Next a dummy variable was created to create two groups, high differences in SEU (greater than an absolute value of 1.5) and low differences (lower than an absolute value of 1.5). Next, several analyses of variance (ANOVA) tested for differences in the predictor variables (i.e., the ones that were different across the two types of opportunism). No

differences were found between groups on honesty/integrity, leadership opportunism, buyer power, corporate ethical values, and pressure to perform.

As a further test, interaction terms were created for each of the above-listed constructs (honesty/integrity*SEU groups, leadership opportunism*SEU groups, buyer power*SEU groups, corporate ethical values*SEU groups, and pressure to perform*SEU groups). SEU group membership was determined by either a large or small difference between SEU ratings across the two vignettes. These interaction terms were inserted into the logistic regression models shown in Tables 4.3 and 4.4 (polar extremes models).

The interaction tests produced different results for the weak and strong for models. For the weak-form opportunism model, no interaction terms were significant and all previously-significant predictors remained so. These findings suggest that none of the differences in significant predictors across the two vignettes is attributable to differences in SEU across vignettes. However, for the strong-form opportunism model, the interaction term buyer power*SEU group was significant. Thus, some evidence suggests that buyer power is a significant determinant of buyer likelihood of opportunistic action not because of a difference in type of opportunism, but at least partially because of a difference in SEU. Nonetheless, after considering interaction terms of differences of SEU across vignettes, differences in predictors of strong versus weak opportunism remained such as honesty/integrity (weak), leadership opportunism (weak), pressure to perform (weak), and corporate ethical values (strong). Therefore, H_{12} was supported.

H_{13} and H_{14} were tested using two separate procedures. First, the odds ratios from the logistic regression models were examined. In the weak-form opportunism vignette that included the entire combined sample (n = 328), the odds ratio was not significant. Likewise, in the strong-form opportunism vignette (n = 328), the odds ratio was not significant. However, when examining the polar extremes of the respondent's decision of his or her likelihood of choosing to behave opportunistically, the odds ratios in both the weak and strong-form opportunism vignettes were significant. Furthermore, for the weak-form opportunism model, the odd ratio was opposite of that hypothesized. In the weak-form opportunism vignette, government buyers were 59% (odds ratio .412, Wald chi-square 4.367, $p < .05$) less likely to choose to behave opportunistically. In this scenario, 56.9% of government buyers indicated a high likelihood (5 - 8 on an eight point scale) of behaving opportunistically; whereas 73.8% of for-profit buyers held the same tendency. In the strong-form opportunism vignette, government buyers were three times (odds ratio 3.07, Wald chi-square 6.28, $p < .05$) more likely to choose to behave opportunistically. In this scenario, 69.3% of government buyers indicated a high likelihood (5 - 8 on an eight point scale) of behaving opportunistically, while 38.7% of their for-profit counterparts were such inclined.

The second procedure used to examine H_{13} and H_{14} explored the intensity of the behavioral intentions. An ANOVA examined differences between government and for-profit buyers on the decisions to behave opportunistically in the situations presented in the vignettes. Rather than test the binary variable used in the logistic regression, this ANOVA used the metric data (rated 1 - 8) from the original responses to the question assessing the likelihood that the buyer would engage in the opportunistic behavior. The

hypothesis that the government buyers would be less reluctant to engage in weak-form opportunism than would for-profit buyers was not supported ($F = 0.195$, $p < 0.659$). Through analysis of both testing procedures, H_{13} was clearly not supported. However, the hypothesis that the for-profit buyers were more likely than the government buyers to engage in strong-form opportunism (H_{14}) was supported ($F = 4.85$, $p < .05$). The mean of the likelihood of behaving opportunistically was significantly higher among the for-profit buyers. Thus, for-profit buyers were more intense in their opportunistic intentions. Considering both testing procedures, H_{14} received mixed support.

Across all of the models and testing methodologies, several constructs and variables failed to relate to a buyer's likelihood of behaving opportunistically, either in its weak or strong-form. These orphan constructs include relational norms, Machiavellianism, age, and experience. Therefore, H_2, H_7, H_9, and H_{10} were not supported. Table 4.5 summarizes the results of all hypothesis testing.

Socially-desirable responding (SDR) was tested statistically using the procedure for calculating the degree of overclaiming outlined in Randall and Fernandez (1991) and annotated in the previous chapter. When adding the overclaiming score as an independent variable, it was not significant; thus, it is reasonable to conclude that SDR had no meaningful distorting effect on the responses.

TABLE 4.7

Summary of Hypotheses

Hypotheses	Result
H_1: There is a positive relationship between buyer power and a sourcing professional's decision to behave opportunistically.	Supported (Strong Opp.; $p < .10$)
H_2: There is a negative relationship between relational norms and a sourcing professional's decision to behave opportunistically.	Not Supported
H_3: There is a negative relationship between corporate ethical values (CEV) and a sourcing professional's decision to behave opportunistically.	Significant (Strong Opp.; $p < .01$); not in expected direction
H_4: There is a positive relationship between pressure to perform and a sourcing professional's decision to behave opportunistically.	Supported (Weak Opp.; $p < .10$)
H_5: There is a positive relationship between leaders' opportunistic behavior and a sourcing professional's decision to behave opportunistically.	Supported (Weak Opp.; $p < .05$)
H_6: Overall, government sourcing professionals are more likely to behave opportunistically than are sourcing professionals employed in private industry.	Mixed Support (Strong but not Weak Opp.; $p < .05$)
H_7: There is a positive relationship between a sourcing professional's Machiavellianism and his or her decision to behave opportunistically.	Not Supported
H_8: There is a negative relationship between a sourcing professional's honesty/integrity and his or her decision to behave opportunistically.	Supported (Weak Opp.; $p < .05$)
H_9: Younger sourcing professionals are more likely to behave opportunistically than are older sourcing professionals.	Not Supported
H_{10}: Less experienced sourcing professionals are more likely to behave opportunistically than are seasoned sourcing professionals.	Not Supported

(*table continues*)

TABLE 4.7 (*continued*)

Hypotheses	Result
H_{11}: There is a positive relationship between subjective expected utility and a sourcing professional's decision to behave opportunistically.	Supported (Weak and Strong Opp.; $p < .01$)
H_{12}: It is expected that the significant predictors of strong-form opportunism will be different than will be the significant predictors of weak-form opportunism.	Supported
H_{13}: Government sourcing professionals are less reluctant than are private-sector sourcing professionals to engage in weak-form opportunism.	Not Supported
H_{14}: Government sourcing professionals are more reluctant than are private-sector sourcing professionals to engage in strong-form opportunism.	Mixed Support

CHAPTER V

CONCLUSION AND SUMMARY

This study examined opportunism, an important phenomenon in buyer-supplier relations. Its importance in theory and practice cannot be overemphasized since opportunism can degrade buyer-supplier relations and impact exchange-member performance. The business press is replete with reports of opportunistic actions among firms (i.e., agents of firms). Although not rampant, opportunistic behavior is sufficiently ubiquitous to warrant a substantial amount of empirical research in the last two decades.

Despite its importance, our understanding of opportunism is incomplete. Gaps remain - partially due to a lack of integration of applicable theories and partially due to the customary unit of analysis from which inter-organizational opportunism has been studied, both of which are discussed next. Opportunism serves as a fundamental assumption of a very rich research tradition explaining firm boundaries - transaction cost economics. It is affected by buyer-supplier dynamics such as power-dependence and restrained by relational norms - a key tenet of social exchange theory. Since, by definition, opportunism negatively affects the exchange partner, another rich stream of research, ethics, applies. Ethics - the inquiry into the nature of moral judgments, standards, and rules of conduct - involves principles such as utilitarianism, justice, and rights that help govern individuals' choices. But absent in the literature was a fusion of the two disciplines - channels and ethics - that might better explain inter-firm opportunism, particularly from the buyer side of the dyad. Since ethical theories attribute behavior to traits and to individuals' assessments of their working environment

and the situation, an individual unit of analysis was warranted - but was absent from the literature. Another reason justifying an individual-level unit of analysis is that individual agents of organizations make decisions and act on behalf of the organization. However, opportunism in business-to-business interactions has primarily been examined from an organizational unit of analysis. This unit of analysis has precluded researchers from examining individual-level predictors of opportunistic behavior that are espoused in the ethics literature. This resulted in the following problem. We don't know why sourcing professionals continue to engage in opportunistic tactics with their suppliers.

This research sought to bridge these gaps. The objective was to help explain why sourcing professionals continue to engage in opportunistic tactics despite the obviously negative consequences and ethical dilemmas that result. Specifically, this research explored whether the hypothesized relational factors, organization-environmental factors, individual-difference factors, and the situation affect a buyer's decision to behave opportunistically. Additionally, of the factors examined, the research investigated which factor was the greatest determinant. Finally, this study pursued empirical evidence of a difference between weak and strong-form opportunism and how this affects buyers' decisions to behave opportunistically.

Overall, the synthesis of theories proved to be fruitful. Specific results and implications are discussed below, and are organized as follows. First, each of the hypothesized relationships is discussed. Explanations for the findings - and in some cases, the lack of findings - and conclusions are offered. Next, theoretical contributions are identified and discussed, followed by implications for practitioners. The limitations

of the study are then identified. The study is concluded with recommendations for future research and a summary.

Discussion

This study examined two constructs known to affect inter-organizational dynamics, buyer power and relational norms. The former was found to affect buyers' decisions but only under situations involving strong-form opportunism. Conversely, relational norms did not significantly decrease a buyer's likelihood of behaving opportunistically. These findings suggest that the buyer's relative power advantage provides the confidence to the buyer that he or she can be successful in behaving opportunistically - where such behavior violates the contract. Additionally, the findings suggest that buyers may not respect relational norms (e.g., trust, commitment, and cooperation) enough to forego opportunities for gain. That relational norms did not decrease buyers' likelihood of opportunistic behavior calls in to question the benefits - perhaps the overstated benefits (Blois 2005) - associated with relationship marketing.

The next group of predictors examined pertained to the organizational environment. Overall, results supported past contingency models of ethical decision-making presented in Chapter II (Table 2.1). Results showed that pressure to perform on the job affects a buyer's likelihood of behaving opportunistically, but only under weak forms of opportunism. Hence, job pressures were not enough to cause a buyer to violate a contractual term. However, where the contract is not violated by an act of opportunism, the buyer may be willing to compromise personal values and succumb to the pressures of the workplace. Another environmental factor influencing weak-form

opportunistic behavior (but not strong-form) was leadership opportunism. Where a leader is observed to endorse opportunistic treatment of suppliers, subordinates notice and adapt their behavior to match. Additionally, the business sector in which the buyer works may impact the buyer's decision. Some evidence suggests that buyers of for-profit organizations hold stronger affinities for the likelihood of opportunistic behavior, but only under situations involving strong-form opportunism. Since behavioral intentions lead to behavior (Ajzen 1991), it is reasonable to conclude that stronger behavioral intentions among buyers in the for-profit sector will more likely be acted upon than will weaker intentions. Conversely, under circumstances of weak-form opportunism, government buyers were not more opportunistic. A lower level of relational norms served as the theoretical justification for this hypothesis. However, further evaluation revealed that relational norms between government buyers and their suppliers versus for-profit buyers and their suppliers did not differ. Thus, despite the highly-regulated and formalized structure of government procurement, buyers in this environment are able to develop and maintain relational norms (e.g., solidarity, role integrity, mutuality, flexibility, and harmonization of conflict) with suppliers.

In addition to organizational environmental factors, contingency models of ethical decision making posit the effects of individual-difference variables. The traits examined in this study included honesty/integrity and Machiavellianism. Additionally, two proxies for cognitive moral development (CMD) - age and experience - were included. None of these predictors showed an effect on buyer likelihood of opportunistic behavior except honest/integrity. The measurement of Machiavellianism suffered from low reliability and questionable construct validity, which may have impacted the results.

Also, age and experience do not tap the full domain of CMD; thus, a conclusion that CMD does not relate to buyers' choices to engage in opportunistic behavior is inappropriate. We can only infer that age and experience had no bearing on decisions in the contexts presented in the vignettes.

A buyer's honesty/integrity effectively curtailed his or her likelihood of choosing to behave opportunistically, but only within situations involving weak-form opportunism. This phenomenon may be explained by the tradeoff between the deontological norms and teleological evaluations made by individuals. Honesty/integrity represents a form of a deontological norm - a black and white moral standard. However, a high teleological cost/benefit ratio, assessed herein as subjective expected utility (SEU), may be what is required to cause individuals to violate a contract (strong opportunism). Hence, for some situations, SEU may be so great that any effects of honesty/integrity are overwhelmed.

Finally, as predicted by contingency theories of ethical decision making, the particular situation at hand is important. The teleological evaluation, operationalized as SEU, has a significant effect on buyer behavior in both forms of opportunism. In fact, in three of the four logistic regression models, SEU was the strongest positive predictor. Additionally, the form of opportunism, weak or strong, in each situation is an important factor in explaining buyer opportunism.

The purpose of this research was to enhance our understanding with respect to why buyers choose to behave opportunistically. The findings of this research at least partially alleviate the problem that motivated the research. The first research question sought to identify the factors that contribute to the individual buyer's decision to behave

opportunistically. According to these findings, buyers behave opportunistically because of the buyer's power position, the business sector in which the buyer works, pressure to perform on the job, leaders' opportunistic attitudes and behavior, the buyer's honesty/integrity trait, and the prospective net benefit (SEU) of the situation at hand. These factors were discoverable only by examining the individual - versus organizational - unit of analysis. The second research question pursued the identity of the factor with the greatest effect on the sourcing professional's decision to act opportunistically. This research identified the net benefit (SEU) as the single greatest contributor to the buyer's decision. The third research question inquired whether differences existed in the predictors of strong-form versus weak-form opportunism. The findings suggest that these predictors differ providing evidence that: (1) the strong-weak distinction between types of opportunism is meaningful and (2) that differing levels of moral intensity matter in a given situation. Attention now turns to the implications of these answers.

Theoretical Implications

This study makes six important contributions to our understanding of opportunism in buyer-supplier relations. First, this research integrates theories from two disciplines. Second, this study refines our understanding of how individual decision-making manifests in organizational-level phenomenon prescribed by TCE theory. Third, the findings of this research expand ethical decision-making models to include buyer-supplier relationship factors such as buyer power. Fourth, this study finds a meaningful distinction between strong and weak forms of opportunism. Fifth, a new measurement

scale to measure *pressure to perform* is offered for future use. Finally, this study identified business sector as an important variable to consider in ethics and marketing theories. Each of these contributions is expounded below.

This research explores, in one study, literature streams - such as marketing channels and ethics - known to impact ethical decisions in the context of buyer-supplier relationships. Thus, the relative effects of individual-difference variables, environmental factors, the situation at hand, power, and relational norms were able to be assessed. From this assessment, clearly, SEU dominated buyer decision making. SEU is a situational variable that is prescribed by the various contingency models of ethical decision making. Therefore, ethical theory, rather than buyer-supplier relationship theories (e.g., marketing channels), seems to provide the greatest explanation of the opportunism phenomenon. This finding supports the contention that research on opportunism should be conducted at the individual-level unit of analysis versus the that of the organizational level.

Second, the study supplements transaction cost economic (TCE) theory by: (1) analyzing opportunism at the individual's psyche level and (2) determining the factors that lead to a decision to employ opportunistic tactics. This, in turn, facilitates a better explanation of firm boundaries because predictors of opportunism - the driver of transaction costs - can be identified and assessed.

Third, this research expands the ethics literature by considering buyer-supplier relationship factors (from the TCE and channels literature), previously unaccounted for in the ethics literature. This study found that buyer power can influence buyers to violate contract terms (strong-form opportunism). Therefore, ethical decision-making

models, at least in the context of business-to-business interactions, should include buyer-supplier relationship factors as predictors of opportunistic behavior.

Finally, the study empirically contrasted strong versus weak opportunism (Luo 2006) and found that differences in moral intensity apparently affect buyer behavior. Therefore, Jones' (1991) theory of moral intensity, likely the *social consensus* and *temporal immediacy* components, was observed to apply to inter-organizational dyads. This research offers *moral intensity* as the underlying theoretical foundation for differences in types of opportunism, and finds that strong and weak types of opportunism are meaningful distinctions. Previous research (Wathne and Heide 2000) created a taxonomy of opportunism but it was supported neither by underlying theory nor quantitative empirical data.

This study also contributes to the efforts of future researchers. Though unintentional, a refined scale for the construct pressure to perform was developed. This scale differs from the original scale of Robertson and Rymon (2001) by measuring general job stress rather than threat to job security. In this sense, the new scale provided herein is applicable to government employees - who typically don't experience the same degree of threat to job security - and employees of for-profit firms. The three-item scale demonstrated sufficient reliability and construct validity; thus, it may be a useful measurement instrument for future research involving pressure to perform.

Finally, this research addressed an important gap in the body of marketing knowledge. Reid and Plank (2000) called attention to the mystery of marketing to government entities. This study peeks behind the curtain and uncovers key insights about the nature of government buyers, namely that they are less likely than their for-

profit counterparts to violate contracts (strong-form opportunism). This finding underscores the importance that government buyers place on written expectations. Additionally, that relational norms did not affect decision-making highlights the lack of emphasis on, and comparative importance of, relational norms among government buyers. The theoretical implication raised by this research is that business sector (i.e., government) may be a key moderator in relationship marketing causal relationships. Perhaps the same effects in a government setting may not be as strong.

Managerial Implications

In addition to the contributions to theory, the findings of this study should yield several benefits for procurement practitioners, both in the government and for-profit sectors. First, knowledge of the factors causing buyers to behave opportunistically should allow organizations' leaders to make more accurate judgments of what functions to insource rather than outsource. The findings of this research suggest that managers should be aware of the buyer's power position, the business sector, a buyer's perceived pressure to perform on the job, opportunism exhibited by leaders, buyers' honesty/integrity, and the potential net benefits of the situation at hand. A better estimate of the probability of opportunistic behavior, given conducive circumstances, should yield a more accurate estimate of monitoring and other control costs – a central tenet of TCE theory that affects the make or buy decision. A more accurate assessment of these transaction costs should result in a better decision.

Second, an understanding of the individual factors driving opportunistic behavior should enable organizational leadership to hire and appropriately assign sourcing talent

to manage particular groups of company spend. *Non-critical* spend includes purchased goods and services that: (1) do not contribute much to the organization's competitive advantage and (2) do not pose a risk to the organization's performance if delayed or absent. Because of these characteristics, suppliers of *non-critical* goods and services are best suited for transactional governance (Webster 1992). In contrast, s*trategic* spend involves goods and services that: (1) contribute substantially to the organization's competitive advantage and (2) pose a risk to the organization's performance if delayed or absent. These characteristics of *strategic* spend make it conducive to relational governance (Kraljic 1983). Thus, for those categories of spend where building and sustaining relationships with suppliers is paramount, the sourcing professionals hired or assigned to manage those relationships/contracts should be screened for relational traits such as honesty/integrity. Such relationships with suppliers are built on trust and commitment - relational norms that can be damaged by acts of opportunism. An individual buyer's honesty/integrity reduces the inclination to behave opportunistically. Thus, hiring authorities will want to know whether their candidates are adequately equipped to resist opportunism. Additionally, with respect to internal candidates whom management might want to promote, these results suggest that an organization should emphasize integrity in its developmental education and training.

In addition, leaders' awareness of the inter-firm, organizational, individual and situational factors driving opportunism will help leaders manage buyer-supplier relationships by knowing which factors to monitor. This study suggests that leaders will need to track the expected utility of situations where buyers could be tempted to behave opportunistically both involving potential contract violations (strong-form opportunism)

and potential non-contract, or relational norm, violations (weak-form opportunism). Since these opportunities appear frequently across the many contracts managed by sourcing professionals, these findings suggest that senior procurement executives should seriously consider the span of control of the sourcing manager. A sourcing manager cannot reasonably be expected to monitor all potentially-risky situations where he or she is accountable for either too many contracts/relationships or too many sourcing professionals. Notwithstanding, since SEU is the strongest factor influencing a likelihood of behaving opportunistically, managers must ask themselves why buyers, in a given situation, might perceive a net benefit of the opportunistic behavior. Is the leader's own incentive structure increasing the perceived payoff of such behavior? Where buyers are rewarded for short-term financial gains, opportunistic tendencies may prevail. The finding of this research that the net benefit (SEU) is paramount in buyer decision making suggests that leaders will need to examine how buyers are assessing SEU - that is, whether buyers are assessing SEU over the long term (which considers total cost ramifications) or the short term (which may be myopic).

The findings of this research suggest that the buyer's power position matters when contemplating an act of opportunism. As such, leaders should monitor the balance of power between the dyad. Relative positions of power/dependence change constantly with changes in the market, market share, and number of suppliers. Leaders should be aware of how individual buyers perceive their organization's power position and their propensity to leverage that power. Leaders must introspectively monitor their own behavior and the behavior of the organization at large. The ability to monitor and control propensities to act opportunistically should decrease instances of opportunism.

This, in turn, should increase relationship success by preserving relational norms and performance. By monitoring the factors that contribute to opportunism, and by not monitoring irrelevant factors, organizations can make the most effective use of scarce resources. Finally, monitoring factors that contribute to strong-form opportunism should enable leaders to prevent the risky behavior that could jeopardize the organization, particularly from litigation.

Another practical contribution of this research is the discovery that leaders can have a substantial impact on subordinates in at least three ways. First, when leaders behave opportunistically, the findings of this study suggest that followers mimic that behavior. Leaders cannot expect subordinates to do as they say, but not as they do. Clearly, leaders' attitudes and actions toward suppliers manifest in subordinates' behaviors. Not only do leaders' own behavior and words matter, but so does the emphasis they place on employees to deliver results. If leaders are not careful, opportunistic treatment of suppliers may be the buyer's shortcut to alleviate performance pressures.

Since differences were discovered across business sectors, there are also sector-specific implications. This study found that government buyers are more reluctant to engage in opportunism that results in a contract violation (strong-form). An examination of (1) the structure of government procurement and (2) the reward - and punishment - system of government procurement may help understand this finding. Government procurement procedures are tightly bound by statue and regulation. Because the government is a steward of public funds and, therefore, the public's trust, there also exists much oversight from internal and external agencies - making detection

of procedural violations plausible. Violations of policy, regulation, and public law can result in hefty legal or administrative punishment. Likewise, violations of explicit agreements are often detectable, and can result in serious consequences such as formal disputes and litigation. Consequently, in government procurement, the written contract is likely well-respected and relied upon as *the* primary governance mechanism - regardless of the type of spend. This transparency of government procurement coupled with the importance on the written agreement likely suppresses much of the opportunistic tendencies of buyers. Therefore, when dealing with the government and prior to contract formation, suppliers should advocate inserting the maximum detail of expectations into the written contract. In this sense, otherwise weak-form opportunism transforms to strong-form opportunism, and a natural insulation is built in. This protection is important considering the magnitude of the government sector of the economy. The federal portion alone accounted for 378 billion dollars awarded through 5.9 million contracts in fiscal year 2005 (Federal Procurement Report FY 2005).

As a general observation, more predictive factors were discovered for weak-form opportunism (five) than for strong-form (three). At first glance, this may appear disappointing since managers want to prevent contract violations due to their potentially-damaging consequences. However, weak-form opportunism may also have serious ramifications such as deteriorating relational norms. Since weak-form opportunism is more difficult to detect, buyers are not deterred by the threat of discovery and follow-on sanctions. Thus, weak-form opportunism should be more prevalent. It should be important to mitigate this otherwise more prevalent behavior that might compromise the organization.

Limitations

This study is not without weaknesses; it suffers from limitations common to survey methodologies and ethics research. First, a scaled dependent variable attempting to assess a choice given a scenario, in reality, can only approximate a behavioral intention. Whereas behavioral intentions are solid predictors of choice (Fishbein and Ajzen 1991), their correlation to an actual behavioral choice is less than 1.0. Thus, findings of significant factors contributing to choices to utilize opportunistic tactics in this study must be qualified as explaining behavioral intentions and not necessarily the behavior itself. This limitation renders the causal inferences that can be made from predictors to behavior less than perfect.

Second, the research design relied upon self-reported data from respondents. Where two or more constructs are measured by self-reports, the data may be contaminated by common method variance (CMV) (Podsakoff and Organ 1986). Podsakoff and Organ (1986) preferred research design remedies over post hoc statistical tests used to detect CMV. This research applied both. The design of the research employed the scale-trimming method of eliminating overlap in items measuring the independent and dependent variables. This was accomplished by measuring multi-item latent constructs as independent variables, but using an interval-scale single choice as the dependent variable. As a statistical test, Harman's one-factor test revealed that when all of the items were run in a single factor analysis, the unrotated solution did not result in a single factor, nor did it result in a general factor that accounted for most of the covariation (Podsakoff and Organ 1986). Based on the

research design defense mechanism employed and the results of the statistical test, the impact of CMV on this research is expected to be minimal.

Third, the response rate of 11.4% is contingent on accurate reporting from each company's focal point of contact. For example, if a purchasing executive reported that they would send the survey invitation to ten employees, but, actually sent it to more or fewer, the reported response rate would be inaccurate. However, since a small portion (30%) of the combined sample was collected using this methodology, any small deviations should not materially alter the response rate.

Fourth, the generalizability of the findings may be compromised by the low response rate. Nonetheless, multiple tests did not generate evidence of a non-response bias. An examination of the demographic data showed that a broad representation of industries, organizational sizes, type of organizations, buyer ages, buyer experience, and buyer gender. This evidence did not suggest that the generalizability of the study should be limited. Furthermore, low response rates in survey research are becoming commonplace (Larson 2005).

Fifth, without a completely random sample, a response bias is possible where the company point of contact is permitted to determine, based on undiscoverable criteria, the survey recipients. Thus, although improbable, it is plausible that survey candidates selected by organizational focal points of contact could have differed by some unmeasured demographic or trait resulting in a selection bias.

Sixth, the research design relied upon one vignette for each type of opportunism, weak and strong. As noted in chapter one, opportunism is broad; it may be manifested in many ways. Two vignettes can only examine two of these manifestations. It is

conceivable that different situations or opportunities to behave opportunistically may elicit different responses, particularly in light of the findings pertaining to hypothesis 12 - that predictors of strong-form and weak-form opportunism are different. Therefore, a strict interpretation may limit the study's generalizability to situations involving deceit or breach of contract (vignette involving altered quality control terms) and withholding information (vignette involving concealed intent to not renew a separate contract).

Finally, corporate ethical values (CEV) positively related to buyer's likelihood of strong-form opportunistic behavior. The direction of this relationship is opposite of that expected. This finding may be an artifact of the particular vignette chosen to represent strong-form opportunism rather than a true effect. The vignette involved a supplier who is delivering sub-standard product or service. The act of opportunism made available to the respondent was the option to unilaterally violate the contract by altering the inspection terms from random to targeted - in order to detect the supplier's non-conformances. This may have been a matter of reversed ethical values - that is, where the organization's expectation of high ethical values are extended as expectations onto the supplier. Perhaps respondents thought it consistent with corporate ethical values to catch a supplier that may be cheating the organization. This potential confound casts doubt on any inferences of the effect of CEV on the likelihood of opportunistic behavior.

Future Research Directions

Future research should follow and build upon the promising findings of this study. First, although the models exhibited good fit and several factors were found to significantly affect a buyer's likelihood of behaving opportunistically, the proportion of

variance explained was low. Thus, other unidentified factors may further explain buyer opportunistic behavior. One factor that might further explain opportunistic behavior is the trait *achievement motivation*, the degree to which individuals seek success, strive to get ahead, and assume responsibility for solving problems (McClelland 1961). Since it has been found that those who use opportunistic tactics obtain more personally favorable outcomes than those who do not (Aquino 1998), and since one's level of achievement motivation may direct his or her behavior (McClelland 1961), the effect of achievement motivation on opportunistic behavior is worth exploring. A study examining this effect could be designed either as a multi-variate analysis of survey data as employed herein or a field experiment - whose strengths are discussed next.

Second, note that this correlational study based on cross-sectional data is limited in its ability to detect causal relations. That several hypothesized constructs and variables were not found to be significant influencers of buyers' decisions to behave opportunistically does not necessarily mean that the non-significant factors do not affect the buyers' decisions. It could be that the survey methodology coupled with manufactured situations (i.e., the vignettes) could not elicit completely realistic responses. Future research should employ a stronger method of inference such as a field experiment. The research question might address whether the true effects of predictors on opportunistic behavior are actually stronger than that determined in this survey research. Perhaps a context closer to reality (than a short vignette) that provides more information could excite the subjects to assess the factors even more accurately.

Additionally, the present research only considered antecedents to a decision to

behave opportunistically. Future research should examine the consequences of the opportunistic actions at the individual unit of analysis. For instance, longitudinal research may help discern whether a pattern of decisions to behave opportunistically influences future decisions. Since prior success leads to continued behavior (Ouellette and Wood 1998), the success (or failure) of past opportunistic actions might be another factor influencing the buyer's decision to behave opportunistically in the future. One method for testing this relationship is a repeated survey separated by a period of time. While this method best captures a realistic context, it might be difficult to obtain a sufficient sample of individuals who have experienced successes or failures with uses of opportunism with similar consequences. Thus, a series of field experiments might be preferred.

Next, the mixed results in one aspect of this research, business sector, suggest that further research is necessary in order to fully understand differences between government and for-profit buyer behavior. This study found that where buyers indicated very strong tendencies either for or against strong and weak-form opportunism (polar extremes), government buyers were half as likely to engage in weak-form opportunism, but three times more likely to commit strong-form opportunism. These findings are opposite to that expected. However, they could be due to artifacts of the scenarios. The vignette representing strong-form opportunism involved a supplier who failed to meet quality standards. Perhaps government buyers perceived a greater entitlement to agreed-upon performance levels. If this was the case, future research should control for distributive justice. Further analysis (ANOVA) on the metric dependent variable without a dichotomous split revealed that when including all respondents, for-profit buyers had

materially higher tendencies to engage in strong-form opportunism. These results seem somewhat contradictory to those of the polar extremes analysis prompting further examination.

Future research should expand this study internationally. The research question would address whether the individual-level and organizational-level antecedents of opportunism differ due to cultural differences. Similar to the method adopted herein, cultural moderators could be explored using multi-variate analysis of cross-sectional survey data. Furthermore, a Web-based survey might prove particularly useful to reach distant populations. Marketing scholars have long-sought expanded international research (Steenkamp 2005). Such knowledge of international supply chain relationships is critical due to the perpetually-emerging global economy.

Another opportunity for further research involves the role of sellers. The knowledge base would be enhanced by a similar understanding of the sell side of the dyad. Future research should explore why sellers behave opportunistically toward buyers. These findings, coupled with the findings of this study, would permit an opportunism gap analysis that might serve as a useful independent variable affecting relationship success. Undoubtedly, there remains great opportunity to build on this research to further advance our understanding of buyer-supplier relationships and associated organizational performance.

Summary

A synthesis of theories from other disciplines - namely marketing channels and ethics - has proven useful in explaining why sourcing professionals may choose to

behave opportunistically toward suppliers. An inter-firm factor, buyer power, was found to affect the buyer's decision. In addition, organizational-environmental factors such as leadership opportunism, pressure to perform, and business sector were influential. Notwithstanding, a characteristic of the individual, honesty/integrity, related to the sourcing professional's likely behavior - confirming the appropriateness of examining opportunism at the individual unit of analysis. Finally, the situational variable, subjective expected utility, was found to be a strong predictor of opportunistic behavior.

This research contributes the identity of the aforementioned factors driving opportunistic behavior, and makes the following additional contributions. By integrating a variety of theories from distinct disciplines, this research was able to identify ethical decision-making theory as offering the greatest explanation of buyer opportunistic behavior. Finally, by examining strong and weak types of opportunism, this study found that the moral intensity of the situation affects buyer's likely behavior.

Through greater awareness and more understanding of these factors, organizational leaders may be able to exercise greater control and mitigate opportunistic behavior of its sourcing staff where appropriate. Consistent with TCE theory, such a feat could have a significant impact on the supply chain by lowering monitoring costs and, consequently, reducing the costs of exchange on the open market.

APPENDIX A

U. S. GOVERNMENT ACCOUNTABILITY OFFICE (GAO) BID PROTEST DECISIONS

JANUARY 2004 - OCTOBER 2006

Bid Decision	Date	Federal Agency	Product/ Service	Opportunistic Behavior Demonstrated	Synopsis - Report Excerpts
B-298411	19 Sep 06	Dept. of Defense - Washington Headquarters Service	Information Technology Hardware & Services	Withheld Information Shirked Obligations	1. Protester's contention that the agency conducted flawed discussions regarding price is sustained where (1) the agency corrected an error in the awardee's pricing; (2) the agency concluded that the awardee's price, as corrected, violated the solicitation's price target; (3) the agency advised the awardee in discussions that its price violated the solicitation's price target, though it did not, but never disclosed the upward adjustment it had made to correct the pricing error; (4) the awardee lowered its price in its final proposal, but repeated the pricing error it had made before; and (5) the agency selected that offeror for award after concluding that its significant price advantage offered the best value to the government. Thus, the record, as a whole, shows that the flawed discussions led the awardee to significantly lower its price, and the selection decision turned on the price differential between awardee and the protester. 2. Protester's contention that the agency failed to evaluate price proposals for completeness is sustained where the record shows that: (1) the solicitation expressly advised that price proposals would be assessed for completeness, including an assessment of the traceability of price estimates, and required that offerors submit detailed pricing data showing the traceability of those estimates in a work breakdown structure; (2) the agency never performed the completeness review; and (3) it is reasonable to conclude that, had it not been compelled to structure its proposal to comply with this solicitation requirement, the protester could have employed a different approach to structuring its proposal which could have resulted in a lower price. 3. Protester's contention that the evaluation of technical proposals was unreasonable is sustained where the record shows that the evaluation deviated from the stated evaluation criteria under one of the technical subfactors.
B-293518	29 Mar 04	Dept. of Health and Human Services	Education Services	Misled	Protest that published synopsis expressing an agency's intent to award a sole-source contract under simplified acquisition procedures was improper because the synopsis lacked necessary information is sustained where the synopsis did not accurately describe the agency's requirements. In light of the misleading notice used here, Information Ventures, as well as other potential contractors, was denied any realistic opportunity to compete for the agency's requirements.
B-293541	9 Apr 04	Dept. of Health and Human Services - National Institutes of Health	Research Services	Withheld Information Deceived	The record here also discloses that the agency's sole-source determination may not be reasonable. We first note in this regard that the agency has never synopsized its intent to make a sole-source award to Metaworks. Although the agency points out that it received no responses (other than the protester's) to the December 15 pre-solicitation notice, the agency also acknowledges that the pre-solicitation notice was misclassified as "medical services," rather than as "other scientific and technical consulting services." AR, Tab 1, Statement of Facts, at 4. The document that the agency terms a "revised notice" was, in actuality, an RFQ apparently issued only to IVI. Given these flaws, the agency's actions may have denied potential sources (other than the protester) the opportunity to respond to a proper synopsis of the agency's intended sole-source. This description, on its face, suggests that there are other providers of these services, and that the agency is aware of them.

Bid Decision	Date	Federal Agency	Product/ Service	Opportunistic Behavior Demonstrated	Synopsis - Report Excerpts
B-293435.2	2 Aug 04	General Services Administration	Operate National Customer Support Center for Federal Supply Schedule Users (Make or Buy Cost Study)	Misled	Notwithstanding this document indicating the MEO's intended staffing levels, the record shows that the MEO affirmatively represented to the technical evaluators that it was using 38.5 FTEs to perform the requirement, which was inconsistent with the 34.5 FTEs used to calculate the MEO's cost (there is no dispute that, at least in the initial cost comparison, only 34.5 FTEs were used to calculate the MEO's cost). In this connection, the narrative portion of the TPP specifically describes the MEO's proposed staffing as including 38.5 employees. AR, exh. 28, at 9-10. In order to meet the PWS requirement for a call monitoring program, the MEO proposed a program purportedly based on meeting the ANSI/ASQ standard, and in doing so created the impression that its proposed sample size was consistent with that standard, when this in fact was apparently not the case. Had the evaluators been aware that the proposed sample size was significantly below that called for under the ANSI/ASQ standard, they may not have found that the MEO's proposed quality control program met the requirements of the PWS. As noted, we find that the agency unreasonably evaluated the MEO's TPP based on a higher level of staffing than was included in the calculation of the cost of in-house performance, and also may not have properly considered the adequacy of the proposed level of staffing for the MEO's quality control program.
B-294572	1 Dec 04	Dept. of Agriculture - Forest Service - National Recreation Reservation Service	Development, Provision, & Operation of a Reservation System	Withheld Information	We also note that to the extent that the agency believed Spherix's approach to the marketing plan requirement was inadequate (the SSET's briefing slides identified this to be a "significant weakness"), this should have been, but was not, raised with Spherix during discussions. Given Spherix's substantial price advantage, any narrowing of the difference in perceived difference in technical quality between Spherix's and ReserveAmerica's proposal could result in a different selection decision. In this respect, the SSA admitted that he may have made a different selection decision if "ReserveAmerica [did] not provide sufficient value to bridge the gap between the cost differences."20 See Tr. at 126. As a result, we conclude that the flaws in the evaluation of proposals prejudiced Spherix, and we therefore sustain this basis of Spherix's protest. It is a fundamental precept of negotiated procurements that discussions, when conducted, must be meaningful; that is, discussions may not mislead offerors and must identify deficiencies and significant weaknesses in each offeror's proposal that could reasonably be addressed in a manner to materially enhance the offerors potential for receiving award.
B-292836.1	24 Nov 04	Dept. of Housing & Urban Development	Information Technology Services	Withheld Information	In view of the foregoing, we sustain LMC's protest on grounds that the agency improperly engaged in post-FPR discussions with EDS, but not LMC, and otherwise failed to provide LMC with meaningful discussions.

Bid Decision	Date	Federal Agency	Product/ Service	Opportunistic Behavior Demonstrated	Synopsis - Report Excerpts
B-295401.8	24 Feb 05	Dept. of Defense - U.S. Air Force	C-130 Avionics Modernization	Cheated Misrepresented Facts Covered Up Dishonesty	Where a senior procurement official who functioned as the source selection authority has acknowledged bias in favor of the awardee, and was materially involved in the evaluation of proposals, indicating during the evaluation process that she believed the awardee's technical ratings should be raised in various areas and that the protesters' technical ratings should be lowered in various areas, the protests are sustained based on the agency's failure to demonstrate that the senior official's acknowledged bias did not prejudice the protesters and that the integrity of the procurement process was not compromised. Protests are sustained where, following submission of final proposal revisions, the agency reopened discussions in order to permit the ultimate awardee to address an aspect of its proposal that was contrary to instructions previously given by the agency during discussions, but failed to identify similar concerns with the proposals of the protesters. On February 23, while the evaluation was still ongoing, the contracting officer sent the evaluators an e-mail, carrying the subject heading "Database Cleanup/Organization," directing the evaluators to "clean up" and "delete" various portions of the evaluation record. We similarly reject the agency's assertion that "the evaluation process was conducted properly." As discussed above, the agency clearly failed to treat offerors fairly with regard to discussions.
B-293348	4 Mar 04	Dept. of Justice - Federal Bureau of Prisons	Provide a Residential Comprehensive Sanction Center in Nashville, TN	Withheld Information	Based on the hearing testimony and the documentation in the record, we find that the SSA was not presented with an accurate summary of the offerors' evaluated past performance to support his cost/technical tradeoff judgment.
B-293679	27 May 04	Dept. of Defense - U.S. Army	System Development & Demonstration for XM395 Precision Guided Mortar Munition	Withheld Information	Neither the language of the solicitation, nor the information provided by the agency during discussions, reasonably placed the offerors on notice that "contractorspecific" savings would have no effect on the agency's calculation of AUPC. Further, the agency clearly knew, or should have known, that Lockheed's initially proposed AUPC was based on "contractor-specific" costs, including the costs associated with the proposed [deleted]; yet the agency failed to advise Lockheed during discussions that such costs would be replaced with "industry rates" in calculating the evaluated AUPC.

Bid Decision	Date	Federal Agency	Product/ Service	Opportunistic Behavior Demonstrated	Synopsis - Report Excerpts
B-293824.2	8 Oct 04	Dept. of Defense - U.S. Navy	Maintenance & Repair of Military Family Housing	Withheld Information	Based on this information, the protester's comments on the agency report included the allegation that the Navy had provided Eastern with an unfair competitive advantage in the reopened competition when it informed Eastern, during its post-award debriefing, that the RFP requirements would probably not be removed under the PPV program during the life of the contract. According to the protest, the Navy should have disclosed this information to all the offerors when it reopened the competition.7 It is a fundamental principle of competitive negotiations that offerors must be provided with the same statements of the agency's requirements so as to provide a common basis for the submission of proposals. Union Carbide Corp., B-184495, Feb. 26, 1976, 76-1 CPD ¶ 134. The Navy asserts that the information it provided Eastern did not in any way change the terms of the solicitation since the solicitation did not discuss the PPV schedule and thus that it did not provide Eastern with a competitive advantage. The information given to Eastern concerning the PPV program, however, was clearly material for purposes of proposal preparation since it provided additional information concerning an important aspect of the agency's requirements.8 The RFP expressly identified the risks associated with the PPV program--the fact that contract requirements may be eliminated--and warned offerors that the costs of eliminating requirements due to the PPV program would not be negotiated. Thus, as SYMVIONICS notes, a reasonable offeror would have factored the risk of PPV implementation into its prices. [Deleted]. SYMVIONICS further notes that the Navy has eliminated hundreds of housing units under two SYMVIONICS contracts as well as an entire contract for 3,300 housing units, as a result of the PPV program. Because Eastern knows that the risk associated with the PPV program is minimal in this instance, it can more accurately reflect this risk in its pricing in the recompetition.
B-294974.4	8 Jun 05	Dept. of Justice - Drug Enforcement Administration	Hazardous Waste Cleanup Services	Shirked Obligations	We find that DEA's use of BPAs to fulfill its hazardous waste cleanup requirements failed to comply with applicable competition requirements in several regards. First, the choice of vendors with whom DEA established BPAs was noncompetitive and apparently based upon the personal preference of local agency personnel. DEA also viewed the establishment of BPAs as a form of "down-select" that effectively determined which vendors the agency would exclusively consider and utilize to meet its hazardous waste cleanup requirements. See OMNIPLEX World Servs. Corp., supra. Lastly, DEA's subsequent decision to noncompetitively issue purchase orders to select BPA holders was not consistent with the applicable standard--obtaining competition to the maximum extent practicable. In sum, as asserted in Envirosolve's earlier protest, the record shows that DEA failed to adhere to applicable competition requirements in its procurements here. In addition, DEA failed to promptly implement its proposed corrective action, effectively requiring the protester to file a second protest, and thereby defeating the goal of resolving protests economically and expeditiously.

Bid Decision	Date	Federal Agency	Product/ Service	Opportunistic Behavior Demonstrated	Synopsis - Report Excerpts
B-293073.1	16 Mar 05	Dept. of Defense - U.S. Army	Information Technology Support Services	Withheld Information	While an agency is not required to "spoon-feed" an offeror during discussions as to each and every item that could be revised to improve its proposal, see ITT Fed. Sys. Int'l Corp., B-285176.4, B-285176.5, Jan. 9, 2001, 2001 CPD ¶ 45 at 6, agencies must impart sufficient information to afford offerors a fair and reasonable opportunity to identify and correct deficiencies, excesses or mistakes in their proposals. Matrix Int'l Logistics, Inc., B-272388.2, Dec. 9, 1996, 97-2 CPD ¶ 89 at 9. In this case, we conclude that CITI could not be reasonably expected to have understood the true nature and magnitude of the agency's concern with its proposal based upon the information provided by the Army during its discussions with CITI, thus rendering those discussions essentially meaningless. By informing CITI only that its total price was "overstated," the Army failed to convey, in any meaningful way, the magnitude of the disparity in prices. Moreover, by characterizing the issue simply as one of price, the agency failed to address the underlying cause of CITI's unreasonable pricing9 As a consequence, CITI could not reasonably have understood the agency's concern with its proposal or the fact that its proposal required fundamental changes in order to have a reasonable chance of being selected for award. Accordingly, the agency's discussions were not meaningful.
B-297616	14 Feb 06	Dept. Of Energy	Guidance Development Services	Withheld Information Misled Shirked Obligation	The protesters both argue that the synopsis did not indicate that any of these matters needed to be addressed in their respective responses. Thompson argues that "were Thompson given the chance [it] could demonstrate expertise in all of these topics," A synopsis must provide an "accurate description" of the property or service to be purchased and must be sufficient to allow a prospective contractor to make an informed business judgment as to whether to request a copy of the solicitation. Here, the notice, as issued, did not meaningfully describe DOE's requirements. Moreover, DOE compounded the shortcomings of this particular notice by providing no information on the availability of a statement of work and by stating in the synopsis that the notice "is for informational purposes only and is no a request for proposals or other information." Cf. 41 U.S.C. § 416(b)(4); 15 U.S.C. § 637(f); FAR § 5.207(c)(15).9 The protesters and the Small Business Administration (SBA) argue, and we agree, that the language of the synopsis discouraged, and may have been intended to discourage, responses.
B-297758	1 Mar 06	Dept. of Health & Human Services - Center For Disease Control	Assistance & Technical Support Services	Misled	IVI also contends that the cost realism adjustments were unreasonable because the agency misled it during discussions. Although neither of the written discussions questions specifically directed IVI to reduce its proposed hours for the project director position, IVI contends that the agency indicated during an August 19, 2005 telephone conversation that the agency anticipated a reduced role for the project director: As discussed above, IVI and BRI each reduced the number of hours proposed for the project director position after discussions with the agency. Normalization involves the adjustment of offers to the same standard or baseline where there is no logical basis for a difference in approach or where there is insufficient information provided with the proposals, leading to the establishment of common "should have bid" estimates by the agency. See The Research Found. of State Univ. of New York, B-274269, Dec. 2, 1996, 96-2 CPD ¶ 207 at 5. Normalization is not proper, however, where varying costs between competing proposals result from different technical approaches that are permitted by the RFP.

Bid Decision	Date	Federal Agency	Product/ Service	Opportunistic Behavior Demonstrated	Synopsis - Report Excerpts
B-296855.2	16 Nov 05	Dept. Of Labor	Construction Services	Withheld Information	In our view, DOL did not act reasonably in determining that Odyssey's spreadsheets were not in good order and did not provide clear and convincing evidence of Odyssey's intended bid. DOL's reversal of its initial decision permitting Odyssey to upwardly correct the bid was based upon what DOL regarded as possible additional mistakes in the spreadsheets beyond the one Odyssey claimed. Under FAR § 14.407-1, in cases of apparent mistakes and in cases where the contracting officer has reason to believe that a mistake may have been made, the contracting officer is required to request from the bidder a verification of the bid, calling attention to the suspected mistakes. Since DOL suspected other mistakes in Odyssey's bid than the one Odyssey was requesting to correct, consistent with FAR § 14.407-1, it should have requested further verification of Odyssey's bid price, and called Odyssey's attention to the suspected mistakes in its spreadsheets. In this regard, FAR § 14.407-3(g)(1)(iv) provides that to ensure that the bidder will be put on notice of mistakes suspected by the contracting officer, the bidder should be advised as appropriate "of any other information, proper for disclosure, that leads the contracting officer to believe that there is a mistake in bid." See Enco Dredging, B-284107, Feb. 22, 2000, 2000 CPD ¶ 44 at 6. Here, the agency did not advise Odyssey of these additional suspected mistakes prior to rejecting Odyssey's request for correction (which effectively served as a rejection of Odyssey's bid).
B-297444.2	13 Apr 06	National Science Foundation	Visual Information Support Services	Cheated Shirked Obligations Disguised Preferences	As discussed above, DRC clearly stated in its quotation that it did not intend to comply with the on-site requirement for at least one of the web page designer/developer positions, and the record establishes that the agency clearly recognized this aspect of DRC's quotation; yet, the agency evaluated the personnel proposed to fill these positions as constituting a "Significant Strength." Further, in performing the contract, none of the personnel DRC proposed to perform either of the two web page designer/developer positions has ever performed on-site. Finally, as noted above, LAI maintains that, had it been permitted to similarly propose off-site personnel to fill these positions, it could have proposed more qualified personnel. On this record, it is clear that the agency permitted DRC to propose to perform the contract requirements on a basis that was materially different than that required by the solicitation. That is, the agency effectively relaxed the solicitation's stated requirements for on-site performance without providing an opportunity for the other competing firms to submit quotations on a similar basis.

APPENDIX B

INTERVIEW GUIDE

Name (optional): _____

Employer (optional): _____
Years experience in procurement: ____
Types of products/services/construction that you have managed:
_____
_____
_____
****

1. Do you believe that *ethics* is an important topic in procurement? **YES NO**
If yes, why? _____
In no, why not? _____

Do you believe that the choice of tactics used in communicating with suppliers can be an ethical decision?
_____
_____
_____
_____

2. Consider the following list of tactics sometimes used in communications with suppliers:
   a. lying
   b. stealing
   c. cheating
   d. breach of contract
   e. dishonesty
   f. distorting data
   g. obfuscating issues
   h. confusing transactions
   i. false threats
   j. false promises
   k. cutting corners
   l. cover ups
   m. disguising attributes or preferences
   n. withholding information
   o. deception
   p. misrepresentation
   q. using a situation to further your own interest at the expense of the supplier using whatever means available
   r. exaggerating the extent of the damage caused to your firm by the supplier in order to extract concessions from them.
   s. not being willing to adapt the contract to accommodate changing circumstances
   t. not sharing information with suppliers
   u. altering the facts slightly in order to get what you need from you suppliers

v. shirking certain contractual obligations to your supplier when you see profit opportunities from doing so
w. neglecting your responsibilities when your supplier is not likely to notice the noncompliance

Do you believe all of these examples of ethical issues are equally bad - as they pertain to use with a supplier? **Yes No**
Explain: _____
_____

3. If you had to place each of the tactics above into one of three buckets, labeled "very bad" "somewhat bad," and "depends on situation," in which bucket would you place each? (place letters on lines below.)

very bad: _____
somewhat bad: _____
depends on situation: _____

4. When you face an ethical situation, what factors do you consider in making your decision?
_____
_____
_____
_____

5. Do you think that the magnitude of the payoff (benefit) of using any of the tactics above might influence your decision to use the tactic? **Yes No**

6. Do you believe that pressure from your organization to deliver results (e.g., fear for your job, pay, promotion opportunity) might influence your decision to use any of the tactics above? **Yes No**

7. If you observed your leaders (supervisor, or senior executives) using any of the tactics above, might you be more inclined to also use any of the tactics above? **Yes No**

8. If your firm never punished any sourcing professionals for using any of the tactics above, might you be more inclined to also use any of the tactics above? **Yes No**

9. Does your firm have a code of ethics or a procurement ethics policy that explicitly addresses all of the tactics above? **Yes No.**

10. Which of the tactics above are not covered explicitly by your firm's code of ethics or procurement ethics policy?
_____
_____

11. Do you believe that your firm leadership expects you to use any of the tactics in #2 above in order to secure the best terms (price, performance, etc.) for the firm? **Yes No**

12. Of the tactics in #2 above, which ones would you likely be punished for using if you were discovered using it? _____

13. Do you believe that one's morals or personally-held values might prevent them from ever using some or any of the above tactics above? **Yes No**

14. Do you believe that younger sourcing professionals are more likely to use the tactics above than are older sourcing professionals? **Yes No**

15. Do you believe that people who prioritize self-interest above anything else are more likely to use the tactics above? **Yes No**

16. Would you be more inclined to use the tactics above on a supplier (i.e. a business) versus on a co-worker or any other individual? Hence, is it more acceptable to use the tactics above on another firm as an agent representing your firm than it is for you to use the tactics above on another individual person from you personally (representing yourself)? **Yes No**

17. Do you believe that if the stakes are high enough, anyone will:
    lie: **Yes No**
    cheat: **Yes No**
    steal: **Yes No**
    mislead: **Yes No**
    withhold information: **Yes No**
    bluff: **Yes No**
    make idle threats: **Yes No**
    slightly alter facts: **Yes No**
    deceive: **Yes No**
    cover up: **Yes No**
    shirk responsibilities: **Yes No**
    violate a contract term: **Yes No**
    violate an unwritten understanding w/ a supplier: **Yes No**

18. Do you believe that, independent of the nature of what you are purchasing, there is a fundamental difference in the way sourcing professionals view suppliers such that some have a general tendency to always view suppliers as partners (relational), whereas some have a general tendency to always view suppliers only as third parties who are obligated to fulfill contractual terms (transactional)? **Yes No**

19. Read the following hypothetical scenario.

    Your organization has recently experienced a cash-flow crisis, and therefore, cash flow has become an important emphasis by senior leadership in all functional areas. Each employee is expected to help improve the cash-flow crisis. You could help by altering the payment terms in the contract with Supplier X. Currently, the contract states that payment terms are net 30 days, but you consider contacting Accounts Payable (or Finance) and advising them

**not to pay invoices until at least 60 days from receipt of the invoice. Your annual spend with Supplier X is substantial. Over the course of a year, your firm's delayed payments to Supplier X will likely cost them $300,000 in borrowing costs and lost short-term investment opportunities.

**

[NOTE: If you work in government, substitute a budget crisis for a cash-flow crisis.]

What do think would be some consequences to your organization (negative & positive) of delaying payments to your supplier?

_____
_____
_____
_____

Think of your closest coworker in purchasing. What is the probability that this coworker would choose to delay the payments to net 60 days?

1 - Very low probability
2
3
4 - 50/50
5
6
7 - Very high probability

Was the scenario easy to read? **Yes No**
Was the scenario easy to understand? **Yes No**
Do you think it took too much time to read? **Yes No**

20. Read the following hypothetical scenario.

Recently, your organization levied specific cost-savings goals on you. You are leading a negotiation to purchase a large quantity of widgets. Supplier X is your incumbent supplier. There are at least two other viable sources for these widgets that can meet your organizations' needs. Though you are negotiating with all three, you don't intend to switch suppliers. The incumbent supplier currently has one other contract with your firm to supply a separate product. This other contract expires soon, and the supplier expects it to be renegotiated. You believe that this other contract is a somewhat important source of revenue and profit to Supplier X. You have heard that your organization's product line is changing; thus, your organization likely won't need to renegotiate this other contract. The supplier is unaware of this potential situation. You don't think the supplier can replace the revenue from the lost contract in the near term; thus, the supplier's overhead is likely to consume most of the profit on the immediate contract you are negotiating for widgets. You expect that Supplier X will still make a 2% profit on the widgets if the other contract is dropped, but this is less than the 10% that Supplier X anticipates. You consider not disclosing the possibility of your organization dropping the other contract.

What do you think would be some consequences to your organization (negative & positive) of deciding not to disclose the possibility of dropping the other contract?

_____
_____
_____

Think of your closest coworker in purchasing. What is the probability that this coworker would choose to withhold the information about the possible lost contracts?
1 - Very low probability
2
3
4 - 50/50
5
6
7 - Very high probability

Was the scenario easy to read? **Yes No**
Was the scenario easy to understand? **Yes No**
Do you think it took too much time to read? **Yes No**

21. Read the following hypothetical scenario.

You are currently in the 4th year of a 5-year contract with a supplier/contractor. The contract specifically states that you will conduct random inspections of products and/or services. Thus, only a certain percentage of the work will be inspected, and all work has an equal chance of being randomly chosen for inspection. However, during the last 2 years, the suppliers' quality has declined – often to deficient levels. Recently, your supervisor has emphasized a need for higher quality output to your customers. Your supplier's defective performance costs you time to correct the errors and delays your customer receiving what he or she needs. You consider conducting inspections at non-random dates/times in order to catch more deficiencies. Discovering deficiencies early during inspections rather than later on significantly reduces the costs to your organization and improves the quality of the product or service that you deliver to your customers. You also believe that the targeted, non-random inspections will uncover more defects, necessitating corrective rework that will be costly to the supplier. You estimate that the rework will reduce the supplier's margin on the contract from 10% to 2%. The supplier has no way of knowing that inspections are no longer random.

What do you think would be some consequences to your organization (negative & positive) of deciding to alter the inspections from random to targeted?

_____
_____
_____

Think of your closest coworker in purchasing. What is the probability that this coworker would choose to alter the inspections from random to targeted?
1 - Very low probability
2
3
4 - 50/50

5
6
7 - Very high probability

Was the scenario easy to read? **Yes No**
Was the scenario easy to understand? **Yes No**
Do you think it took too much time to read? **Yes No**

22. Do you believe each of the following tactics is an ethical issue:
lie: **Yes No Maybe**
cheat: **Yes No Maybe**
steal: **Yes No Maybe**
mislead: **Yes No Maybe**
withhold information: **Yes No Maybe**
bluff: **Yes No Maybe**
make idle threats: **Yes No Maybe**
slightly alter facts: **Yes No Maybe**
deceive: **Yes No Maybe**
cover up: **Yes No Maybe**
shirk responsibilities: **Yes No Maybe**
violate a contract term: **Yes No**
violate an unwritten understanding w/ a supplier: **Yes No**

If you answered "maybe" above, on what does your decision depend?

_____
_____
_____

23. Had I presented the questions found in this document to you in a survey (vs. this interview format), do you think you would answer them honestly? **Yes No**
Can you think of any reason you would not be completely honest in answering these questions?

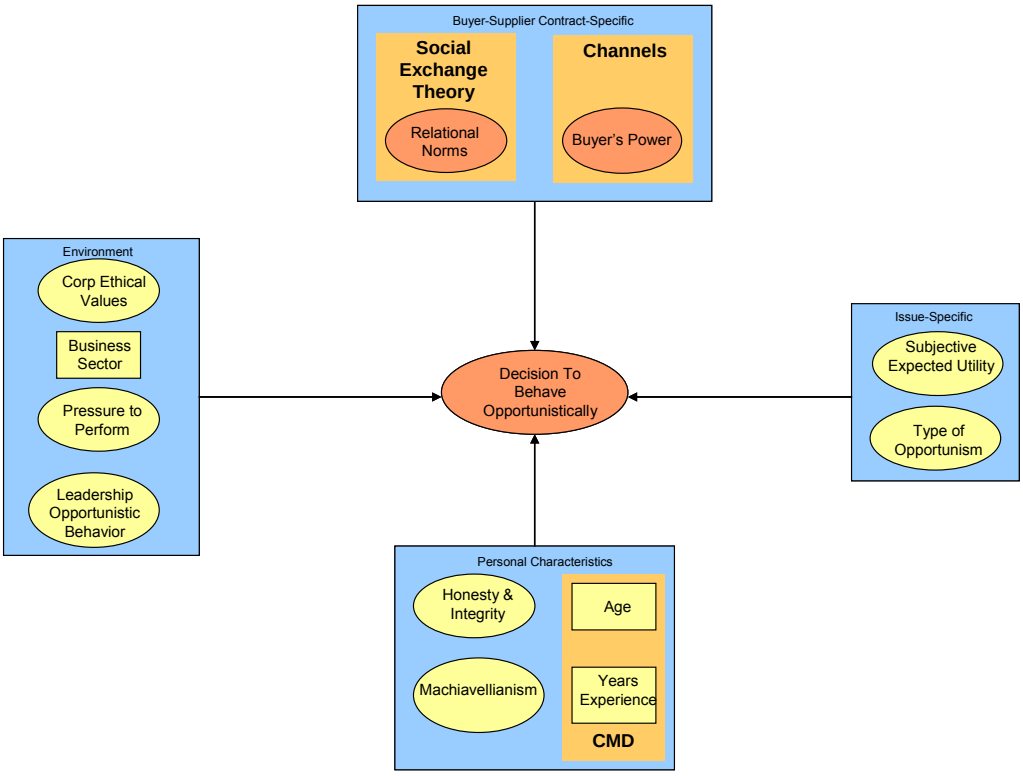
_____
_____
_____

24. Consider the conceptual model below. This depicts factors that may contribute to a buyer's decision to act opportunistically toward a supplier. Opportunistic acts are those that are motivated by self-interest, with an intent to do harm to a supplier. Do you believe these factors are the primary decision drivers? If not, what other factors might be relevant? Hence, what else might cause you to act opportunistically toward a supplier?

_____

_____

_____



APPENDIX C

MANIPULATION CHECK SURVEY

Scenario Evaluation

Please read the two scenarios below.

Scenario 1:
You are currently in the 4th year of a 5-year contract with a supplier/contractor. The contract specifically states that you will conduct random inspections of products and/or services. Thus, only a certain percentage of the work will be inspected, and all work has an equal chance of being randomly chosen for inspection. However, during the last 2 years, the suppliers' quality has declined – often to deficient levels. Recently, your supervisor has emphasized a need for higher quality output to your customers. Your supplier's defective performance costs you time to correct the errors and delays your customer receiving what he or she needs. You consider conducting inspections at non-random dates/times in order to catch more deficiencies. Discovering deficiencies early during inspections rather than later on significantly reduces the costs to your organization and improves the quality of the product or service that you deliver to your customers. You also believe that the targeted, non-random inspections will uncover more defects, necessitating corrective rework that will be costly to the supplier. You estimate that the rework will reduce the supplier's margin on the contract from 10% to 2%. The supplier has no way of knowing that inspections are no longer random.

Scenario 2:
Recently, your organization levied specific cost-savings goals on you. You are leading a negotiation to purchase a large quantity of widgets. Supplier X is your incumbent supplier. There are at least two other viable sources for these widgets that can meet your organizations' needs. Though you are negotiating with all three, you don't intend to switch suppliers. The incumbent supplier currently has one other contract with your firm to supply a separate product. This other contract expires soon, and the supplier expects it to be renegotiated. You believe that this other contract is a somewhat important source of revenue and profit to Supplier X. You have heard that your organization's product line is changing; thus, your organization likely won't need to renegotiate this other contract. The supplier is unaware of this potential situation. You don't think the supplier can replace the revenue from the lost contract in the near term; thus, the supplier's overhead is likely to consume most of the profit on the immediate contract you are negotiating for widgets. You expect that Supplier X will still make a 2% profit on the widgets if the other contract is dropped, but this is less than the 10% that Supplier X anticipates. You consider not disclosing the possibility of your organization dropping the other contract.

1) In each scenario above, you were presented with a situation where you needed to make a decision. List any fundamental differences you notice between the context (setting) of the decisions in the two scenarios above. Re-read the scenarios, and spend about 10 minutes pondering differences.

_____
_____
_____
_____
_____
_____

APPENDIX D

COMPANY SUPPORT SOLICITATION

[Inserted salutation Mr. or Mrs.] [Inserted last name],

I'm seeking help from industry. I'm still on active duty, but now at the Univ. of North Texas working on my dissertation for a Ph.D. in marketing & logistics. For the dissertation effort, I'm exploring why buyers behave opportunistically toward suppliers. I'm requesting your help in this regard.

My goals are to make your support:
• Quick (15 minute survey completed by your sourcing professionals)
• Simple (Web-based survey with email invitation)
• Risk free (completely anonymous respondents)

Support needed: Either
1) Help me forward an email survey invitation to your purchasing professionals that actively select suppliers and manage supplier relationships/contracts.
OR
2) Provide a list of email addresses of your sourcing professionals such that I can invite them to the survey directly

I will gladly fill you in on the specifics of the research if interested. Also, I will commit to sharing research results with you and each respondent that requests a copy. Would you be willing to assist my research efforts? If so, roughly how many purchasing professionals can you help me send the email invitation to?

Respectfully,

Maj Tim Hawkins

APPENDIX E

SURVEY INVITATION

[Inserted salutation Mr. or Mrs.] [Inserted last name],

Thank you for participating in this research. As a doctoral candidate at the University of North Texas, I am exploring the dynamics involved in buyer-supplier relationships. Participation from professionals, such as you, is very important for the success of this research. Your perspective will help contribute to our incredibly-important discipline - purchasing and supply management. Click on the link below to access the survey. I am preferably looking for responses by mid-December.

[Inserted survey hyperlink]

What's in it for you?
In appreciation of your participation, I will be happy to send you a report identifying: (1) factors influencing buyers to use certain tactics with their suppliers, and (2) information as to how supply chain professionals can optimize buyer-supplier relationships. Please note that this report will contain descriptive statistics based on collective responses of all participating companies; no individual response data will be published. Your response will be completely anonymous. None of the information put in the survey can be traced back to any individual nor to any company/organization.

Thank you for your time, and I sincerely hope that you will participate in this effort. Individuals such as you help researchers to advance both the theory and practice of purchasing and supply chain management. If you have any questions, please contact me at hawkinst@unt.edu or (xxx)-xxx-xxxx.

Kind Regards,

Tim Hawkins, Maj, USAF, C.P.M., CPCM

Note: Should you experience any technical difficulty accessing the survey, take a look at the URL and ensure there are no blank spaces in the address. Also, if you have to cut and paste the URL into your Internet browser, ensure none of the URL is cut off.

****

If you agree to take part in this study, you will be asked complete a questionnaire that will take approximately 15 minutes to complete. Completion of the survey involves no foreseeable risks. Participation is voluntary and you may stop at any time. Your name will not be requested in this study, so your responses will be anonymous. All research records will be kept confidential by the Principal Investigator. No individual responses will be reported to anyone because data will be reported only on a group basis. Completion of the survey constitutes your consent to participate. If you have any questions regarding this study, please contact Tim Hawkins, Univ. of North Texas, College of Business Administration, Dept. of Marketing & Logistics, at

hawkinst@unt.edu, xxx-xxx-xxxx, or Dr. Terry Pohlen, pohlen@unt.edu 940-565-2367. This project has been reviewed and approved by the University of North Texas Institutional Review Board (IRB). Please contact the UNT IRB at 940-565-3940 with any questions regarding your rights as a research subject. You may print a copy of this Informed Consent Notice for your records.

****

APPENDIX F

FOLLOW-UP NOTICE

Dear [Inserted salutation Mr. or Mrs.] [Inserted last name],

Thank you for your participating in my research study. I need several more responses to achieve the required response rate. For those of you who have not been able to respond just yet, please take a few minutes and complete the survey. For those of you who have already responded, thank you much!
As a reminder, I am conducting a study to better understand the dynamics involved in buyer-supplier relationships.

In appreciation of your participation, I will be happy to send you a report identifying factors influencing buyers to use certain tactics with their suppliers. Just reply to this message to request the summary report. Again, this report will contain descriptive statistics based on collective responses of all participating organizations; no individual response data will be published. Your response will be completely anonymous. None of the information put in the survey can be traced back to any individual nor to any company/organization. Thank you for assisting me in this valuable study required for the
completion of my degree.

To access the online survey, please click the following link:

[Inserted survey hyperlink]

(or copy and paste to your Web browser.)

Alternatively, if you prefer a hard copy of the survey and return envelope, please reply to this email.

Thank you for your time.

Kindest Regards,

Tim Hawkins, Maj, USAF, C.P.M., CPCM
Ph.D. Candidate
Department of Marketing & Logistics
University of North Texas

APPENDIX G

QUESTIONNAIRE

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Examining Buyer-Supplier Relationships

Dear Respondent, **thank you** for participating in this survey, and supporting my dissertation research. The quality of this research begs input from experienced professionals such as yourself. Specifically, this research will help us understand some of the dynamics involved in buyer-supplier relationships

Some of the questions below pertain to tactics commonly used in communications with suppliers. Please answer the questions honestly and as accurately as possible. Note that your response is completely anonymous -- answers cannot possibly be traced back to you.

You will be presented 2 hypothetical scenarios, followed by a series of questions related to the scenarios. Then, after the page break, you will be presented several questions independent of the scenarios.

Note that the term "supplier" is synonymous with the term "contractor." Also note that "construction" may be considered "services."

Question sets 1 and 2 below are specific to one supplier relationship of your choosing. Choose only one supplier (Supplier X) and answer both sets of questions with the chosen supplier in mind. Think of a supplier relationship/contract that you currently manage and have managed for at least the past three months.

[a]1) For the following five statements, please indicate the extent to which you agree or disagree.

The vendor we chose gave us a better deal than most of their other customers.

□ 1 Strongly Disagree □ 2 □ 3 □ 4 □ 5 □ 6 □ 7 Strongly Agree

In terms of our negotiating strength, we didn't have much "clout."

□ 1 Strongly Disagree □ 2 □ 3 □ 4 □ 5 □ 6 □ 7 Strongly Agree

We had much bargaining power in this purchase situation.

□ 1 Strongly Disagree □ 2 □ 3 □ 4 □ 5 □ 6 □ 7 Strongly Agree

The suppliers were really competing to make this sale to us.

□ 1 Strongly Disagree □ 2 □ 3 □ 4 □ 5 □ 6 □ 7 Strongly Agree

The supplier was really motivated in making this sale to us.

□ 1 Strongly Disagree □ 2 □ 3 □ 4 □ 5 □ 6 □ 7 Strongly Agree

Additional Comments: _____

[b]2) Please rate each statement below as it pertains to Supplier X.

The relationship is based on mutual benefit and trust.

□ 1 Strongly Disagree □ 2 □ 3 □ 4 □ 5 □ 6 □ 7 Strongly Agree

When disagreements arise in the relationship, all facts are reassessed to try to reach a mutually satisfactory compromise.

□ 1 Strongly Disagree □ 2 □ 3 □ 4 □ 5 □ 6 □ 7 Strongly Agree

The relationship is flexible in accommodating one another if special problems/needs arise.

□ 1 Strongly Disagree □ 2 □ 3 □ 4 □ 5 □ 6 □ 7 Strongly Agree

The relationship extends across many complex responsibilities and multiple tasks.

□ 1 Strongly Disagree □ 2 □ 3 □ 4 □ 5 □ 6 □ 7 Strongly Agree

Staying together in the face of adversity/challenge is very important to both firms.

□ 1 Strongly Disagree □ 2 □ 3 □ 4 □ 5 □ 6 □ 7 Strongly Agree

Additional Comments: _____

3) How would you classify the product or service that Supplier X provides to your organization?

□ **Non-critical/Generics** (Many Suppliers to choose from; Product/service they provide are NOT critical to your firm's profitability and/or effectiveness)
□ **Leverage/Commodities** (Many Suppliers to choose from; Product/service they provide are critical to your firm's profitability and/or effectiveness)
□ **Bottleneck/Distinctives** (Few Suppliers to choose from; Product/service they provide are NOT critical to your firm's profitability and/or effectiveness)
□ **Strategic/Criticals** (Few Suppliers to choose from; Product/service they provide are critical to your firm's profitability and/or effectiveness)

Additional Comments: _____

Again, consider only Supplier X chosen above. Read the following hypothetical scenario. Answer the following questions with respect to Supplier X and with respect to the scenario.

Scenario:
You are currently in the 4th year of a 5-year contract with a supplier/contractor. The contract specifically states that you will conduct **random** inspections of products and/or services. Thus, only a certain percentage of the work will be inspected, and all work has an equal chance of being randomly chosen for inspection. However, during the last 2 years, the suppliers' quality has declined – often to deficient levels. Recently, your supervisor has emphasized a need for higher quality output to your customers. Your supplier's defective performance costs you time to correct the errors and delays your customer receiving what he or she needs. You consider conducting inspections at **non-random** dates/times in order to catch more deficiencies. Discovering deficiencies early during inspections rather than later on significantly reduces the costs to your organization and improves the quality of the product or service that you deliver to your customers. You also believe that the targeted, non-random inspections will uncover more defects, necessitating corrective rework that will be costly to the supplier. You estimate that the rework will reduce the supplier's margin on the contract from 10% to 2%. The supplier has no way of knowing that inspections are no longer random.

Listed below is a series of possible consequences of this action. For each possible consequence, please rate: 1) its desirability and 2) its probability of occurrence.

4) Please rate the extent of desirability associated with each possible consequence.

Higher quality - Supplier fixes their processes leading to fewer defects in the future

□ -5 Completely Undesirable □ -4 □ -3 □ -2 □ -1 □ 0 □ 1 □ 2 □ 3 □ 4 □ 5 Completely Desirable

Increased labor costs to conduct more inspections
□ -5 Completely Undesirable □ -4 □ -3 □ -2 □ -1 □ 0 □ 1 □ 2 □ 3 □ 4 □ 5 Completely Desirable

More defects discovered - Supplier's costs increase to fix more defects

□ -5 Completely Undesirable □ -4 □ -3 □ -2 □ -1 □ 0 □ 1 □ 2 □ 3 □ 4 □ 5 Completely Desirable

More defects discovered - Your organizations' costs decrease since you accept fewer defects

□ -5 Completely Undesirable □ -4 □ -3 □ -2 □ -1 □ 0 □ 1 □ 2 □ 3 □ 4 □ 5 Completely Desirable

Higher quality of the product or service that your organization delivers to its customers

□ -5 Completely Undesirable □ -4 □ -3 □ -2 □ -1 □ 0 □ 1 □ 2 □ 3 □ 4 □ 5 Completely Desirable

Additional Comments: _____

5) Please rate the probability that each consequence might occur.

Higher quality - Supplier fixes their processes leading to fewer defects in the future

□ 10% □ 20% □ 30% □ 40% □ 50% □ 60% □ 70% □ 80% □ 90% □ 100%

Increased labor costs to conduct more inspections

□ 10% □ 20% □ 30% □ 40% □ 50% □ 60% □ 70% □ 80% □ 90% □ 100%

More defects discovered - Supplier's costs increase to fix more defects

□ 10% □ 20% □ 30% □ 40% □ 50% □ 60% □ 70% □ 80% □ 90% □ 100%

More defects discovered - Your organizations' costs decrease since you accept fewer defects

□ 10% □ 20% □ 30% □ 40% □ 50% □ 60% □ 70% □ 80% □ 90% □ 100%

Higher quality of the product or service that your organization delivers to its customers

□ 10% □ 20% □ 30% □ 40% □ 50% □ 60% □ 70% □ 80% □ 90% □ 100%

Additional Comments: _____

6) Think of your closest coworker in purchasing. What is the probability that this coworker would choose to change the inspections from random to targeted/non-random?

□ 1 - Very Low Probability □ 2 □ 3 □ 4 □ 5 □ 6 □ 7 □ 8 - Very High Probability

Additional Comments: _____

Again, consider only Supplier X chosen above. Read the second hypothetical scenario. Answer the following questions with respect to Supplier X and with respect to the scenario.

Scenario 2:
Recently, your organization levied specific cost-savings goals on you. You are leading a negotiation to purchase a large quantity of widgets. Supplier X is your incumbent supplier. There are at least two other viable sources for these widgets that can meet your organizations' needs. Though you are negotiating with all three, you don't intend to switch suppliers. The incumbent supplier currently has one other contract with your firm to supply a separate product. This other contract expires soon, and the supplier expects it to be renegotiated. You believe that this other contract is a somewhat important source of revenue and profit to Supplier X. You have heard that your organization's product line is changing; thus, your organization likely won't need to renegotiate this other contract. The supplier is unaware of this potential situation. You don't think the supplier can replace the revenue from the lost contract in the near term; thus, the supplier's overhead is likely to consume most of the profit on the immediate contract you are negotiating for widgets. You expect that Supplier X will still make a 2% profit on the widgets if the other contract is dropped, but this is less than the 10% that Supplier X anticipates. You consider not disclosing the possibility of your organization dropping the other contract.

Listed below is a series of possible consequences of this action. For each possible consequence, please rate: 1) its desirability and 2) its probability of occurrence.

7) Please rate the extent of desirability associated with each possible consequence.

Decrease in supplier's performance (because your business is less profitable)

□ -5 Completely Undesirable □ -4 □ -3 □ -2 □ -1 □ 0 □ 1 □ 2 □ 3 □ 4 □ 5 Completely Desirable

Positive recognition from your supervisor for avoiding costs

□ -5 Completely Undesirable □ -4 □ -3 □ -2 □ -1 □ 0 □ 1 □ 2 □ 3 □ 4 □ 5 Completely Desirable

Easier negotiation (can ignore analysis of overhead pool)

□ -5 Completely Undesirable □ -4 □ -3 □ -2 □ -1 □ 0 □ 1 □ 2 □ 3 □ 4 □ 5 Completely Desirable

Cost avoidance to your organization -- maintain a low unit cost of widgets

□ -5 Completely Undesirable □ -4 □ -3 □ -2 □ -1 □ 0 □ 1 □ 2 □ 3 □ 4 □ 5 Completely Desirable

Decreased trust from your supplier

□ -5 Completely Undesirable □ -4 □ -3 □ -2 □ -1 □ 0 □ 1 □ 2 □ 3 □ 4 □ 5 Completely Desirable

Additional Comments: _____

8) Please rate the probability that each consequence might occur.

Decrease in supplier's performance (because your business is less profitable)

□ 10% □ 20% □ 30% □ 40% □ 50% □ 60% □ 70% □ 80% □ 90% □ 100%

Positive recognition from your supervisor for avoiding costs

□ 10% □ 20% □ 30% □ 40% □ 50% □ 60% □ 70% □ 80% □ 90% □ 100%

Easier negotiation (can ignore analysis of overhead pool)

□ 10% □ 20% □ 30% □ 40% □ 50% □ 60% □ 70% □ 80% □ 90% □ 100%

Cost avoidance to your organization -- maintain a low unit cost of widgets

□ 10% □ 20% □ 30% □ 40% □ 50% □ 60% □ 70% □ 80% □ 90% □ 100%

Decreased trust from your supplier

□ 10% □ 20% □ 30% □ 40% □ 50% □ 60% □ 70% □ 80% □ 90% □ 100%

Additional Comments: _____

9) Think of a typical coworker in purchasing. What is the probability that this coworker would choose to withhold the information about the possible dropped contracts?

□ 1 - Very Low Probability □ 2 □ 3 □ 4 □ 5 □ 6 □ 7 □ 8 - Very High Probability

Additional Comments: _____

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Note: The remaining questions do NOT pertain to any of the previous scenarios, nor do they pertain specifically to Supplier X. Questions about suppliers pertain to all of your suppliers in general.

[g]10) How familiar are you with each of the following music CDs?

Offender After Dark

□ 1 - Not at all familiar □ 2 □ 3 - Somewhat familiar □ 4 □ 5 - Very familiar

Cosmic Being

□ 1 - Not at all familiar □ 2 □ 3 - Somewhat familiar □ 4 □ 5 - Very familiar

[f]11) For the following statements, please indicate the extent to which you agree or disagree.

The best way to handle people is to tell them what they want to hear.

□ 1 Strongly Disagree □ 2 □ 3 □ 4 □ 5 □ 6 □ 7 Strongly Agree

Most people are basically good and kind.

□ 1 Strongly Disagree □ 2 □ 3 □ 4 □ 5 □ 6 □ 7 Strongly Agree

It is safest to assume that all people have a vicious streak and it will come out when they are given a chance.

□ 1 Strongly Disagree □ 2 □ 3 □ 4 □ 5 □ 6 □ 7 Strongly Agree

Most people who get ahead in the world lead clean, moral lives.

□ 1 Strongly Disagree □ 2 □ 3 □ 4 □ 5 □ 6 □ 7 Strongly Agree

Anyone who completely trusts anyone else is asking for trouble.

□ 1 Strongly Disagree □ 2 □ 3 □ 4 □ 5 □ 6 □ 7 Strongly Agree

It is hard to get ahead without hurting someone here and there.

□ 1 Strongly Disagree □ 2 □ 3 □ 4 □ 5 □ 6 □ 7 Strongly Agree

Additional Comments: _____

[g]12) How familiar are you with each of the following products?

Microsoft Statistical Assistant

□ 1 - Not at all familiar □ 2 □ 3 - Somewhat familiar □ 4 □ 5 - Very familiar

New Life Spices

□ 1 - Not at all familiar □ 2 □ 3 - Somewhat familiar □ 4 □ 5 - Very familiar

13) For the following statements, please indicate the extent to which you agree or disagree.

My leaders exaggerate the extent of the damage caused to us by the supplier in order to extract concessions from them.

□ 1 Strongly Disagree □ 2 □ 3 □ 4 □ 5 □ 6 □ 7 Strongly Agree

My leaders use situations to further their own interests at the expense of a supplier using whatever means.

□ 1 Strongly Disagree □ 2 □ 3 □ 4 □ 5 □ 6 □ 7 Strongly Agree

My leaders are not willing to make adjustments to a contract with a supplier in order to cope with a temporary crisis.

□ 1 Strongly Disagree □ 2 □ 3 □ 4 □ 5 □ 6 □ 7 Strongly Agree

[e]My leaders do not volunteer much information regarding their business to their suppliers.

□ 1 Strongly Disagree □ 2 □ 3 □ 4 □ 5 □ 6 □ 7 Strongly Agree

[e]Sometimes, my leaders alter the facts slightly in order to get what they need from their suppliers.

□ 1 Strongly Disagree □ 2 □ 3 □ 4 □ 5 □ 6 □ 7 Strongly Agree

Additional Comments: _____

14) For the following statements, please indicate the extent to which you agree or disagree.

[c]Top management in my company has let it be known in no uncertain terms that unethical behaviors will not be tolerated.

□ 1 Strongly Disagree □ 2 □ 3 □ 4 □ 5 □ 6 □ 7 Strongly Agree

[c]If a manager in my company is discovered to have engaged in unethical behavior that results primarily in **coporate gain** (rather than personal gain), he or she will be promptly reprimanded.

□ 1 Strongly Disagree □ 2 □ 3 □ 4 □ 5 □ 6 □ 7 Strongly Agree

[c]Managers in my company often engage in behaviors that I consider to be unethical.

□ 1 Strongly Disagree □ 2 □ 3 □ 4 □ 5 □ 6 □ 7 Strongly Agree

[c]In order to succeed in my company, it is often necessary to compromise one's ethics.

□ 1 Strongly Disagree □ 2 □ 3 □ 4 □ 5 □ 6 □ 7 Strongly Agree

When dealing with suppliers, complete honesty is always the best policy.

□ 1 Strongly Disagree □ 2 □ 3 □ 4 □ 5 □ 6 □ 7 Strongly Agree

[c]If a manager in my company is discovered to have engaged in unethical behavior that results primarily in **personal gain** (rather than corporate gain), he or she will be promptly reprimanded.

□ 1 Strongly Disagree □ 2 □ 3 □ 4 □ 5 □ 6 □ 7 Strongly Agree

It is okay to neglect my responsibilities when my suppliers are not likely to notice my noncompliance.

□ 1 Strongly Disagree □ 2 □ 3 □ 4 □ 5 □ 6 □ 7 Strongly Agree

Additional Comments: _____

[g]15) How familiar are you with each of the following newly released movies?

Katherine's Mistake

□ 1 - Not at all familiar □ 2 □ 3 - Somewhat familiar □ 4 □ 5 - Very familiar

Turned To Gold

□ 1 - Not at all familiar □ 2 □ 3 - Somewhat familiar □ 4 □ 5 - Very familiar

16) For the following statements, please indicate the extent to which you agree or disagree.

I feel pressure to perform well in my job.

□ 1 Strongly Disagree □ 2 □ 3 □ 4 □ 5 □ 6 □ 7 Strongly Agree

The possibility of failing to achieve targeted results at work is worrisome.

□ 1 Strongly Disagree □ 2 □ 3 □ 4 □ 5 □ 6 □ 7 Strongly Agree

If I don't achieve targeted results people (e.g., co-workers, supervisors, employer) will notice.

□ 1 Strongly Disagree □ 2 □ 3 □ 4 □ 5 □ 6 □ 7 Strongly Agree

Additional Comments: _____

17) For the following statements, please indicate the extent to which you agree or disagree.

One should always accurately represent one's education, training, and experience.

□ 1 Strongly Disagree □ 2 □ 3 □ 4 □ 5 □ 6 □ 7 Strongly Agree

One should not knowingly participate in a conflict of interest without prior notice to all parties involved.

□ 1 Strongly Disagree □ 2 □ 3 □ 4 □ 5 □ 6 □ 7 Strongly Agree

My job is very demanding.

□ 1 Strongly Disagree □ 2 □ 3 □ 4 □ 5 □ 6 □ 7 Strongly Agree

In my job, I feel stressed by the requirement to deliver results.

□ 1 Strongly Disagree □ 2 □ 3 □ 4 □ 5 □ 6 □ 7 Strongly Agree

One must always be honest in serving consumers, clients, employees, suppliers, distributors, and the public.

□ 1 Strongly Disagree □ 2 □ 3 □ 4 □ 5 □ 6 □ 7 Strongly Agree

One should always adhere to all applicable laws and regulations.

□ 1 Strongly Disagree □ 2 □ 3 □ 4 □ 5 □ 6 □ 7 Strongly Agree

Additional Comments: _____

[g]18) How familiar are you with each of the following designer labels?

Ocean City

□ 1 - Not at all familiar □ 2 □ 3 - Somewhat familiar □ 4 □ 5 - Very familiar

Jones L.A.

□ 1 - Not at all familiar □ 2 □ 3 - Somewhat familiar □ 4 □ 5 - Very familiar

19) Do any of your organizational policies or regulations expressly prohibit deceiving suppliers?

□ Yes □ No

Additional Comments: _____

Thank you for your responses. The remaining <u>few</u> questions collect the necessary demographic data.

20) Please select an industry

□ Advertising/Public Relations □ Biotechnology / Biomedical □ Computers □ Construction
□ Consumer Products/Retail/Wholesale □ Consulting □ Education/Training
□ EnergyEntertainment □ Finance/Banking □ Food & Apparel □ Government-Federal/State/Local
□ Insurance □ IndustrialTech □ Manufacturing □ Medical/Healthcare □ MilitaryNon-Profit
□ Publishing □ Travel/Hospitality □ Telecommunications □ Transportation
□ Utilities Not currently employed.

If you selected other, please specify: _____

21) What type of organization do you work for?

□ Private sector (e.g. most businesses and individuals)
□ Federal Government - Defense Department
□ Federal Government - Non-Defense Department
□ State Government
□ Local Government (e.g., City,County)
□ Not-for-profit sectorOther (please specify)

If you selected other, please specify: _____

22) What was your company's total sales revenue last year?

□ Under $250,000 □ $250,000 - $999,999 □ $1 million - $2.4 million □ $2.5 - $4.9 million
□ $5 - $9.9 million □ $10 - $19.9 million □ $20 - $29.9 million □ $30 - $49.9 million
□ $50 - $99.9 million □ $100 million or more □ N/A - Government

23) Are you a Certified Purchasing Manager (C.P.M.) or a Certified Professional Contracts Manager (CPCM)?

□ Yes □ No □ Other (please specify): _____

24) What is your age?

□ Under 18 □ 18 - 24 □ 25 - 34 □ 35 - 44 □ 45 - 54 □ 55 - 64 □ 65 or older

25) Number of years of purchasing/sourcing experience

_____

26) Gender

□ Male □ Female

Again, thank you for your dedication of time to this important research. Please feel free to contact the principal investigator, Tim Hawkins, at hawkinst@unt.edu or 817-919-8286 or my faculty advisor, Dr. Terry Pohlen, Associate Professor, Department of Marketing and Logistics at the University of North Texas, at pohlen@unt.edu or 940-565-2367.

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Department of Marketing and Logistics
University of North Texas

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APPENDIX H

MISSING DATA MANOVA

Cases Missing BP Data Vs. Cases Not Missing BP Data

Opportunism Factor - Dependent Variables	Source of Variance	Wilks' Lambda	Sums of Squares	Degrees of Freedom	F	*p*
Multivariate (all 7 Dependent Variables)	Groups: missing BP or Not	.967		320	1.561	.146
Multivariate (all 7 Dependent Variables)	Groups: missing RN or Not	.953		320	2.274	.028
BP	Groups: missing RN or Not		94.995	1	2.549	.111
	Error		12149.697	326		
	Total		12244.692	327		
RN	Groups: missing RN or Not		9.413	1	.284	.594
	Error		10798.099	326		
	Total		10807.512	327		
M	Groups: missing RN or Not		96.648	1	3.493	.063
	Error		9019.51	326		
	Total		9116.158	327		
L	Groups: missing RN or Not		9.05	1	.206	.650
	Error		14293.686	326		
	Total		14302.736	327		
CEV	Groups: missing RN or Not		237.551	1	5.907	.016
	Error		13110.254	326		
	Total		13347.805	327		
H	Groups: missing RN or Not		3.668	1	.322	.571
	Error		3718.637	326		
	Total		3722.305	327		
PP	Groups: missing RN or Not		5.657	1	.110	.741
	Error		16801.599	326		
	Total		16807.256	327		
Multivariate (all 7 Dependent Variables)	Groups: missing M or Not	.991		320	.436	.879
Multivariate (all 7 Dependent Variables)	Groups: missing L or Not	.973		320	1.269	.265
Multivariate (all 7 Dependent Variables)	Groups: missing CEV or Not	.975		320	1.171	.319

Opportunism Factor - Dependent Variables	Source of Variance	Wilks' Lambda	Sums of Squares	Degrees of Freedom	F	*p*
Multivariate (all 7 Dependent Variables)	Groups: missing H or Not	.583		320	32.702	.001
BP	Groups: missing RN or Not		33.006	1	.881	.349
	Error		12211.686	326		
	Total		12244.692	327		
RN	Groups: missing RN or Not		132.637	1	4.051	.045
	Error		10674.876	326		
	Total		10807.512	327		
M	Groups: missing RN or Not		13.571	1	.486	.486
	Error		9102.587	326		
	Total		9116.158	327		
L	Groups: missing RN or Not		2.416	1	.055	.815
	Error		14300.320	326		
	Total		14302.736	327		
CEV	Groups: missing RN or Not		11.656	1	.285	.594
	Error		13336.139	326		
	Total		13347.805	327		
H	Groups: missing RN or Not		26.166	1	2.308	.130
	Error		3696.139	326		
	Total		3722.305	327		
PP	Groups: missing RN or Not		6841.256	1	223.786	.001
	Error		9966.000	326		
	Total		16807.256	327		
Multivariate (all 7 Dependent Variables)	Groups: missing PP or Not	.979		320	.961	.459

Cases Missing RN Data vs. Cases Not Missing RN Data

Source	Sum of Squares	df	Mean Square	F	*p*
Buyer Power					
Between Groups	95.00	1	95.00	2.549	0.111
Within Groups	12149.70	326	37.27		
CEV					
Between Groups	237.55	1	237.55	5.907	0.016
Within Groups	13110.25	326	40.22		
Pressure To Perform					
Between Groups	5.66	1	5.66	0.110	0.741
Within Groups	16801.60	326	51.54		
Leadership Opportunism					
Between Groups	9.05	1	9.05	0.206	0.650
Within Groups	14293.69	326	43.87		
Machiavellianism					
Between Groups	96.65	1	96.65	3.493	0.063
Within Groups	9019.51	326	27.68		
Honesty/Integrity					
Between Groups	3.67	1	3.67	0.322	0.571
Within Groups	3718.68	326	11.41		

Cases Missing H Data vs. Cases Not Missing H Data

Source	Sum of Squares	df	Mean Square	F	*p*
Buyer Power					
Between Groups	33.00	1	33.00	0.881	0.349
Within Groups	12211.69	326	37.46		
Relational Norms					
Between Groups	132.64	1	132.64	4.051	0.045
Within Groups	10674.87	326	32.75		
CEV					
Between Groups	11.66	1	11.66	0.285	0.594
Within Groups	13336.15	326	40.91		
Pressure To Perform					
Between Groups	6841.26	1	6841.26	223.79	0.001
Within Groups	9966.00	326	30.57		
Leadership Opportunism					
Between Groups	2.42	1	2.42	0.055	0.815
Within Groups	14300.32	326	43.87		
Machiavellianism					
Between Groups	13.57	1	13.57	0.486	0.486
Within Groups	9102.59	326	27.92		

APPENDIX I

TESTS OF NON-RESPONSE BIAS

Test of Homogeneity of Variance - NCMA List Sample

Dependent Variables	Box's M	F	*p*
Buyer Power, Relational Norms, Machiavellianism, Leadership Opportunism, CEV, Honesty/Integrity, Pressure To Perform	28.304	.892	.628

Chi-Square Test of Independence - NCMA List Sample

Variable	χ^2	p
Gender	0.01	0.907
Age	5.24	0.263
Business Sector	5.64	0.060
Certification	3.10	0.212

Non-Response MANOVA - NCMA List Sample

Opportunism Factor - Dependent Variables	**Source of Variance**	**Wilks' Lambda**	**Sums of Squares**	**Degrees of Freedom**	**F**	***p***
Multivariate (all 7 Dependent Variables)	Early Vs. Late Respondents	.890		58	1.023	.425

Test of Homogeneity of Variance - Pilot Study

Dependent Variables	Box's M	F	*p*
Buyer Power, Relational Norms, Machiavellianism, Leadership Opportunism, CEV, Honesty/Integrity, Pressure To Perform	61.041	1.676	.014

Chi-Square Test of Independence - Pilot Study Sample

Variable	χ^2	p
Gender	2.39	0.122
Age	3.70	0.296
Business Sector	6.42	0.011
Certification	7.42	0.024

Non-Response MANOVA - NCMA List Sample

Opportunism Factor - Dependent Variables	Source of Variance	Wilks' Lambda	Sums of Squares	Degrees of Freedom	F	*p*
Multivariate (all 7 Dependent Variables)	Early Vs. Late Respondents	.586		27	2.73	.028
BP	Early Vs. Late Respondents		80.583	1	1.852	.183
	Error		1436.160	33		
	Total		1516.743	34		
RN	Early Vs. Late Respondents		98.481	1	1.867	.181
	Error		1741.062	33		
	Total		1839.543	34		
M	Early Vs. Late Respondents		.198	1	.009	.927
	Error		763.974	33		
	Total		764.171	34		
L	Early Vs. Late Respondents		44.583	1	1.599	.215
	Error		920.160	33		
	Total		964.743	34		
CEV	Early Vs. Late Respondents		.723	1	.012	.915
	Error		2060.248	33		
	Total		2060.971	34		
H	Early Vs. Late Respondents		14.275	1	2.777	.105
	Error		169.611	33		
	Total		183.886	34		
PP	Early Vs. Late Respondents		723.294	1	15.517	.001
	Error		1538.267	33		
	Total		2261.561	34		

Non-Response ANOVA - Pilot Study Sample

Source	Sum of Squares	df	Mean Square	F	*p*
Buyer Power					
Between Groups	80.58	1	80.58	1.852	0.183
Within Groups	1436.16	33	43.52		
Relational Norms					
Between Groups	98.48	1	98.48	1.867	0.181
Within Groups	1741.06	33	52.76		
CEV					
Between Groups	0.723	1	0.723	0.012	0.915
Within Groups	2060.25	33	62.43		
Pressure To Perform					
Between Groups	723.29	1	723.29	15.517	0.001
Within Groups	1538.27	33	46.61		
Leadership Opportunism					
Between Groups	44.58	1	44.58	1.599	0.215
Within Groups	920.16	33	27.88		
Machiavellianism					
Between Groups	0.198	1	0.198	0.009	0.927
Within Groups	763.97	33	23.15		
Honesty/Integrity					
Between Groups	14.28	1	14.28	2.777	0.105
Within Groups	169.61	33	5.14		

Test of Homogeneity of Variance - ISM List Sample

Dependent Variables	Box's M	F	*p*
Buyer Power, Relational Norms, Machiavellianism, Leadership Opportunism, CEV, Honesty/Integrity, Pressure To Perform	31.621	.966	.516

Chi-Square Test of Independence - ISM List Sample

Variable	χ^2	p
Gender	1.42	0.233
Age	6.37	0.173
Business Sector	4.53	0.104
Certification	0.98	0.613

Non-Response MANOVA - ISM List Sample

Opportunism Factor - Dependent Variables	**Source of Variance**	**Wilks' Lambda**	**Sums of Squares**	**Degrees of Freedom**	**F**	***p***
Multivariate (all 7 Dependent Variables)	Early Vs. Late Respondents	.815		46	1.491	.194

Test of Homogeneity of Variance - Fortune 500 List Sample

Dependent Variables	Box's M	F	*p*
Buyer Power, Relational Norms, Machiavellianism, Leadership Opportunism, CEV, Honesty/Integrity, Pressure To Perform	33.898	.853	.687

Chi-Square Test of Independence - Fortune 500 List Sample

Variable	χ^2	p
Gender	0.19	0.663
Age	0.74	0.865
Business Sector	2.19	0.139
Certification	1.14	0.565

Non-Response MANOVA - Fortune 500 List Sample

Opportunism Factor - Dependent Variables	**Source of Variance**	**Wilks' Lambda**	**Sums of Squares**	**Degrees of Freedom**	**F**	***p***
Multivariate (all 7 Dependent Variables)	Early Vs. Late Respondents	.909		20	.285	.952

APPENDIX J

UNIVARIATE DETECTION OF OUTLIERS

Univariate Detection of Outliers

Construct	Number of Data Points With Standardized Scores > 3.5	Number of Cases With Standardized Scores > 3.5	Number of Cases With >2 Items With Standardized Scores > 3.5
Buyer Power	0	0	0
Relational Norms	0	0	0
CEV	0	0	0
Pressure To Perform	5	5	0
Leadership Opportunism	0	0	0
Machiavellianism	1	1	0
Honesty/Integrity	17	12	3

APPENDIX K

STATISTICAL TESTS OF NORMALITY

Statistical Tests Of Normality

Item	Mean	S.D.	Skewness	Sk. S.E.	Kurtosis	Ku. S.E.
BP1	4.65	0.088	-0.373	0.134	-0.601	0.268
BP2	4.79	0.097	-0.617	0.134	-0.497	0.268
BP3	4.81	0.088	-0.545	0.135	-0.374	0.268
BP4	5.39	0.081	-1.044	0.134	0.979	0.268
BP5	4.96	0.094	-0.704	0.135	-0.523	0.269
RN1	5.22	0.085	-0.866	0.134	0.152	0.268
RN2	5.32	0.079	-0.914	0.134	0.549	0.268
RN3	5.23	0.080	-0.863	0.134	0.318	0.268
RN4	5.43	0.083	-1.017	0.135	0.543	0.268
RN5	5.38	0.075	-0.918	0.135	0.593	0.268
CEV1	5.54	0.093	-1.159	0.134	0.379	0.268
CEV2	6.04	0.085	-1.899	0.134	2.974	0.268
CEV3	6.00	0.094	-1.858	0.134	2.390	0.268
CEV4	5.89	0.098	-1.724	0.134	1.850	0.268
CEV5	5.06	0.105	-0.713	0.134	-0.658	0.268
PP4	5.02	0.090	-0.771	0.135	-0.009	0.269
PP5	5.99	0.061	-1.211	0.135	1.476	0.269
PP6	5.40	0.090	-1.130	0.134	0.654	0.268
PP7	5.32	0.085	-0.922	0.134	0.311	0.268
PP8	4.84	0.095	-0.599	0.135	-0.565	0.268
L1	2.60	0.092	-0.957	0.134	-0.006	0.268
L2	2.73	0.088	-0.993	0.135	0.281	0.268
L3	3.39	0.092	-0.404	0.134	-0.761	0.268
L4	2.92	0.099	-0.666	0.135	-0.708	0.268
L5	2.74	0.093	-0.854	0.134	-0.163	0.268

Item	Mean	S.D.	Skewness	Sk. S.E.	Kurtosis	Ku. S.E.
M1	2.10	0.066	1.374	0.134	1.988	0.268
M2	3.03	0.073	0.534	0.134	0.251	0.268
M3	2.54	0.081	1.054	0.135	0.594	0.268
M4	4.15	0.094	-0.081	0.134	-0.820	0.268
M5	3.53	0.102	0.228	0.134	-1.096	0.268
M6	2.63	0.088	0.817	0.134	-0.380	0.268
H1	5.41	0.093	-1.103	0.134	0.413	0.268
H2	6.73	0.042	-4.405	0.135	24.535	0.268
H3	6.62	0.043	-2.686	0.135	8.675	0.269
H4	6.60	0.042	-3.082	0.135	14.300	0.268
H5	6.55	0.062	-3.428	0.135	12.607	0.268
SEU-Wk	5.25	0.093	0.400	0.134	0.306	0.268
SEU-Strg	3.32	0.074	0.403	0.134	0.568	0.268
AGE	3.63	0.052	-0.141	0.134	-0.487	0.268
EXP	15.94	0.511	0.183	0.134	-0.877	0.268

REFERENCES

Achrol, Ravi S. and Gregory T. Gundlach (1999), "Legal and Social Safeguards Against Opportunism in Exchange," *Journal of Retailing*, 75 (1), 107-123.

Ajzen, Icek (1991), "The Theory of Planned Behavior," *Organizational Behavior and Human Decision Processes*, 50 (2), 179-211.

Allen, Jeff and Duane Davis (1993), "Assessing Some Determinant Effects of Ethical Consulting Behavior: The Case of Personal and Professional Values," *Journal of Business Ethics*, 12 (6), 449-58.

Ameen, Elsie C., Daryl M. Guffey, and Jeffrey J. McMillan (1996), "Accounting Students' Perceptions of Questionalbe Academic Practices and Factors Affecting Their Propensity to Cheat," *Accounting Education*, 5 (3), 191-205.

Anderson, Erin (1988), "Transaction Costs as Determinants of Opportunism in Integrated and Independent Sales Forces," *Journal of Economic Behavior and Organization*, 9 (3), 247-64.

Aquino, Karl (1998), "The Effects of Ethical Climate and the Availability of Alternatives on the Use of Deception During Negotiation," *International Journal of Conflict Management*, 9 (3), 195-216.

Arminas, David (2001), "Cash Delays are Bad for Business," *Supply Management*, 6 (16), 17.

Armstrong, J. Scott and Terry S. Overton (1977), "Estimating Nonresponse Bias in Mail Surveys," *Journal of Marketing Research*, 14 (3), 396-402.

Badenhorst, J. A. (1994), "Unethical Behaviour in Procurement: A Perspective on Causes and Solutions," *Journal of Business Ethics*, 13 (9), 739-745.

Bagozzi, R. P. and Y. Yi (1988), "On the Evaluation of Structural Equation Models," *Academy of Marketing Science*, 16 (1), pp. 74-94.

Baker, Thomas L., Tammy G. Hunt, and Martha C. Andrews (2006), "Promoting Ethical Behaivor and Organizational Citizenship Behaviors: The Influence of Corporate Ethical Values," *Journal of Business Research*, 59 (7), 849-57.

Baumhart, Raymondk S. J. (1968), *Ethics in Business*, New York, NY: Holt, Rinehart, and Winston.

Beu, Danielle S., M. Ronald Buckley and Michael G. Harvey (2003), "Ethical Decision-Making: A Multidimensional Construct," *Business Ethics: A European Review*, 12 (1), 88-107.

Beauchamp, Tom L. and Norman E. Bowie (1983), *Ethical Theory and Business*, 2nd ed., Prentice Hall: New Jersey.

Blair, Edward and George M. Zinkhan (2006), "Nonresponse and Generalizability in Academic Research," *Journal of the Academy of Marketing Science*, 34 (1), 4-7.

Blois, Keith (2005), "Self-Interest and Not Benign Power - A Comment on Hingley's 'Power to All Our Friends,'" *Industrial Marketing Management*, 34 (8), 859-862.

Bonoma, Thomas V. and Wesley J. Johnston (1979), "Decision Making Under Uncertainty: A Direct Measurement Approach," *Journal of Consumer Research*, 6 (2), 177-91.

Bowman, James S. (1976), "Managerial Ethics in Business and Government," *Business Horizons*, 19 (5), 48-54.

Boye, M. W. and J. W. Jones (1997), Organizational Culture and Employee Counter-Productivity. In R. A. Giacalone and J. Greenberg (Eds.), *Antisocial Behavior in Organizations* (pp. 172-184). Thousand Oaks, CA: Sage.

Bray, Chad (2004). "Whitehall to Avoid Prosecution," *Wall Street Journal*, September 29, B3.

Brass, Daniel J., Kenneth D. Butterfield and Bruce C. Skaggs (1998), "Relationships and Unethical Behavior: A Social Network Perspective," *Academy of Management Review*, 23 (1), 14-31.

Brenner, Steven N. and Earl A. Molander (1977), "Is the Ethics of Business Changing?" *Harvard Business Review*, 55 (1), 57-71.

Brown, James R., Chekitan S. Dev, and Dong-Jin Lee (2000), "Managing Marketing Channel Opportunism: The Efficacy of Alternative Governance Mechanisms," *Journal of Marketing*, 64 (2), 51-65.

Bunn, Michelle D. (1993), "Taxonomy of Buying Decision Approaches," *Journal of Marketing*, 57 (January), 38-56.

Byrne, Barbara M. (1998), *Structural Equation Modeling With LISREL, PRELIS, and SIMPLIS: Basic Concepts, Applications, and Programming*, Mahwah, NJ: Lawrence Erlbaum Associates.

Calhoon, Richard P. (1969), "Niccolo Machiavelli and the Twentieth Century Administrator," *Academy of Management Journal*, 12 (June), 205-12.

Campbell, Donald R. and Donald W. Fiske (1959), "Convergent and Discriminant Validity by the Multitrait-Multimethod Matrix," *Psychological Bulletin*, 56, 81-105.

Carroll, Archie B. (1975), "Managerial Ethics: A Post-Watergate View," *Business Horizons*, 18 (2), 75-80.

Cavusgil, S. Tamer, Seyda Deligonul, and Chun Zhang (2004), "Curbing Foreign Distributor Opportunism: An Examination of Trust, Contracts, and the Legal Environment in International Channel Relationships," *Journal of International Marketing*, 12 (2), 7-27.

Christie, Richard and Florence L. Geis (1970), *Studies in Machiavellianism*, New York: Academic Press.

Churchill, Gilbert A., Jr. (1979), "A Paradigm for Developing Better Measures of Marketing Constructs," *Journal of Marketing Research*, 16 (February), 64-73.

Code of Ethics. National Contract Management Association (n.d.). Retrieved August 14, 2006, from http://www.ncmahq.org/membership/about.asp#ethics

Code of Ethics, Purchasing Management Association of Canada (2006). Retrieved July 29, 2006, from http://www.pmac.ca/about/ethics.asp

Cohen, Jacob, Patricia Cohen, Stephen G. West, and Leona S. Aiken (2003), *Applied Multiple Regression/Correlation Analysis for the Behavioral Sciences*, 3rd ed., Mahwah, NJ: Lawrence Erlbaum Associates.

Cook, Thomas D. and Donald T. Campbell (1979), *Quasi-experimentation: Design and Analysis Issues for Field Settings*, Chicago: Rand McNally College Publication Co.

Cox, Andrew (2001), "Understanding Buyer and Supplier Power: A Framework for Procurement and Supply Competence," *Journal of Supply Chain Management*, 37 (2), 8-15.

Creswell, John W. (2003), *Research Design: Qualitative, Quantitative, and Mixed Methods Approaches*, 2nd edition, Thousand Oaks, CA: Sage Publications.

Dahlstrom, Robert and Arne Nygaard (1999), "An Empirical Investigation of Ex Post Transaction Costs in Franchised Distribution Channels," *Journal of Marketing Research*, 36 (2), 160-170.

Das, T. K. (2006), "Strategic Alliance Temporalities and Partner Opportunism," *British Journal of Management*, 17 (1), 1-21.

DeConinck, James (2004), "The Effect of Ethical Climate and Moral Intensity on Marketing Managers' Ethical Perceptions and Behavioral Intentions," *Marketing Management Journal*, 14 (1), 129-37.

Deeds, David L. and Charles W. L. Hill (1998), "An Examination of Opportunistic Action within Research Alliances: Evidence from the Biotechnology Industry," *Journal of Business Venturing*, 14 (2), 141-163.

Defense Acquisition University (n.d.), Contracting 120: *Negotiations*, p. 1-43.

Derry, Robbin (1989), "An Empirical Study of Moral Reasoning Among Managers," *Journal of Business Ethics*, 8 (11), 855-62.

Deshpande, Rohit and Frederick E. Webster, Jr. (1989), "Organizational Culture and Marketing: Defining the Research Agenda," *Journal of Marketing*, 53 (1), 3-15.

----, John U. Farley and Frederick E. Webster, Jr. (1993), "Corporate Culture, Customer Orientation, and Innovativeness," *Journal of Marketing*, 57 (1), 23-37.

Dillman, Don A. (2000), *Mail and Internet Surveys: The Tailored Design Method*, 2nd ed., John Wiley and Sons, Inc.: New York.

Douglas, Patricia C., Ronald A. Davidson, and Bill N. Schwartz (2001), "The Effect of Organizational Culture and Ethical Orientation on Accountants' Ethical Judgments," *Journal of Business Ethics*, 34 (2), 101-21.

---- and Barbara Loken (1989), "Analyzing Ethical Decision Making in Marketing," *Journal of Business Research*, 19 (2), 83-107.

Dwyer, Robert F., Paul H. Schurr and Sejo Oh (1987), "Developing Buyer-Seller Relationships," *Journal of Marketing*, 51 (2), 11-27.

Edwards, Ward (1954), "The Theory of Decision Making," *Psychological Bulletin*, 51 (4), 380-417.

Ellram, Lisa M. and Amelia Carr (1994), "Strategic Purchasing: A History and Review of the Literature," *International Journal of Purchasing and Materials Management*, 30 (2), 10-8.

Ellram, Lisa M. and Sue P. Siferd (1998), "Total Cost of Ownership: A Key Conception In Strategic Cost Management Decisions," *Journal of Business Logistics*, 19 (1), 55-84.

Emerson, Richard M. (1962), "Power-Dependence Relations," *American Sociological Review*, 27 (1), 31-41.

Farrington, David P. and Barry J. Knight (1979), "Two Non-reactive Field Experiments on Stealing From a 'Lost' Letter," *British Journal of Social and Clinical Psychology*, 18, 277-84.

Federal Procurement Report Fiscal Year 2005, Office of Management and Budget, Federal Procurement Data System - Next Generation (FPDS-NG), Retrieved February 28, 2007, from https://www.fpds.gov/

Ferrell O.C. and Larry G. Gresham (1985), "A Contingency Framework for Understanding Ethical Decision Making in Marketing," *Journal of Marketing*, 49 (3), 87-96.

Finegan, Joan (1994), "The Impact of Personal Values on Judgments of Ethical Behavior in the Workplace," *Journal of Business Ethics*, 13 (9), 747-55.

Fischhoff, Baruch, Bernard Goitein and Zur Shapira (1981), "Subjective Expected Utility: A Model of Decision-Making," *Journal of the American Society For Information Science*, 32 (5), 391-9.

Fishbein, Martin and Icek Ajzen (1975), *Belief, Attitude, Intention and Behavior: An Introduction to Theory and Research*, Reading, MA: Addison-Wesley.

Fornell, Claes (1983), "Issues in the Application of Covariance Structure Analysis: A Comment," *Journal of Consumer Research*, 9 (4), 443-448.

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

French, John R. P. and Bertram Raven (1959), "The Bases of Social Power," in Darwin Cartwright, ed.. *Studies in Social Power*, Ann Arbor: University of Michigan Press. 150-67.

Frisch, Deborah and Robert T. Clemen (1994), "Beyond Expected Utility: Rethinking Behavioral Decision Research," *Psychological Bulletin*, 116 (1), 46-54.

Fritzsche, David J. and Helmut Becker (1983), "Ethical Behavior of Marketing Managers," *Journal of Business Ethics*, 2 (4), 291-9.

Ganster, Daniel C., Harry W. Hennessey, and Fred Luthans (1983), "Social Desirability Response Effects: Three Alternative Models," *Academy of Management Journal*, 26 (2), 321-31.

GAO Bid Protest Annual Report to the Congress for Fiscal Year 2005, Government Accountability Office (2006). Retrieved October 1, 2006, from http://www.gao.gov/decisions/bidproan.htm

Gaski, John F. (1984), "The Theory of Power and Conflict in Channels of Distribution," *Journal of Marketing*, 48 (3), 9-29.

---- and John R. Nevin (1985), "The Differential Effects of Exercised and Unexercised Power Sources in a Marketing Channel," *Journal of Marketing Research*, 12 (May), 130-42.

Gassenheimer, Jule B., David B. Baucus, and Melissa S. Baucus (1996), "Cooperative Arrangements Among Entrepreneurs: An Analysis of Opportunism and Communication in Franchise Structures," *Journal of Business Research*, 36 (1), 67-79.

Geis, Florence L. and Tae Hyun Moon (1981), "Machiavellianism and Deception," *Journal of Personality and Social Psychology*, 41 (October), 766-75.

Gilliland, David I. and Kenneth C. Manning (2002), "When Do Firms Conform to Regulatory Control? The Effect of Control Processes on Compliance and Opportunism," *Journal of Public Policy and Marketing*, 21 (2), 319-31.

Glover, Saundra H., Minnette A. Bumpus, John E. Logan and James R. Ciesla (1997), "Re-examining the Influence of Individual Values on Ethical Decision Making," *Journal of Business Ethics*, 16 (12/13), 1319-29.

Gray, Carol Ann (1975), "Factors in Students' Decisions to Attempt Academic Tasks," *Organizational Behavior and Human Performance*, 13 (2), 147-64.

Griffis, Stanley E., Thomas J. Goldsby and Martha Cooper (2003), "Web-based and Mail Surveys: A Comparison of Response, Data, and Cost," *Journal of Business Logistics*, 24 (2), 237-58.

Grover, Steven L. (1993), "Lying, Deceit, and Subterfuge: A Model of Dishonesty in the Workplace," *Organization Science*, 4 (3), 478-95.

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

Hair, Joseph F., William C. Black, Barry J. Babin, Rolph E. Anderson and Ronald L. Tatham (2006), *Multivariate Data Analysis*, 6th ed., Upper Saddle River, NJ: Pearson Prentice Hall.

Hattie, John (1985), "Methodology Review: Assessing Unidimensionality of Tests and Items," *Applied Psychological Measurement*, 9 (June), 139-64.

Hegarty, Harvey W. and Henry P. Sims, Jr. (1978), "Some Determinants of Unethical Decision Behavior: An Experiment," *Journal of Applied Psychology*, 63 (4), 451-7.

Heide, Jan B. and George John (1992), “Do Norms Matter in Marketing Relationships?,” *Journal of Marketing*, 56 (4), 32-44.

Hill, Charles W. (1990), “Cooperation, Opportunism, and the Invisible Hand: Implications for Transaction Cost Theory,” *The Academy of Management Review*, 15 (3), 500-513.

Holmstrom, Valerie L. and Lee Roy Beach (1973), “Subjective Expected Utility and Career Preferences,” *Organizational Behavior and Human Performances*, 10 (October), 201-7.

Hopwood, Anthony. G. (1976), *Accounting and Human Behavior*, Upper Saddle River, NJ: Prentice Hall.

Horvath, Charles M. (1995), “Excellence V. Effectiveness: MacIntyre’s Critique of Business,” *Business Ethics Quarterly*, 5 (3), 499-532.

House, R.J. and T.R. Mitchell (1974), “A Path-Goal Theory of Leadership Effectiveness,” *Journal of Contemporary Business*, 3, 81-98.

Hosmer, LaRue T. (1987), “The Institutionalization of Unethical Behavior,” *Journal of Business Ethics*, 6 (6), 439-47.

Hunt, Shelby D. and John R. Nevin (1974), “Power in a Channel of Distribution: Sources and Consequences,” *Journal of Marketing Research*, 11 (May), 186-93.

---- and Lawrence B. Chonko (1984), “Marketing and Machiavellianism,” *Journal of Marketing*, 48 (3), 30-42.

---- and Scott Vitell (1986), “A General Theory of Marketing Ethics,” *Journal of Macromarketing*, 6 (1), 5-16.

----, Van R. Wood and Lawrence B. Chonko (1989), “Corporate Ethical Values and Organizational Commitment in Marketing,” *Journal of Marketing*, 53 (3), 79-90.

---- and Scott Vitell (1993), "The General Theory of Marketing Ethics: A Retrospective and Revision," in N.C. Smith and J.A. Quelch eds., *Ethics in Marketing,* Homewood, IL: Richard D. Irwin, 775-84.

Inks, Scott, Ramon Avila and Joe Chapman (2004), “A Comparison of Buyers’ and Sellers’ Perceptions of Ethical Behaviors within the Buyer-Seller Dyad,” *The Marketing Management Journal*, 14 (1), 117-28.

Institute For Supply Management. (2006, May). *Ethical Practices, Drivers and Barriers: Supply Professionals and Their Peers Weigh In*. Report presented at the 90th Annual International Supply Management Conference & Educational Exhibit. San Antonio, TX.

Jacoby, Marsha B. (1975), "Dichotomous Choices on Life-Dilemma Problems, Subjective Expected Utility, and the Group Shift Effect," *Social Behavior & Personality: An International Journal*, 3 (1), 71-80.

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

Jeffrey, Cynthia, William Dilla and Nancy Weatherholt (2004), "The Impact of Ethical Development and Cultural Constructs on Auditor Judgments: A Study of Auditors in Taiwan," *Business Ethics Quarterly*, 14 (3), 553-79.

John, George (1984), "An Empirical Investigation of Some Antecedents of Opportunism in a Marketing Channel*," Journal of Marketing Research*, 21 (3), 278-289.

Johnson, Jean L., John B. Cullen, and Tomoaki Sakano (1996), "Opportunistic Tendencies in IJVs with the Japanese: The Effects of Culture, Shared Decision Making, and Relationship Age," *The International Executive* 38 (1): 79-94.

Jones, Thomas M. (1991), "Ethical Decision Making by Individuals in Organizations: An Issue-Contingent Model," *Academy of Management Review*, 16 (2), 366-95.

Joshi, Ashwin W. and Stephen J. Arnold (1997), "The Impact of Buyer Dependence on Buyer Opportunism in Buyer-Supplier Relationships: The Moderating Role of Relational Norms," *Psychology and Marketing*, 14 (8), 823-845.

---- and Rodney L. Stump (1999), "Determinants of Commitment and Opportunism: Integrating and Extending Insights From Transaction Cost Analysis and Relational Exchange Theory," *Canadian Journal of Administrative Sciences*, 16 (4), 334-352.

Kamat and Kanekar (2001), "Prediction of and Recommendation for Honest Behavior," *Journal of Social Psychology*, 130 (5), 597-607.

Kerlinger, Fred N. and Howard B. Lee (2000), *Foundations of Behavioral Research*, 4th Edition, Australia: Wadsworth Thomson Learning.

Kline, R.B. (1997). *Principles and Practice of Structural Equation Modeling.* New York: Guilford Press.

Kohlberg, Lawrence (1976), "Moral Stages and Moralization: The Cognitive Developmental Approach," In T. Lickona (Ed.)*, Moral Development and Behavior: Theory, Research, and Social Issues*: 31-53. New York: Holt, Rinehart and Winston.

Knouse, Stephen B. and Robert A. Giacalone (1992), "Ethical Decision-Making in Business: Behavioral Issues and Concerns," *Journal of Business Ethics*, 11 (5,6), 369-77.

Kraljic, Peter (1983), "Purchasing Must Become Supply Management," *Harvard Business Review*, 61 (5), 109-17.

Kwon, Ik-Whan G. and Taewon Suh (2005), "Trust, Commitment and Relationship in Supply Chain Management: A Path Analysis," *Supply Chain Management: An International Journal*, 10 (1), 26-33.

Lai, Chi-Shiun, Shuei-Shen Liu, Chin-Fang Yang, Hong-Wei Lin, and Hung-Wen Tsai (2005), "Governance Mechanisms of Opportunism: Integrating from Transaction Cost Analysis and Relational Exchange Theory," *Taiwan Academy of Management Journal*, 5 (1), 1-24.

Lambe, Jay C., C. Michael Wittmann, and Robert E. Spekman (2001), "Social Exchange Theory and Research on Business-to-Business Relational Exchange," *Journal of Business-to-Business Marketing*, 8 (3), 1-36.

Landeros, Robert and Richard E. Plank (1996), "How Ethical are Purchasing Management Professionals?," *Journal of Business Ethics*, 15 (7), 789-803.

Larson, Paul (2005), "A Note on Mail Surveys and Response Rates in Logistics Research," *Journal of Business Logistics*, 26 (2), 211-22.

Lee, Dong-Jin (1998), "Developing International Strategic Alliances between Exporters and Importers: The Case of Australian Exporters," *International Journal in Marketing*, 15 (3), 335-348.

Leitsch, Deborah L. (2006), "Using Dimensions of Moral Intensity to Predict Ethical Decision-making in Accounting," *Accounting Education: An International Journal*, 15 (2), 135-49.

Lo, Kin Chung (2000), "Rationalizability and the Savage Axioms," *Economic Theory*, 15 (3), 727-33.

Loe, Terry W., Linda Ferrell and Phyllis Mansfield (2000), "A Review of Empirical Studies Assessing Ethical Decision Making in Business," *Journal of Business Ethics*, 25 (3), 185-204.

Lothia, Ritu. (1991). "A Transaction Cost and Resource-Dependence Based Model of Buyer-Seller Relations." Dissertation. University of Maryland.

Luo, Yadong (2006), "Opportunism in Inter-firm Exchanges in Emerging Markets," *Management and Organization Review*, 2 (1), 121-47.

MacNeil, Ian R. (1980), *The New Social Contract*, New Haven, CT: Yale University Press.

---- (1981), "Economic Analysis of Contractual Relations: Its Shortfalls and the Need for a 'Rich Classificatory Apparatus,'" *Northwestern University Law Review*, 75 (2), 1018-1063.

Manufacturers Alliance/MAPI. (2004). *Key Issues in Ethics and Compliance*. (S-102). Arlington, VA: David W. Danjczek and Scott Rosen.

McDevitt, Roselie and Joan Van Hise (2002), "Influences in Ethical Dilemmas of Increasing Intensity," *Journal of Business Ethics*, 40 (3), 261-274.

McClelland, D.C. (1961), *The Achieving Society*. Princeton, NJ: Van-Nostrand.

Mentzer, John T., Daniel J. Flint, and John L. Kent (1999), "Developing a Logistics Service Quality Scale," *Journal of Business Logistics*, 20 (1), 9-32.

Mitchell, Terence R. and Anthongy Biglan (1971), "Instrumentality Theories: Current Uses in Psychology," *Psychological Bulletin*, 76 (6), 432-54.

Monczka, R., R. Trent and R. Handfield (2002), *Purchasing and Supply Chain Management*, 2nd edition, Cincinatti: Southwestern.

Morgan, Robert M. and Shelby D. Hunt (1994), "The Commitment-Trust Theory of Relationship Marketing," *Journal of Marketing*, 58 (3), 20-38.

Morris, Sara A. and Robert A. McDonald (1995), "The Role of Moral Intensity in Moral Judgments: An Empirical Investigation," *Journal of Business Ethics*, 14 (9), 715-26.

Moser, Martin R. (1988), "Ethical Conflict at Work: A Critique of the Literature and Recommendations for Future Research," *Journal of Business Ethics*, 7 (5), 381-7.

Mowen and Michael S. Minor (2001), *Consumer Behavior: A Framework,* Upper Saddle River, NJ: Prentice Hall.

Murphy, Patrick E. and Gene R. Laczniak (2006), *Marketing Ethics: Cases and Readings*, Pearson Prentice Hall: Upper Saddle River, NJ. 65.

Nagin, Daniel S., James B. Rebitzer, Seth Sanders, and Lowell J. Taylor (2002), "Monitoring, Motivation, and Management: The Determinants of Opportunistic Behavior in a Field Experiment," *The American Economic Review*, 92 (4), 850-873.

Nettles, Reginald and James A. Bayton (2001) "Persons, Situations, Subjective Expected Utility, and Assertive Behavioral Intentions," *The Journal of Psychology*, 122 (2), 159-172.

Nunlee, Martin P. (2005), "The Control of Intra-Channel Opportunism through the Use of Inter-channel Communication," *Industrial Marketing Management*, 34 (1), 515-525.

Nunnally, J.C. (1978), *Psychometric Theory*, 2nd ed., McGraw-Hill: New York.

Ouellette, J.A. and W. Wood, (1998), "Habit and Intention in Everyday Life: The Multiple Processes by which Past Behavior Predicts Future Behavior," *Psychological Bulletin,* 124 (1), 54-74.

Paolillo, Joseph G. P. and Scott J. Vitell (2002), "An Empirical Investigation of the Influence of Selected Personal, Organizational and Moral Intensity Factors on Ethical Decision Making," *Journal of Business Ethics*, 35 (1), 65-74.

Parkhe, Arvind (1993), "Strategic Alliance Structuring: A Game Theoretic and Transaction Cost Examination of Interfirm Cooperation," *Academy of Management Journal*, 36 (4), 794-829.

Paulhus, DeIroy (1991), "Measurement and Control of Response Bias," In J.P. Robinson, P.R. Shaver and L.S. Wrightsman (Ed.), *Measures of Personality and Social Psychological Attitudes: Volume I of Measures of Social Psychological Attitudes*, 2: 17-59, San Diego: Academic Press, Inc.

Peshkin, Alan (1993), "The Goodness of Qualitative Research," *Educational Researcher*, 22 (2), 23-29.

Petry, Edward S., Amanda E. Mujica, and Dianne M. Vickery (1999), "Sources and Consequences of Workplace Pressure: Increasing the Risk of Unethical and Illegal Business Practices," *Business and Society Review*, 99 (1), 25-30.

Phillips, Derek L. and Kevin J. Clancy (1972), "Some Effects of 'Social Desirability' in Survey Studies," *The American Journal of Sociology*, 77 (5), 921-40.

Ping, Jr., Robert A. (1993), "The Effects of Satisfaction and Structural Constraints on Retailer Exiting, Voice, Loyalty, Opportunism, and Neglect," *Journal of Retailing*, 69 (3), 320-352.

Podsakoff, Philip M. and Dennis W. Organ (1986), "Self-Reports in Organizational Research: Problems and Prospects," *Journal of Management*, 12 (4), 531-44.

Posner, Barry Z. and Warren H. Schmidt (1987), "Ethics in American Companies: A Managerial Perspective," *Journal of Business Ethics*, 6 (5), 383-392.

Principles and Standards of Ethical Supply Management Conduct, Institute of Supply Management (2005). Retrieved July 29, 2006, from http://www.ism.ws/tools/content.cfm?ItemNumber=4740

Provan, Keith G. and Steven J. Skinner (1989), "Interorganizational Dependence and Control as Predictors of Opportunism in Dealer-Supplier Relations," *Academy of Management Journal*, 32 (1), 202-212.

Provis, Chris (2000), "Honesty in Negotiation," *Business Ethics: A European Review*, 9 (1), 3-12.

Randall, Donna M. and A. M. Gibson (1990), "Methodology in Business Ethics Research: A Review and Critical Assessment," *Journal of Business Ethics*, 9 (6), 457-71.

---- and Maria F. Fernandez (1991), "The Social Desirability Response Bias in Ethics Research," *Journal of Business Ethics*, 10 (11), 805-17.

Ravlin, Elizabeth C. and Bruce M. Meglino (1987), "Issues in Work Values Measurement." In W.C. Frederick (Ed.), *Research in Corporate Social Performance and Policy*, 9: 153-83, Greenwich, CT: JAI Press.

Razzaque, Mohammed A. and Tan Piak Hwee (2002), "Ethics and Purchasing Dilemma: A Singaporean View," *Journal of Business Ethics*, 35 (4), 307-26.

Reid, David A. and Richard E. Plank (2000), "Business Marketing Comes of Age: A Comprehensive Review of the Literature," *Journal of Business To Business Marketing*, 7 (2/3), 1-202.

Rest, James R. (1986), *Moral Development: Advances in Research and Theory*, New York, NY: Praeger.

Rindfleisch, Aric and Jan B. Heide (1997), "Transaction Cost Analysis: Past, Present, and Future Applications," *Journal of Marketing*, 61 (4), 30-54.

Robertson, Diana C. and Talia Rymon (2001), "Purchasing Agents' Deceptive Behavior: A Randomized Response Technique Study, *Business Ethics Quarterly*, 11 (3), 455-79.

Robin, Donald P. and R. Eric Reidenbach (1987), "Social Responsibility, Ethics, and Marketing Strategy: Closing the Gap between Concept and Application," *Journal of Marketing*, 51 (January), 44-58.

Robinson, John P., Phillip R. Shaver, and Lawrence S. Wrightsman (1991), *Measures of Personality and Social Psychological Attitudes: Volume I of Measures of Social Psychological Attitudes*, San Diego: Academic Press, Inc.

Rokeach, Milton (1973), *The Nature of Human Values*. New York: Free Press.

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 (2), 210-224.

Romar, Edware J. (2004), "Globalization, Ethics, and Opportunism: A Confucian View of Business Relationships," *Business Ethics Quarterly*, 14 (4), 663-678.

Ruegger, Durwood and Ernest W. King (1992), "A Study of the Effect of Age and Gender upon Student Business Ethics," *Journal of Business Ethics*, 11 (3), 179-86.

Sako, Mari and Susan Helper (1998), "Determinants of Trust in Supplier Relations: Evidence from the Automotive Industry in Japan and the United States," *Journal of Economic Behavior and Organization*, 34 (3), 387-417.

Schildhouse, Jill (2005), "Corporate Ethics: Taking the High Road," *Inside Supply Management*, 16 (3), 30-5.

Schilling, Melissa A. and H. Kevin Steensma. (2002). "Disentagling the Theories of Firm Boundaries: A Path Model and Empirical Tests." *Organization Science* 13 (4): 387-401.

Schweitzer, Maurice E., Lisa Ordonez, and Bambi Douma (2004), "Goal Setting as a Motivator of Unethical Behavior," *Academy of Management Journal*, 47 (3), 422-432.

Serwinek, Paul J. (1992), **"**Demographic & Related Differences in Ethical Views among Small Businesses," *Journal of Business Ethics*, 11 (7), 555-67.

Singhapakdi, Anusorn and Scott J. Vitell (1990), "Marketing Ethics: Factors Influencing Perceptions of Ethical Problems and Alternatives," *Journal of Macromarketing*, 10 (1), 4-18.

----, Scott J. Vitell and Kenneth L. Kraft (1996), "Moral Intensity and Ethical Decision-Making of Marketing Professionals," *Journal of Business Research*, 36 (3), 245-55.

Skarmeas, Dionisis, Constantine S. Katsikeas and Bodo B. Schlegelmilch (2002), "Drivers of Commitment and Its Impact on Performance in Cross-Cultural Buyer-Seller Relationships: The Importer's Perspective," *Journal of International Business Studies*, 33 (4), 757-783.

Smith, Katherine T. and Murphy Smith (2003), *Business and Accounting Ethics*. Retrieved September 9, 2006, from http://acct.tamu.edu/smith/ethics/ethics.htm

Sparks, John R. and Shelby D. Hunt (1998), "Marketing Researcher Ethical Sensitivity: Conceptualization, Measurement, and Exploratory Investigation," *Journal of Marketing*, 62 (2), 92-109.

Steenhaut, Sarah and Patrick van Kenhove (2006), "An Empirical Investigation of the Relationship among a Consumer's Personal Values, Ethical Ideology and Ethical Beliefs," *Journal of Business Ethics*, 64 (2), 137-155.

Steenkamp, Jan-Benedict E. M. (2005), "Marketing Renaissance: Opportunities and Imperatives for Improving Marketing Thought, Practice, and Infrastructure," *Journal of Marketing*, 69 (4), 1-25.

Street, Marc and Vera L. Street (2006), "The Effects of Escalating Commitment on Ethical Decision-Making," *Journal of Business Ethics*, 64 (4), 343-56.

Taylor, Paul W. (1975), *Principles of Ethics: An Introduction*, Encino, CA: Dickenson Publishing Company, Inc.

Thibaut, John W. and Harold H. Kelley (1959), *The Social Psychology of Groups*, New York: John Wiley & Sons, Inc.

Trevino, Linda K. (1986), "Ethical Decision Making in Organizations: A Person-Situation Interactionist Model," *Academy of Management Review*, 11 (3), 601-17.

---- and Gail A. Ball (1992), "The Social Implications of Punishing Unethical Behavior: Observers' Cognitive and Affective Reactions," *Journal of Management*, 18 (4), 751-68.

----, Kenneth D. Butterfield, and Donald L. McCabe (1998), "The Ethical Context in Organizations: Influences on Employee Attitudes and Behaviors," *Business Ethics Quarterly*, 8 (3), 447-476.

U. S. Government Accountability Office. (2004). *Bid Protest Decision: B-293518*. Washington, DC: Comptroller General of the United States

U. S. Government Accountability Office. (2004). *Bid Protest Decision: B-293541.* Washington, DC: Comptroller General of the United States

U. S. Government Accountability Office. (2004). *Bid Protest Decision: B-293435.2.* Washington, DC: Comptroller General of the United States

U. S. Government Accountability Office. (2004). *Bid Protest Decision: B-294572.* Washington, DC: Comptroller General of the United States

U. S. Government Accountability Office. (2004). *Bid Protest Decision: B-292836.1.* Washington, DC: Comptroller General of the United States

U. S. Government Accountability Office. (2004). *Bid Protest Decision: B-293348.* Washington, DC: Comptroller General of the United States

U. S. Government Accountability Office. (2004). *Bid Protest Decision: B-293679.* Washington, DC: Comptroller General of the United States

U. S. Government Accountability Office. (2004). *Bid Protest Decision: B-293824.2.* Washington, DC: Comptroller General of the United States

U. S. Government Accountability Office. (2005). *Bid Protest Decision: B-295401.8.* Washington, DC: Comptroller General of the United States

U. S. Government Accountability Office. (2005). *Bid Protest Decision: B-294974.4.* Washington, DC: Comptroller General of the United States

U. S. Government Accountability Office. (2005). *Bid Protest Decision: B-293073.1.* Washington, DC: Comptroller General of the United States

U. S. Government Accountability Office. (2005). *Bid Protest Decision: B-296855.2.* Washington, DC: Comptroller General of the United States

U. S. Government Accountability Office. (2006). *Bid Protest Decision: B-298411.* Washington, DC: Comptroller General of the United States

U. S. Government Accountability Office. (2006). *Bid Protest Decision: B-297616.* Washington, DC: Comptroller General of the United States

U. S. Government Accountability Office. (2006). *Bid Protest Decision: B-297758*. Washington, DC: Comptroller General of the United States

U. S. Government Accountability Office. (2006). *Bid Protest Decision: B-297444.2.* Washington, DC: Comptroller General of the United States

Verbeke, Willem, Cok Ouwerkerk and Ed Peelen (1996), "Exploring the Contextual and Individual Factors on Ethical Decision Making of Salespeople," *Journal of Business Ethics*, 15 (11), 1175-87.

Victor, Bart and John B. Cullen (1987), "A Theory and Measure of Ethical Climate in Organizations," In W.C. Frederick (Ed.), *Research in Corporate Social Performance and Policy*, 9: 51-71, Greenwich, CT: JAI Press.

Vitell, Scott J. and Shelby D. Hunt (1990), "The General Theory of Marketing Ethics: A Partial Test of the Model," In Jagdish N. Sheth (Eds.), *Research in Marketing*, 10, Greenwich: JAI Press, 237-65.

---- , and James Muncy (1992), “Consumer Ethics: An Empirical Investigation of Factors Influencing Ethical Judgments of the Final Consumer.” *Journal of Business Ethics*, 11 (8), 585-97.

---- , Kumar C. Rallapalli, and Anusorn Singhapakdi. (1993). “Marketing Norms: The Influence of Personal Moral Philosophies and Organizational Ethical Culture.” *Journal of the Academy of Marketing Science*, 21 (4), 331-337.

---- , Aysen Bakir, Joseph G.P. Paolillo, Encarnacion Ramos Hidalgo, Jamal Al-Khatib and Mohammed Y.A. Rawwas (2003), “Ethical Judgments and Intentions: A Multinational Study of Marketing Professionals,” *Business Ethics: A European Review*, 12 (2), 151-71.

Vroom, Victor H., (1964), *Work and Motivation*. New York: John Wiley and Sons, Inc.

Wathne, Kenneth H. and Jan B. Heide (2000), “Opportunism in Interfirm Relationships: Forms, Outcomes, and Solutions,” *Journal of Marketing*, 64 (4), 36-51.

Weber, James (1990), “Managers’ Moral Reasoning: Assessing Their Responses to Three Moral Dilemmas,” *Human Relations*, 43 (7), 687-702.

---- (1996), “Influences Upon Managerial Moral Decision Making: Nature of the Harm and Magnitude of Consequences,” *Human Relations*, 49 (1), 1-22.

Webster, Frederick E., Jr. (1992), “The Changing Role of Marketing in the Corporation,” *Journal of Marketing*, 56 (4), 1-17.

Williamson, Oliver E. (1975), *Markets and Hierarchies, Analysis and Antitrust Implications*. New York: The Free Press.

---- (1980), “The Organization of Work: A Comparative Institutional Assessment,” *Journal of Economic Behavior and Organization*, 1 (1), 5-38.

---- (1981), “The Economics of Organization: The Transaction Cost Approach,” *American Journal of Sociology*, 87 (3), 548-577.

---- (1993), “Opportunism and Its Critics,” *Managerial and Decision Economics*, 14 (2), 97-107.

Zey-Ferrell, Mary, Mark K. Weaver, and O.C. Ferrell (1979), "Predicting Unethical Behavior Among Marketing Practitioners," *Human Relations*, 32 (7), 557-69.