

**ETHICAL COPING: DEEP AND SHALLOW APPROACHES TO ETHICAL CHOICE**

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Submitted to the Graduate Faculty of  
Katz Graduate School of Business in partial fulfillment  
of the requirements for the degree of  
Doctor of Philosophy

University of Pittsburgh

2006

UNIVERSITY OF PITTSBURGH  
KATZ GRADUATE SCHOOL OF BUSINESS

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This dissertation investigates the cognitive processes businesspeople use to resolve ethical dilemmas. I assert that to accurately represent the ethical decision making process, it is necessary to move beyond ethical decision making models that rely solely on rational choice and utility theory. I develop a behavioral model of ethical decision making that extends and improves upon existing models in two ways. First, I apply dual-process cognition theories to account for the fact that not all decisions are made in a deliberative and effortful manner (which I call “deep choice”). At times decisions are made based on intuition, heuristics, stereotypes, and other non-deliberative processes (which I call “shallow choice”). Second, I include the influence of emotions on the ethical decision process. Many managers attempt to remove emotions from the workplace, but emotions influence the decision process and must be acknowledged in a descriptive ethical decision making model. A key observation stemming from this revised model is that the ethical considerations of an action may not be actively evaluated in a decision, but may instead be “bundled” with a shallow choice. This makes it critical to understand how organizations can influence the creation, content, and use of shallow choice.

A discussion of ethical choice necessarily involves a dialog regarding the methods used to evaluate the quality of the ethical decision. I critique the current measurement instruments and suggest five guideposts to help overcome the duality of the need to apply universal principles and the necessity to respond to the particular situation when resolving an ethical dilemma.

I clarify and explain dual-process cognition and the proposed model by using them to explain trust formation in organizations. I also apply the model to describe how managers cope with the time pressure that is so prevalent in business today. I suggest workers engage in ethical satisficing, that is, they accept solutions that surpass some minimal ethical threshold, but which do not represent the most ethical response available. I also establish a foundation upon which a theory of ethical satisficing can be built.

Lastly, I discuss implications of the proposed model and future research opportunities.

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## **DEDICATION**

This dissertation is dedicated to the two women who have most influenced my life and my pursuit of a Ph.D. First, I dedicate this to my wife, Lisa Roman, whose constant love, support, and patience enabled me to persevere through the doctoral program. I love her today; I will love her tomorrow; I will love her always. Second, I dedicate this dissertation to my late mother, Ann Roman, who always encouraged me to pursue excellence and also to enjoy life. I miss her dearly, and I suspect that I always will.

## **PREFACE**

I would like to thank all the members of my dissertation committee for their valuable insights and for their time. I would especially like to thank my committee chair, Barry Mitnick, for his direction and effort. He helped me clarify my thinking and this dissertation was greatly improved because of his involvement in its production.

I also would like to thank my father, Emil Roman, for his continuous support and love. Whatever positive traits I possess, I must attribute them to his guidance. Also, his sacrifices and encouragement have enabled and inspired me to pursue and achieve numerous goals in my life, including attainment of this degree.

## 1.0 INTRODUCTION

Consider these three business scenarios:

Case 1: The CFO of an Internet firm is completing the quarterly financial statements when the CEO enters and asks about the latest numbers. The CFO indicates the company will miss the projections of Wall Street analysts by a couple of cents per share. The CEO states that if they make a few sales “adjustments” the company will meet expectations. The CFO is a bit uncomfortable with the changes, but feels a strong sense of loyalty to his boss, who after all, hired him and gave him this great career opportunity. The CFO trusts his boss, who is many years his senior, and who has had a very successful career. The numbers must be released today. Without considering all the possible ramifications, the CFO decides to follow the CEO’s direction, changes a few accounting entries, and meets the analyst’s expectations.

Case 2: A recall coordinator of an automobile manufacturing company reviews crash data about the company manufactured cars. The company has set routines and quantitative guidelines as to when to issue a recall. Graphic photographs of cars after a collision do not stir the recall coordinator to deviate from the company procedures. However, after leaving the company the recall coordinator states:

The recall coordinator’s job was serious business. The scripts associated with it influenced me more than I influenced [it]. Before I went to Ford I would have argued strongly that Ford had an ethical obligation to recall. After I left Ford, I now argue and teach that Ford had an ethical obligation to recall. But, while I was there, I perceived no

obligation to recall and I remember no strong ethical overtones to the case whatsoever. It was a very straightforward decision, driven by dominant scripts for the time, place, and context (Gioia, 1992).

Case 3: For the past week Juan has worked many hours of overtime because the manufacturing company he works for is introducing a new product. It is now Saturday and his daughter's softball team is playing in the playoffs, but again Juan is called to work. His daughter and wife are angry as Juan leaves the house. Juan is mad at his boss for making him work so much, causing him to miss important family events. At work Juan is told everyone will get to go home as soon as the new product, a brake lining for school buses, meets all of the customer's specifications. Just about the time his daughter's game is due to begin, he receives the latest sample product from the production department. The brake lining still does not meet the specifications, but Juan alters the test equipment so that it reveals a passing rating for the brake lining and he is soon on the way to the softball game.

A couple of factors are consistent in all of these cases. First, they all involve ethical issues. In the first case, issues of honesty and duty to the shareholders and duty to the public are highlighted. In the second and third cases, a duty to avoid harm and duty to customers are involved. Second, in all three circumstances these ethical issues and the ethical principles represented by them were not evaluated independently by the decision makers. The ethical principles were embedded within the role or identity that was assumed, the schemas that were enacted, or the emotion that was evoked. This contrasts with the majority of research on ethical decision making which assumes that decisions are made using a calculative process whereby the attributes and consequences of the various alternatives are projected and a choice is made based on predefined preferences. However, as these scenarios suggest, many times these ethical

attributes are not considered separately, but rather come “bundled” along with the decision choice. In these types of situations where ethical principles are embedded, it may not make sense to describe the process as an ethical choice.

In this dissertation I suggest that most ethical decisions are not entirely determined by a calculative, rational process – what I refer to as a “deep choice” – but instead suggest that many decisions are made primarily based on an intuitive, non-rational, non-deliberative approach, what I call a “shallow choice.” When this shallow choice is used, decision makers may not calculate ethics, but merely enact a process in which ethical principles are embedded. For instance, in some situations a decision maker trusts that her friend has examined the ethical consequences of a decision and relies on his conclusions without examining the situation herself; sometimes employees act solely based on loyalty toward their managers; other times workers follow the corporate routine that is in place; and still other times employees respond emotionally without any thought (or at least what has traditionally been considered thought).

To account for both a deliberative, conscious decision process and a non-deliberative, intuitive decision process, I propose a new model of ethical decision making. This model is a behavioral and descriptive model, as it includes both deep and shallow choice and the influence of emotions. It is meant to depict how managers make decisions, and not how they should make decisions. That is, it is meant to be a descriptive, and not a prescriptive, ethical decision making model.

In summary, ethical decisions are not only made in an active, calculative, and rational manner. At times an automatic, schema-based approach is used and this entire process is subject to the influence of emotions. This dissertation constructs an improved model of ethical decision

and then applies it to describe trust formation and the effect of time pressure on ethical decisions in order to better understand and predict ethical choice and ethical behavior in business.

## **1.1 CONTRIBUTIONS OF THIS DISSERTATION**

This dissertation makes four noteworthy contributions to the business ethics field. First, in Chapter 3, it develops a new model of ethical decision making by synthesizing past research in ethical decision making with work from other fields. It highlights that the existing ethical decision making models fail to account for two elements that are important to building an accurate descriptive model of ethical decision making: shallow ethical choice and emotions. Shallow ethical choice is the use of intuitive, automatic cognition when making a moral decision. Previous models concentrate on the use of rational, deliberative cognition, here referred to as deep choice, to resolve ethical dilemmas. Yet, at times, decisions are made or augmented by intuitive decision methods and this fact should be accounted for in the ethical decision making model.

A descriptive ethical decision making model must account for emotion. Emotions have a significant, and sometimes dramatic, effect on our decision processes. In fact, it is likely that emotions mediate all the previously proposed moderators to ethical decision process. Without a minimum level of moral emotions such as empathy, guilt, shame, or pride, decision makers are unlikely to consider the social effects of their decisions. Moreover, recent research in social psychology reveals that emotions such as anger, happiness, and fear change the appraisal and cognitive processes in predictable ways. By including emotions and shallow choice, I build a



descriptive model of ethical decision making that better captures the ethical choice process which in turn will lead to greater understanding and predictability of ethical judgment and behavior.

The second area in which this dissertation advances the field, developed in Chapter 4, is through a detailed discussion and systematic evaluation of the methods used to measure the quality of an ethical choice. Business ethics researchers have primarily relied on Kohlberg's theory of moral development to gauge the level of ethical thought. However, Kohlberg's theory is problematic. Some of the shortcomings are representative of the field of philosophy as a whole. By this I mean that the lack of a universally accepted fundamental ethical theory poses problems when attempting to measure the quality of a moral choice, as there is no accepted standard against which to measure the decision. Those professing Kantian theory suggest Kant's theories should be used as a guide. Others claiming the superiority of Rawlsian justice believe a decision should be measured against that theory. Still others suggest care ethics and its emphasis on the particular situation should be used as a basis for measurement. And these Western approaches can be augmented by those from numerous other cultures and traditions. No easy answer exists that overcomes the challenge of the plurality of ethical theories. However, one can still make some evaluative statements about ethical quality even in the face of competing ethical theories and the inherent duality between universality and particularism. In Chapter 4, I offer five guideposts for measuring ethical quality that allow such evaluative statements.

Other shortcomings of Kohlberg's theory are directly related to Kohlberg's approach and claims. He posited that moral development proceeds in an invariant series of stages, but questions arise as to whether the stages are true stages, whether people actually progress unerringly through them, and whether the more advanced stages truly represent a higher level of

ethical thought. Given the reliance on Kohlberg's approach and the lack of discussion on this topic in the extant research, Chapter 4 represents an important and overdue contribution to the field.

The third major contribution of this work, discussed in Chapter 5, is the application of the shallow and deep decision processes to develop a dual-process model of trust. Trust is arguably the most important ethical virtue in business for without trust monitoring costs and other expenses would rise so dramatically it would threaten the productivity of the economy. The feeble economy of countries where trust is low such as Russia, or the costs imposed by the reporting requirements of the Sarbanes-Oxley law – which was enacted to restore the public's trust in financial reporting – point toward the importance of trust. In chapter 5, I highlight how both deep and shallow processes are used to establish trust and indicate trustworthiness. This application of the shallow and deep approach to ethical choice both demonstrates its importance and advances our understanding of trust.

The final contribution of this dissertation, found in Chapter 6, is the investigation into the effects of time pressure on ethical decision making. I posit that decision makers use several coping strategies to combat time pressure and that these strategies generally lower ethical quality. These coping strategies represent a form of ethical satisficing as managers diverge from utility maximizing behavior and accept non-optimal ethical results. I provide a series of propositions derived from these coping strategies that can serve as a foundation for building a theory of ethical satisficing.

## 1.2 OVERVIEW OF THIS DISSERTATION

There are four primary research streams that inform this dissertation. The first is research from social psychology related to dual-process cognition. In Chapter 2, I define the dual-process concept, review previous research on the topic, and offer a method to distinguish between deep and shallow choice.

The second research area that guides this dissertation is the work pertaining to ethical decision making. Making an ethical choice is one part of an overall ethical decision making process and various models have been offered to describe the steps required to go from the realization that an ethical dilemma is present to engaging in ethical action. In Chapter 3, I synthesize the previously offered ethical decision making models and review and sort the moderators that have been shown to affect the ethical decision making process. Next, I discuss shallow choice as it pertains to ethical reasoning. In this section I explore how stereotypes, routines, procedures, and heuristics can include embedded ethical principles. These shallow choice mechanisms can have a dramatic affect on ethical decisions and it is important to understand their impact.

Also in Chapter 3, I build my behavioral model of ethical decision making and explain each component of the model.

I discuss the measurement of ethical choice in Chapter 4. The bulk of the existing research on this topic primarily focuses on the work of Kohlberg, so a discussion of his work is critical. However, Kohlberg's work is not without criticism and the review includes a critique of Kohlberg's approach as well. In addition, I identify several significant difficulties in measuring ethical quality and suggest five guideposts to help overcome these challenges.

Chapter 5 provides an application of shallow and deep choice by describing how the two processes are used in the formation of trust in organizations.

In Chapter 6, I return my attention to the factors that moderate the ethical decision process. After a brief introduction, I narrow my focus to explore how a single element that is common in business today – time pressure – can affect ethical decisions. The lack of adequate time can significantly affect both the way we decide and, consequently, the outcomes of those decisions. Yet the effect of time pressure and the resulting reliance on shallow choice has received very minimal attention in the business ethics literature. Subsequently, we know little about how people cope with time pressure, how time pressure affects the level of ethics of a decision, or what can be done to better equip employees and companies to deal with this common business malady. In Chapter 6, I begin to fill this gap in the literature by exploring time pressure coping strategies related to ethical decisions and formulate many testable propositions.

In Chapter 7, I summarize the contributions and the implications of the new ethical decision making model, and then conclude the chapter with recommendations of areas for future exploration.

First, then, is the discussion of dual-process cognition and deep and shallow choice.

## **2.0 DESCRIBING AND DEFINING DUAL-PROCESS COGNITION**

A core component of this dissertation is the application of dual-process cognition in ethical choice models to create a behavioral ethical decision model. The primary goal of this chapter is to define and describe what is meant by dual-process cognition. Four main topics comprise this chapter. First, I introduce the dual-process concept. Second, I describe the two types of cognitive processes composing dual-process cognition. Third, I depict and discuss what determines the use of the cognitive modes. And fourth, I describe why the application of dual-process cognition is important to the field of business ethics.

### **2.1 BEYOND RATIONAL THOUGHT**

Up to this point, research in ethical decision making has focused on rational thought and utility theory to describe the ethical choice process. Many moderators have been proposed and tested, but these have been applied to a rational choice approach to making decisions. I suggest that research in the cognitive and social science areas can provide important insights into ethical decision making. One significant contribution these other areas offer is an acknowledgment that two forms of cognitive process can occur: a high-effort, deliberative process that has been studied previously by business ethics researchers and a low-effort, intuitive decision process that has not previously garnered attention from researchers in this field. I will refer to these two types

of processes as deep choice and shallow choice, respectfully. I argue that these deep and shallow processes are fundamentally different from each other and represent alternate ways to make a decision.

Here at the beginning I want to emphasize that the use of the term “shallow” refers to characteristics in how a decision is made and the resources required to make a decision and does not necessarily indicate a lack of decision quality. It is certainly possible that intuition, emotion, scripts, and so on can lead a decision maker to a right choice. In other words, I do not mean to imply any necessary negative connotation on a decision process that I describe as “shallow.” Generally, shallow choice refers to a non-deliberative decision process and deep choice refers to a deliberative decision process.

For several decades, researchers in cognitive and social sciences have considered the notion of dual-process cognition. While there is general agreement as to the concept of dual-process cognition, the components have been applied and defined in many different ways. Dual-process models have informed studies of social attitudes, stereotyping, person perception, memory, decision strategy, and decision making. Updating the review by Smith and DeCoster (2000), Appendix A summarizes some of the various ways the two processing modes have been studied and the relationship between the cognitive modes. Many of the dual-process forms listed here are applied in ways that are not applicable in this dissertation. Yet, taken as a whole, these applications provide an understanding of the theory. Among all the implementations, the core idea remains the same: “social judgments are not always formed on the basis of relatively effortful processing of judgment-relevant information; rather, judgments may also be formed on the basis of relatively low-effort processing of more peripheral forms of information” (Chen & Chaiken, 1999: 80). In brief, the low-effort or shallow choice mode uses heuristics, similarity-

based computational methods, and simple decision rules to make a choice, while the high-effort or deep choice mode uses a deliberative process to search for and summarize attributional characteristics of the alternatives in a complex decision process. Moreover, dual-process theories include the notion that individuals have limited cognitive resources and, therefore, seek to economize their information processes – that is, use shallow choice – whenever possible. This economizing aligns with Fiske and Taylor’s (1991) contention that people use shortcuts and inferences because they need to develop strategies to “move information quickly through the system in order to make a decision” (1991: 380). A detailed discussion of the two processing types is included below.

Both of the processing modes have strengths and weaknesses for making ethical decisions in business. For example, the speed with which a decision is reached using shallow choice can be a distinct advantage. Business is fast paced. The ability to decide quickly is a competitive advantage. But, this decision speed is likely to produce more errors in judgment than a slower-paced, more detailed approach. One potential error is that the rapid, intuitive, low-effort answer is prone to bias. Without a conscious, systematic approach, biases such as inappropriate stereotypes are more likely to be enacted. A second potential error is that not all attributes of an alternative will be considered. Rather than comprehensively considering all components of a decision, a decision will be made based on a select few attributes. The ethical attribute may not be one of the attributes explicitly considered to make the decision, and instead it may be embedded within a decision. If this is the case it may not be appropriate to claim an ethical choice has been made. When using the shallow choice approach, the posited failure to actively evaluate the ethical consequences of an action will at times lead to undesired results, so it is important to understand what ethical values are embedded in decisions, how they become

embedded, and how to avoid the activation of unethical values that are embedded within alternatives. A third potential problem is that all the important stakeholders may not be considered. The shallow choice mode may cause decision makers to narrow their focus and consider the effects to only the most salient stakeholders and those stakeholders who have legitimate claims but who are not highly salient may be ignored to an even greater extent under shallow choice than under deep choice.

Deep choice also has advantages and disadvantages. This deliberative, effortful process is often needed since many business decisions are complex or novel. For these decisions the ability to systematically identify and evaluate available alternatives is a necessity. The major disadvantage of this process is the amount of time, effort, and other resources it requires. Every individual has limited resources and thus cannot fully examine every decision. The demands of the workplace and our predisposition to conserve effort when possible dictate that not every decision is deeply considered.

There are four questions about dual-process cognition that I seek to answer in this chapter: (1) What is shallow choice? (2) What is deep choice? (3) What conditions prompt use of each of the two types? and (4) What is the importance of dual-process cognition to ethical decision making, and more broadly, to business ethics? I begin with the first question.

## **2.2 SHALLOW CHOICE**

Research on ethical decision making has been primarily focused on a rational, deliberative, and reflective approach to making decisions. Yet if we consider how we make decisions in our own lives we would have to acknowledge that at times we do not exert the effort or take the time to



generate and consider all the available alternatives. We often rely on intuition, gut instinct, or simple rules. In other words, we rely on a decision process that is more akin to automatically making a decision rather than actively evaluating the alternatives. I refer to this intuitive, automatic, non-deliberative approach to decision making as shallow choice.

Shallow choice is implemented through the use of heuristics, intuition, and simple rules. Heuristics are judgment rules that are learned and stored in memories (Chen & Chaiken, 1999). Examples include “Experts’ statements can be trusted,” “Consensus opinions are correct,” and “One should never lie.” Often a shallow choice is made unconsciously and without knowledge of how the decision was made.

The shallow choice process is constrained by the availability, accessibility, and applicability of relevant knowledge (Higgins, 1996). Availability means that judgment-relative heuristics, rules, or experiences must be available for recall and activation. These heuristics, rules, and experiences are primarily obtained through experiencing similar decisions in the past. Therefore, when facing new decisions for which a person does not have a heuristic, experiences, or memories upon which to call, it is less likely that the shallow choice process will be used.

In addition to being available, these judgment rules must be accessible, that is, they must be able to be retrieved from memory, if they are to be used in shallow choice. Not all memories are always available, and elements of the situation may make it more likely that certain judgment rules are more salient and that others are less salient. An emotion such as anger may narrow the available judgment rules, and a situational factor such as time pressure may make risk adverse rules more prominent.

Lastly, judgment rules must be deemed applicable, or relevant, to the situation. Obviously, many rules can be available and accessible, but only a select few will be relevant to

any given situation. In summary, these three factors – availability, accessibility, and applicability – must all be present for a heuristic, intuition, or simple rule to be enacted.

As we repeatedly engage in the same or similar processes we can use our experience through our memories. Greater experience in a certain decision domain makes it more likely that a similar decision was faced in the past and that applicable memories of similar decisions or events will be recalled. Over time the recall of past experiences can transform once effortful decisions into low-effort choices as a habit or routine develops. For instance, initially a problem is resolved by working through a deliberative process whereby the alternatives are determined, the attributes of each are weighed, and a choice is made. The second time the same or similar problem is faced, the decision becomes a bit quicker as aspects of the previous decision are recalled from memory and used in the deliberation. Learning occurs each time a decision is faced and a memory of its resolution is formed. Therefore, each time a similar decision is required more parts of the decision process will be recalled from memory and fewer aspects will be analyzed from scratch.

A driving example can illustrate this process. When in a new town, driving to a new job takes effort. First, you must look at a map or use an online mapping service to determine the route. With a route calculated, you embark in your car and you carefully watch street signs and highway exits to ensure you make the correct turn. You are constantly vigilant about your location and identifying each street and turn. You arrive at your location, but deciding how to get there and determining where to turn was laborious. Now imagine the same trip after a year in the job. You do not need a map or directions. In fact, it is likely that you arrive at the office and do not even remember portions of the trip because it has become routine and you were thinking about your day ahead. The effort to get to your destination is dramatically lower. Driving to work

is now largely an automatic process. Decision processes take advantage of routine and similarity in the same manner. Decisions that were initially effortful can become automated and effortless. Within business this can be manifested in the use of experience and gut instinct by more senior businesspeople. In a laboratory study of experienced versus inexperienced accounting auditors, Spilker & Prawitt (1997) found that experienced auditors spent less time reviewing the information database provided with the case study, suggesting a greater reliance on experience and intuition in decision making.

The examples above represent an associative decision process. Associative processing is based upon the similarity of the current problem to past problems. However, since problems are rarely identical to past experiences and since not all data are known for any situation, missing data related to the current situation are often completed with information from past events. The data that fills the gaps may or may not be correct. This can lead to errors in judgment, especially if a bias exists that fills in the missing data in an incorrect manner. Stereotyping is a prime example. Information about the specific individual that is not available may be filled in based on a stereotype. For instance, the judgment of whether someone is a hard worker may be determined merely through applying a stereotype relating work ethic and skin color rather than investigating the specific individual's propensity to work. In this case the associative process is faulty.

Simple rules also make the decision process less effortful. For example, limitations on the value of gifts that company employees can receive from vendors simplify the decision to accept a present from a salesperson. An employee no longer has to deliberate on the benefits and harms or the appropriateness of accepting a gift. She can merely ask if the gift is worth more than \$50, or whatever the company policy is. The decision has been dictated by the policy through the use

of a simple rule: Gifts worth more than \$50 cannot be accepted. In this case, little effort is required of the decision maker.

If a heuristic is available, accessible, and applicable, then a final critical factor in determining the process mode is the strength of the heuristic. Strong heuristics are key here because, with a strong heuristic, people may not even be aware their decision is determined by the heuristic, nor will they challenge its use. The choice will be unconsciously determined and implemented.

It is important to understand shallow choice because decision makers are “cognitive misers” (Bargh, 1999), and use low-effort cognitive processes whenever possible. Shallow choice is used unless decision makers have the motivation and opportunity to engage in deep choice (Fazio & Olson, 2003). When motivation and opportunity are both present, however, the decision maker will likely engage in deep choice. I describe this process next.

### **2.3 DEEP CHOICE**

Deep choice is a high-effort process. The attributes of the various alternatives are identified and evaluated and a choice is made based on pre-existing preferences. It takes effort and resources to properly identify and analyze all relevant information. Since individuals have limited resources, deep choice has constraints, and at times these limits prevent people from maximizing their utility as suggested by utility theory and rational choice models. Instead, they satisfice (Simon, 1957) when making a decision, that is, they accept a decision when it surpasses some minimally acceptable threshold.

The process that I call deep choice has been described in multiple ways by researchers. These definitions have some differences, but overall they describe a high-effort, deliberative process that contrasts with the low-effort, intuitive process of shallow choice. For instance Chen and Chaiken (1999) call their high-effort process “systematic processing” and state it is “resource demanding by definition, as it requires cognitive effort and capacity, and entails intentionality and controllability attending to judgment-relevant information” (1999: 86).

Beach and Mitchell described similar ideas when discussing decision strategies (Beach & Mitchell, 1978). Their strategies included an “analytic strategy” that “requires the decision maker to apply a prescribed procedure utilizing tools such as pencil and paper, mathematics, calculator or computer, etc. in a guided, systematic attempt to analyze the decision and evaluate its components” (1978: 441). This analytic strategy also includes calculating the expected utility of the various alternatives by considering outcomes and associated probabilities and selecting the alternative that offers the best potential. This contrasts with their nonanalytic strategies which are “fairly simple, preformulated rules that are applied by rote to decision tasks.” When using these strategies, “little information is procured or processed, little time is needed, and the rules do not require that the decision be decomposed nor that its multiple aspects be considered” (1979: 442).

Smith and DeCoster (2000) refer to their high-effort decision mode as rule-based processing and describe it as using symbolically represented and culturally transmitted knowledge that is intentionally accessed. Symbolic representation includes mathematical symbols as well as linguistic symbols (words). The researchers argue that symbolic knowledge can be learned from a single experience and this rule can then be applied to future occurrences of similar decisions. These rules serve as guides for the decision process. Smith and DeCoster describe this process as “necessarily sequential and relatively slow,” and thus it is effortful and

time-consuming as compared to the pattern-completion or similarity-based retrieval process of the associative processing mode.

Rational choice theory also provides another way to describe a high-effort decision process. Rational choice involves generating alternatives, estimating the expected outcomes of the alternatives, evaluating the alternatives based on some set of preferences, and applying a decision rule to select the best choice (March, 1994). This systematic approach requires much effort.

Several of the articles describing dual-process models define the high-effort decision mode as the use of individualizing information to overcome stereotypes or other group-based categorizations (Brewer and Feinstein, 1999; Martin, Seta, and Crelia, 1990; Devine, 1989). The effortful choice includes increased complexity and requires increased cognitive capacity in order to evaluate the individualizing information.

Epstein (1991) and Kirkpatrick and Epstein (1992), in their application of the dual-process concept, refer to the more effortful process as “rational” and contrast it with a low-effort process labeled “experiential.” The former involves a conscious evaluation of the decision alternatives while the latter relies on a preconscious, automatic, intuitive response.

Gilhooly and Murphy (2005) applied dual-process cognition to two types of decision problems, those requiring insight (often resulting in an “Aha!” response) and those not requiring an insight. They describe the effortful mode of dual-process cognition as one that “permits abstract reasoning and hypothetical thinking, operates relatively slowly and sequentially, is constrained by working memory capacity, and is highly correlated with general fluid intelligence” (2005: 282). This differs from the low-effort mode which is described as “automatic, implicit, fast, and as generating intuitive, immediate responses” (2005: 282).

Finally, Sloman (1996) refers to an effortful process he labels “rule-based.” By this he means that the laws of logic, causal inference, and abstract rules are used to evaluate the decision. He contrasts his rule-based system with an associative system where choice is made based on similarity and temporal continuity.

A summary of this research in dual-process cognition appears in Appendix A.

In review, past research has described a low-effort decision process that involves the use of heuristics, intuition, and simple rules. This decision mode requires little effort and the decision can be reached very quickly. In contrast, a high-effort decision process can be used instead. In this case the choice is made by actively and systematically analyzing the alternatives in a comprehensive manner. This process requires great effort and considerable time. However, effort and time are sometimes constrained and this forces some decisions to be made using shallow choice even if the decision maker would prefer to use deep choice. Next I draw on this previous research to define my application of deep and shallow choice for this dissertation.

## **2.4 DEFINING DEEP AND SHALLOW CHOICE**

I suggest that the use of deep versus shallow choice is determined by the extent to which a decision involves decision complexity. Decision complexity is a gauge of the effort required to make a decision and is calculated based on the following structural and process factors:

- number of steps in the decision process
- number of alternatives considered
- number of attributes evaluated for each alternative
- degree to which a decision uses compensatory versus non-compensatory analysis

- degree to which heuristic processing is used.

I will briefly describe each of these factors.

### **2.4.1 Structural Factors**

First, the number of steps in the decision process has a direct effect on the effort required to make a decision: the more steps involved, the more effort required. Different types of decisions require different numbers of steps.

Second, the number of alternatives considered has a multiplicative effect on effort. If each alternative requires thirteen steps, increasing the alternatives considered from ten to eleven results in the total number of required steps increasing from 130 to 143. Thus, the number of alternatives considered can quickly increase the complexity of the decision.

Third, the number of attributes that are evaluated also has a multiplicative effect. For instance, if a decision process has three steps and four alternatives are evaluated and each alternative has five attributes that are considered, then sixty steps must be completed. Adding just one more attribute increases the number of required steps to seventy-two. And if you add one more step to the decision process, consider one more alternative, and evaluate one more attribute, the total steps almost double, going from seventy-two to 140. Obviously, the decision structure plays an important role in decision complexity. However, the decision process is also a significant factor.

### **2.4.2 Decision Process**

The calculations above actually underestimate the complexity of the decision if the attributes of the decision are compensatory. Attributes are compensatory when the level of one or more



attributes can compensate for the level of another (Svenson, 1979; Todd & Gigerenzer, 2000). For instance, if you have three attributes that are important, but one of the three is below the level you consider acceptable, the alternative can still be acceptable overall if the remaining two attributes are well above your acceptance threshold. With compensatory attributes, the attributes interact to determine the overall desirability of an alternative. Compensatory attributes add to decision complexity because each attribute must not only be considered individually, but also in relation to each other. In contrast, attributes that are non-compensatory cannot offset each other. If any of the individual attributes are below the acceptance threshold, the alternative is unacceptable. Non-compensatory attributes do not interact.

The final factor determining decision complexity is the extent to which heuristics are used. Heuristics are mental shortcuts. They represent behavioral rules-of-thumb that decision makers use when making decisions about how to respond to various kinds of conflicts and dilemmas they encounter (Allison & Messick, 1990). Heuristics enable decision makers to quickly make a decision based on simple rules and associations and allow decision makers to forego the deliberative evaluation of attributes and alternatives. The use of heuristics reduces decision complexity. In addition, many heuristics are unconsciously employed, thereby reducing the burden on conscious processes.

In brief, these five factors of decision complexity determine whether deep choice or shallow choice is used to make a decision. Thus, the pure case of deep choice occurs when there are many steps in the decision process, when many alternatives and attributes are considered, when compensatory decision rules are used exclusively, and when the use of heuristics is absent. The pure case of shallow choice is a total reliance on heuristics to make a decision.

### **2.4.3 Decision Complexity, Effort, and Resources**

The first four of the decision complexity factors are predicted to be positively related to the effort required to make a judgment (an increase in the factor increases the cognitive effort required), and the last factor is predicted to be negatively related to effort (an increase in the use of heuristics decreases the effort required). This is due to the additional resources (cognitive, financial, or temporal) that must be expended to reach a decision that is complex. For example, an increase in the number of steps in the decision process requires the decision maker to spend more time and cognitive capacity to solve the problem. Or, as a second example, an expansion in the number of alternatives or attributes that are considered increases both the amount of data that must be gathered and the amount of data that must be evaluated. This will require more time, mental attention, or money to collect and appraise the data.

On the other hand, the positive correlation between decision complexity and effort also means that a reduction in complexity reduces the amount of resources required to make a judgment. Therefore, decision makers who have limited resources may cope by reducing decision complexity. For instance, businesspeople facing budgetary constraints or time pressure or the need to juggle numerous projects are likely to reduce the number of steps, alternatives, or attributes in the decision process, or to make greater use of non-compensatory analysis or heuristics. These reductions in complexity decrease the effort required to make a choice.

Having delineated the distinctions between deep choice and shallow choice and having noted how they are determined, the next important step is to develop a logic for explaining when deep choice or shallow choice is used. I do so in the next section.

## 2.5 DETERMINANTS OF MODE SELECTION

Given the existence of dual-process cognition, the question that arises is what determines when each mode is enacted? One foundational idea is that people will expend the minimum effort required to achieve an acceptable result. This is because people have limited cognitive resources (e.g. Shiffrin & Schneider, 1977) and, therefore, seek to economize when possible (e.g. Chaiken, 1980; Fiske & Taylor, 1991). Thus, the default processing mode is shallow choice.

If shallow choice is the default choice, a valid question is “what would cause the activation of deep choice?” Fazio and Towles-Schwen (1999) has offered a model that provides insights into when deep choice will be triggered. Fazio focuses on two factors: (1) whether the decision maker is motivated to use a high-effort, deliberative process and (2) whether the decision maker has the opportunity to use the process. Fazio calls his model the MODE model. MODE is an acronym for motivation and oppportunity as determinants of whether a spontaneous or deliberative approach will be employed. According to Fazio, “Given the effortful reflection required for deliberative processing, some motivating force is necessary to induce individuals to engage in the processing”(Fazio & Olson, 2003).

The motivation to engage in deep choice comes in many forms. I include several below. One motivation is the significance of the decision. As the consequences of the decision become more serious and as the impact of the decision increases, the decision maker will likely not want to rely solely on a heuristic-based or intuitive process (shallow choice), but will determine that it is worth the time and effort to engage in the deliberative process of deep choice.

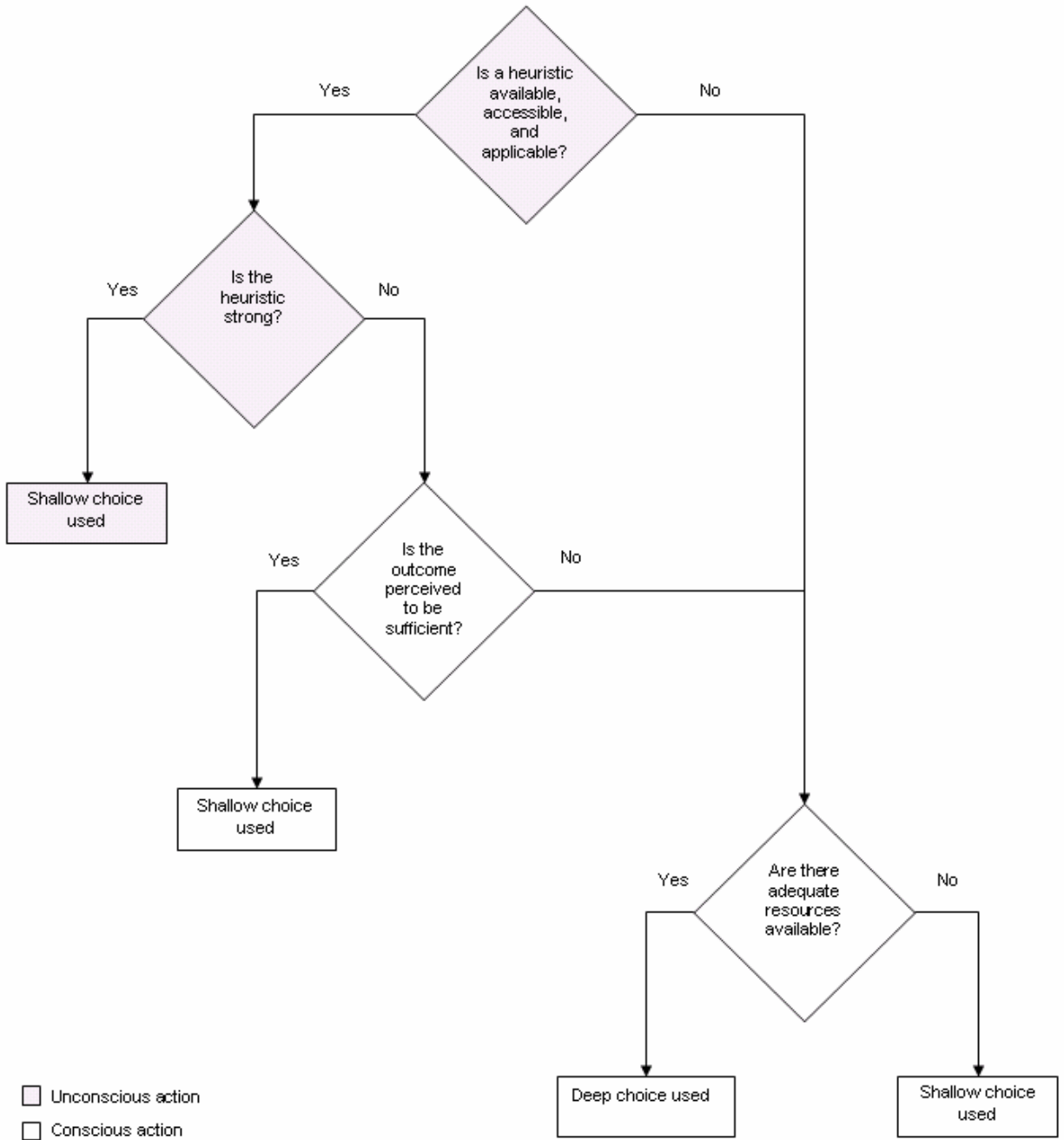
A second motivational factor is familiarity with the problem. To the extent that a problem is unique and unfamiliar to a decision maker, typically due to a lack of experience or memories of similar decisions in the past, it is more likely that deep choice will be used.

A third factor is the strength of relevant stereotypes or heuristics. Some decisions that are significant may still be resolved via shallow choice if the strength of the heuristic leads the decision maker to conclude, either consciously or unconsciously, that the stereotype adequately solves the problem. Put a different way, a heuristic may be so strong there is no motivation to go beyond shallow choice.

A fourth factor that influences the motivation to use deep choice is sufficiency. Given that people have limited resources and seek to economize as much as possible (Chaiken, 1980, 1987; Fiske and Taylor, 1991) and that people are willing to satisfice (Simon, 1976), the notion of sufficiency is critical to the choice of decision process. If the outcome from shallow choice is expected to meet some minimum acceptance threshold, deep choice may not be used even if the problem is difficult and the potential outcome has significant consequences.

The final factor discussed here is the availability of resources. A decision maker may wish to engage in deep choice, but be constrained by a lack of resources. Potentially deficient resources include the time required to engage in an effortful process, the cognitive capacity to devote to solving the problem (perhaps because several other decisions are pressing at the same time), or the money required to gather the desired information to make a decision.

The work of several researchers can be combined to create a flowchart that determines which choice process will be relied upon for the decision. Figure 2.1 depicts the flowchart showing when shallow or deep choice will be the primary decision mode. For simplicity, in this chart I use the word heuristic to refer to heuristics, intuition, and simple rules. The flowchart starts with the notion that for a heuristic to be used it must be available, accessible, and applicable (Higgins, 1995). Each of these three factors is necessary for activation of a heuristic, and no one factor by itself is sufficient for activation. This process occurs unconsciously.



**Figure 2.1 Determining Cognitive Process Mode**

If the heuristic is not strong, the sufficiency of the shallow choice is evaluated. At this point, the decision becomes a conscious process. If the shallow choice is not sufficient, the decision maker will be motivated to improve the decision by using the deep choice process. The question next

becomes, “Are there adequate resources available to engage in deep choice?” In other words, is there sufficient time, cognitive capacity, and relevant decision information available so that a systematic, detailed decision process can be performed? Both the motivation to discover a superior solution and the availability of resources are required for deep choice to be pursued.

Starting back at the top of the flowchart, if a heuristic is not available, accessible or applicable, then it cannot be activated. In the absence of a heuristic, the decision maker will evaluate whether there are enough resources to make a deep choice. If yes, the deep choice process will be used. If no, the decision is made using shallow choice which at its most extreme would simply be random choice or doing nothing, since these actions represent the least effort choice. Since at least minimal information is typically available, it is likely the deep choice mode will be used with whatever information is available.

## **2.6 IMPLICATIONS TO BUSINESS ETHICS OF DUAL-PROCESS COGNITION**

The application of dual-process cognition to ethical decision making is important for several reasons. The inclusion of dual-process cognition enables the construction of a more accurate model of ethical decision making by acknowledging that people resolve ethical dilemmas using modes of thought other than rational choice and expected utility models. Dual-process cognition is one component of a larger behavioral ethical decision model that is proposed in the next chapter. This proposed model seeks to unify theories from several fields to produce the most accurate model to date of how people make ethical decisions. This descriptive model integrates the existing ethical decision models with dual-process cognition, the theory of planned behavior

(Ajzen, 1985), social systems theory (Kuhn, 1974), and a model of emotion's effect on decision making (Loewenstein & Lerner, 2003).

An important idea highlighted by dual-process cognition and the movement beyond rational choice models is the concept of embeddedness. Researchers discuss ethical choice as an intentional and reasoned decision process. By introducing the shallow choice decision method and noting that rational choice does not always take place, we must consider what then determines the ethics of a decision. If the ethical attribute of an alternative is not intentionally evaluated, then whatever positive or negative ethics are embedded within the chosen alternative are enacted. Thus, it is critical to understand when embedded ethical principles are enacted, how these principles become embedded, and how embedded principles can be changed.

Dual-process cognition also raises new questions on topics already discussed in the literature. For instance, the effect of corporate culture on ethical behavior has received significant attention. The proposed dual-process framework allows us to consider whether the culture is so strong that a behavior results from an unconscious application of a strong heuristic, or whether behavior derives from a calculated analysis of costs and benefits. Different strategies would need to be employed to modify behavior depending on the type of cognition used to determine the act.

## **2.7 CHAPTER SUMMARY**

In this chapter I presented the concept of dual-process cognition. I defined the two types of cognition, deep and shallow choice. I identified when each of the processes will be used and described the importance of dual-process cognition to business ethics. This dual-process

approach to decision making is a key component of the behavioral ethical decision making process. In the following chapter I detail this model, which provides an important step in descriptively understanding how people resolve ethical dilemmas in business.



### **3.0 DEVELOPING A BEHAVIORAL MODEL OF ETHICAL DECISION MAKING**

Research on ethical decision making has applied rational choice models to describe how people resolve ethical dilemmas. In this chapter I incorporate ideas from social psychology and the decision sciences to develop a behavioral model of ethical decision making that more accurately describes how people make decisions and how they behave. This model goes beyond the rational choice models that dominate the existing ethical choice literature by including two important additions to the models. First, the model accounts for the use of an intuitive, automatic approach to ethical choice that uses heuristics and simple decision rules in addition to the use of a deliberative, thoughtful approach to ethical decision making. The use of these two types of cognitive approaches has been called dual-process cognition (Chaiken & Trope, 1999), and, building on the previous chapter, I shall refer to the two processes as shallow and deep choice. Second, this new model includes the effects of emotion. A few recent studies have begun to explore this aspect of ethical decision making, but the latest work in social psychology can greatly improve the description of how emotions affect the decision process. These two extensions to the ethical decision making model – dual-process cognition and the effects of emotion – result in a more accurate descriptive account about how people reason through an ethical dilemma.

The format of this chapter is as follows. First, I discuss decision making in a broad context. This provides a structure upon which to frame the discussion on ethical decision making

in the remaining sections of the chapter. Second, I review the existing ethical decision making models and the extensions to these models. Lastly, after noting the deficiencies of these models, I develop my behavioral model of ethical decision making. In addition to the inclusion of shallow choice as discussed above, this model includes a more detailed account of the active cognition component (deep choice process) of ethical decision making than has been offered by previous research.

I start, then, with a brief overview of decision making.

### **3.1 A BROAD OVERVIEW OF THE DECISION MAKING PROCESS**

Decision making is an active and extensive research area with literally thousands of articles on the subject. In this section I provide a brief introduction to decision making in order to establish a foundation for the subsequent discussion on ethical choice. Note that the discussion in this section only reviews the deep choice process (the active cognition process), as that has been the focus of the existing research. I rely on works by March (1994), Baron (2000), Ajzen (1985; 1991), Fiske and Taylor (1991), and Plous (1993) for this review.

Decision making and behavior are traditionally viewed as conscious, deliberative processes involving at least five steps (Ferrell, Gresham, & Fraedrich, 1989). First, decision makers must recognize that there is a problem that needs to be solved. Second, they must generate alternatives to resolve the problem. Third, decision makers must determine the consequences resulting from implementation of each of the alternatives. Fourth, an alternative must be selected by evaluating the alternatives based on a set of rules and preferences. And lastly, decision makers must implement that choice. Simon (1965) described decision making in

a similar way, claiming it is a complex social process involving the directing of attention, discovery, designing courses of action, evaluating alternatives, and choosing among them. I group these steps as three processes. The first is awareness, the process by which an issue becomes salient to the decision maker. The second process, judgment, includes alternative generation, evaluation, and selection. The third process, behavior, is the implantation of the judgment choice.

Note that in Simon's description of decision making, he ended the decision process when a choice is made. However, I am going to follow the structure of Rest (1986), Ferrell (1985), Trevino (1986), and others and include behavior as the final outcome of my ethical decision model. I do so because while many researchers assume choice equals behavior, there often is a disparity between choice and behavior (Ajzen, 1991; Fishbein & Ajzen, 1975). This may be especially true with regard to ethical decisions. Moreover, it could be argued that the choice that really matters is the choice that is enacted, not the one that is intended.

Questions that naturally arise from identification of the five decision making steps mentioned above include:

- What determines what becomes salient?
- What determines what alternatives are included?
- What determines the expectations about consequences?
- How are preferences created and evoked?
- What decision rules are used to make a choice?

The answers to these questions highlight the different assumptions underlying the various decision making models, and in general, provide a structure to compare decision making models.

I will now briefly describe the awareness, judgment, and behavior processes of decision making.

### 3.1.1 Awareness

The decision process begins with awareness (Arsenio & Lemerise, 2004; Fiske & Taylor, 1991; Kinicki & Kreitner, 2006). People constantly receive enormous amounts of physical and social stimuli from the environment. The volume of information overwhelms the processing capacity of the mind, therefore, people selectively perceive subsets of the environmental stimuli and only a portion of the available information captures our attention. In general, the stimuli that capture our attention are those things that are unusual or unexpected or are highly relevant to a task we seek to perform (Fiske & Taylor, 1991), although biases may distort this process. This environmental data is given meaning through an encoding process where the raw information is interpreted or translated into mental representations. The information is placed in categories by referencing previous experiences and using mental summaries known as schemas. A schema is “a cognitive structure that represents knowledge about a concept or type of stimulus, including its attributes and the relations among those attributes” (Fiske & Taylor, 1991: 98). These schemas guide categorization and help us to organize our perceptions of the world around us (Markus & Zajonc, 1985). This information adds to our memories and is used in subsequent encoding episodes. The specificity of schemas varies as the category boundaries may be precise or “fuzzy” (Shetzer, 1993).

The process of information encoding, and later the process of recalling this information, is subject to many biases. For example, at times external stimuli that are unrelated to the decision at hand can have an unconscious effect on decision makers, such as when decision makers are shown photographs of hostile people or situations and later rate an ambiguous partner as more hostile and also behave in a more hostile way than a control group (Herr, 1986). Another bias may occur when the information about a situation or person is incomplete. Many times the

missing data is filled in with information previously stored in memory that is perceived to be similar and relevant to the current situation. In such circumstances, stereotypes are frequently used to fill in the missing data, and the characteristics of a group are applied to an individual who is a member of that group. However, that one individual may not be representative of the group and, therefore, the association would be inaccurate. In addition, at times the decision maker's beliefs about the group are inaccurate. These are just two of a variety of potential errors that occur in this first step of the decision process.

### **3.1.2 Judgment**

The next step in decision making is the judgment process. It entails the generation and evaluation of potential alternatives and selection from among those alternatives. The method that has dominated research in this area is rational choice, which is based on expected utility theory (von Neumann & Morgenstern, 1947). Expected utility theory makes several assumptions that are relevant to the five questions listed earlier regarding decision making. This theory assumes that all the relevant issues become salient to the decision maker and that all the potential alternatives will be considered and evaluated. It further assumes that people have perfect knowledge of the consequences of selecting each of the alternatives. The decision rule used is that people will act self-interestedly and select the single alternative that maximizes their expected utility.

Beginning about fifty years ago and continuing today, researchers have challenged the idea that people use expected utility theory to make decisions. March noted, "pure visions of rational choice are hard to accept as credible portraits of actual individual or organizational actors" (March, 1994: 4). Resource constraints, including cognitive limitations, time restrictions, and financial restraints, result in an inability to perform in a purely rational manner. Simon

(1997) states there are at least three ways that actual behavior does not uphold the assumptions of expected utility theory and rationality:

1. Rationality requires a complete knowledge and anticipation of the consequences that will follow on each choice. In fact, knowledge of consequences is always fragmentary.
2. Since these consequences lie in the future, imagination must supply the lack of experienced feeling in attaching value to them. But values can be only imperfectly anticipated.
3. Rationality requires choice among all possible alternative behaviors. In actual behavior, only a very few of all these possible alternatives ever come to mind. (Simon, 1997: 93-94)

Noting these discrepancies between theory and behavior, Simon (1957) was one of the first to propose an alternative to expected utility theory and purely rational choice. He suggested that people do not select the optimal choice, but rather they “satisfice.” Plous (1993) has written about decision making and satisficing and provides this definition and example:

“To satisfice is to choose a path that satisfies your most important needs, even though the choice may not be ideal or optimal. For example, in renting an apartment, people tend to search for an alternative that satisfies certain needs (price, location, space, safety, and so on). They do not conduct an exhaustive search of all available apartments and choose the apartment that has the highest overall utility.” (Plous, 1993: 95).

Other researchers have discussed additional ways decision makers fail to make decisions as predicted by rational choice models. Kahneman and Tversky (1982) have noted several ways people use heuristics – mental shortcuts and rules-of-thumb – to arrive at answers that violate the principles of rationality. These include the availability heuristic, with which people make judgments based on information that is readily available in memory, and the anchoring heuristic, with which people have difficulty adjusting their initial estimates even when they know the estimate is not based on meaningful data.

### **3.1.3 Behavior**

After completing the judgment process and selecting an alternative, the final process in a model of decision making is the behavior process. This is an important step in a descriptive decision model because many times the intent or decision established in the judgment phase of the decision making process is not the behavior that is performed. Fishbein and Ajzen (1975) and Ajzen (1985; 1991) have researched this disparity between intent and behavior. Their model, the theory of planned behavior, posits that behavior is driven by not only intentions, but also by subjective norms and perceived behavioral control. Subjective norms reflect the influence of the opinion of others on the decision maker and highlights that most decisions are a social process. Perceived behavioral control includes the resources and opportunities needed to implement the decision and the obstacles and impediments that could interfere with implementing the decision. Many times the implementation process is not fully or accurately considered when a decision is being made. At times the given decision may be deemed unworkable when attempting to develop an implementation plan. When this happens, the judgment phase of the decision making process is revisited and a different alternative is chosen.

Having provided a brief overview of a general decision making process, I now narrow my focus to ethical decision making.

## **3.2 ETHICAL DECISION MAKING**

In this section I review the existing ethical decision making literature. Ethical decisions are those decisions that affect the welfare of others and concern issues of good and evil or right and wrong. Proper ethical decision making requires decision makers to determine who warrants moral

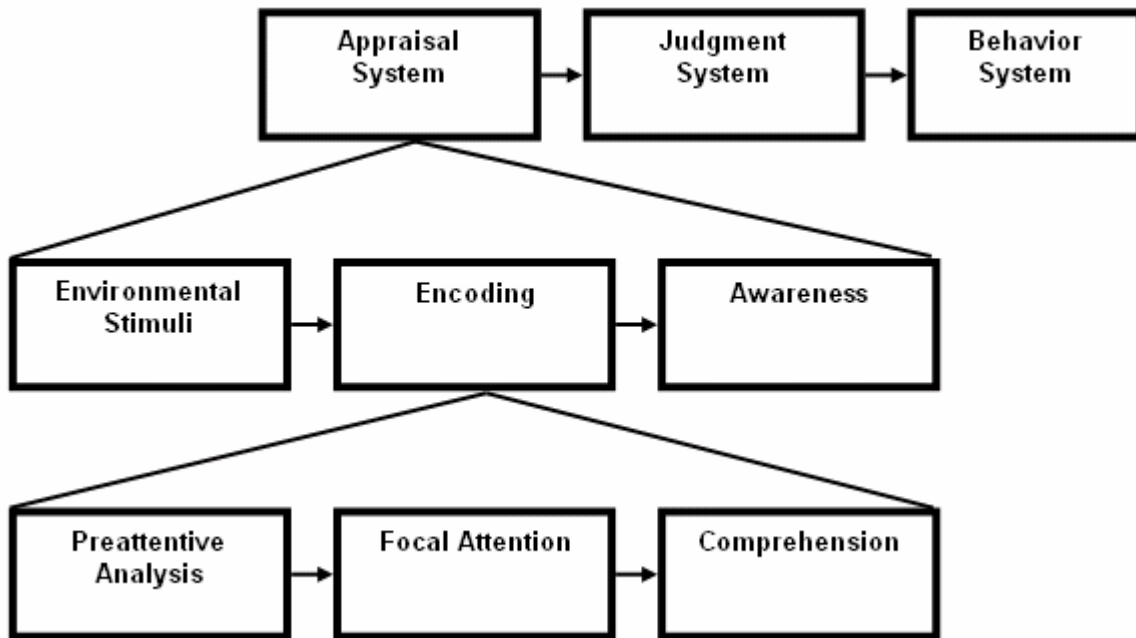
concern, to consider how the potential alternatives will affect those people, and to apply a decision rule based on ethical principles. Researchers have proposed several ethical decision making models for business. Some of these are general models (e.g. Dubinsky & Loken, 1989; Jones, 1991; Rest, 1986; Trevino, 1986) while others are focused on a specific functional areas such as marketing (e.g. Ferrell & Gresham, 1985; Hunt & Vitell, 1986). Other researchers have studied specific aspects of the decision process to better understand the role of imagination (Moberg & Seabright, 2000; Werhane, 1998, 1999) or social influence (Jones & Ryan, 1997; Ryan, 2000). Yet other researchers have investigated the factors that moderate the decision process (for reviews see Ford & Richardson, 1994; Loe, Ferrell, & Mansfield, 2000). All of these efforts provide valuable insights into the decision making process, yet still leave room to improve the predictive and explanatory power of ethical decision making in organizations. As will be discussed in this chapter, these existing models are limited because they use the rationalist approach to decision making. In other words, they assume that decision makers actively search through all possible alternatives, envision the outcomes of each alternative, select an alternative that yields the maximum benefits based on preexisting preferences, and then implement the decision. The failure of these existing models to account for both deliberative and non-deliberative cognition – what I refer to as deep and shallow choice – and the exclusion of the effects of emotions on the decision process, limits the ability of these models to describe the way people actually make decisions. Later in this chapter I will overcome these limitations by explicitly including dual-process cognition and affect within a behavioral model of ethical decision making.

To provide a background for the ethical decision making model that I propose, I first review the existing ethical decision making models. One way to organize and understand these



existing models and the decision process in general is to view the decision process as a system with inputs, process, and outputs (Kuhn, 1974). Put another way, the models can be distinguished by reviewing how information becomes salient to the decision maker (the input), the rules and methods by which choice is made (the process), and the manner in which the decision is implemented (the output).

A useful characteristic of the systems approach is that it is hierarchical; we can easily move between levels of complexity and study the issue at the depth we desire. For instance, at the highest level, a decision process consists of inputs of an appraisal system where environmental stimuli capture our attention, a process of a judgment system where rules and methods are applied to choose among alternatives, and an output of a behavior system where the decision is enacted (Figure 3.1). However, the hierarchical nature of a systems approach means that each of these system components can be divided into various subsystems if greater detail is sought. For example, the appraisal system of the first level process has a subsystem of inputs, process, and outputs that is comprised of inputs from the environment, a process of encoding to make sense of the environmental inputs, and an output of awareness of the environmental situation. If we wish to examine this aspect of the decision process in even greater detail, we can examine the subsystem of the encoding process by analyzing the input of preattentive analysis, the processes of focal attention, and output of comprehension (Fiske & Taylor, 1991). A description of each of these subprocesses is not included here as the immediate point is not to understand the subsystem of the encoding process, but rather to show that systems theory provides a way to organize the ethical decision models. It does so by comparing how decision makers become aware of ethical dilemmas (inputs), the decision rules or evaluation methods that



**Figure 3.1: Decision Systems Model**

are used to select among alternatives (process), and the means used to implement the decision (outputs). Moreover, systems theory provides a structure to investigate inputs, processes, and outputs at whatever level of complexity is desired.

Each of these systems can involve several steps. For example, the judgment system of the decision process includes the five components of the basic decision making paradigm: problem recognition, search, evaluation, choice, and output (Ferrell et al., 1989).

An additional component of the decision models is the moderators that are assumed to influence the decision process. I classify these moderators into four groups: individual factors, group factors, organizational factors, and issue factors.

Although Jones (1991) offered a synthesized ethical decision model using a model proposed by Rest (1986) to which he added other existing ethical decision models, I will return to the original models and reframe them into systems components to ensure that all the

components of the past models are captured. To this new combined model I will add extensions and elaborations of the ethical decision process that have been proposed by other researchers. Later, I will further expand the model by incorporating the aforementioned dual-process and emotion components to develop my behavioral model of ethical decision making.

### **3.2.1 Existing Models**

Four stand-alone models and three extensions to those models have received attention in the literature. Arguably the most cited model is one proposed by Rest (1986), and I begin my review with his four-component model.

#### **3.2.1.1 Four-Component Model**

Rest developed (1986) and later revised (Rest & Narvaez, 1994) a four-component model of ethical decision making. It is arguably the most cited model in the field. Rest developed his model by working backward from the outcome. He determined what would have needed to occur for ethical behavior to have been performed. Rest posited that four processes must have taken place for ethical behavior to have occurred: (1) the situation was interpreted as a moral dilemma (ethical sensitivity); (2) a decision was judged as being morally correct (moral judgment); (3) moral values were prioritized over other values (moral motivation); and (4) the decision maker had the courage, perseverance, and skills to overcome distractions and engage in the moral action (moral character). I will discuss each of these in turn.

The first component in Rest's model, ethical sensitivity, highlights that the initial necessary step toward ethical action is to realize that an ethical dilemma is present. This requires being ethically aware. We may fail to act morally simply because we are unaware that our

actions and decisions may affect others. Within this component, however, Rest includes not just this notion of awareness, but also the generation of alternatives to resolve the dilemma. This second process “involves imaginatively constructing possible scenarios, and knowing the cause-consequence chains of events in the real world; it involves empathy and role-taking skills” (Rest & Narvaez, 1994: 23). Put a different way, in this stage decision makers are aware that the dilemma includes consequences that will affect other people’s welfare and involves concepts of right and wrong. Moreover, they have identified possible alternative actions to take and the consequences of each alternative. Hence, Rest’s first component includes two different processes: awareness and alternative generation.

The second component of Rest’s model, moral judgment, has received the most scholarly attention of the four components. It is in this component that moral evaluation takes place. As with any type of decision, decision rules are used to select the appropriate alternative. Rest states that the decision rules used in moral judgment are determined by the decision maker’s level of cognitive moral development. The theory of cognitive moral development, which was heavily influenced by Lawrence Kohlberg (Kohlberg, 1969, 1973, 1986), will be discussed in detail in Chapter 4. In brief, the theory claims that the method used to resolve ethical dilemmas changes as we mature. This occurs because as we get older and have more social interactions our ideas about whom to consider in a dilemma and how to organize cooperation among people, as well as our conception of fairness, evolve from a short-term, self-interested, and simplistic viewpoint to a long-term, universal, and complex viewpoint. So an eight year old child at a stage 2 level of reasoning under Kohlberg’s developmental theory may view the moral action as an immediate exchange of favors and not consider the long-term consequences or the effect on others beyond the immediate parties, while an adult at a stage 5 level of development may determine the moral

action based on the long-term, society-wide consequences to cooperation. Kohlberg argued that there are six possible stages of moral development, but others now challenge that assertion, as will be discussed in the next chapter. By stating there are six stages, Rest is claiming there are six different decision rules people use to resolve ethical dilemmas. The six stages and their associated decision rules are listed in Table 3.1.

### **Table 3.1: Stages of Moral Development**

#### *Level 1: Preconventional*

Moral value resides in external, quasi-physical happenings, in bad acts, or in quasi-need rather than in persons and standards.

- Stage 1: Action is motivated by avoidance of punishment and “conscience” is irrational fear of punishment.
- Stage 2: Action motivated by desire for reward or benefit. Possible guilt reactions are ignored and punishment viewed in a pragmatic manner.

#### *Level 2: Conventional*

Moral value resides in performing good or right roles, in maintaining the conventional order and the expectancies of others.

- Stage 3: Action motivated by anticipation of disapproval of others, actual or imagined-hypothetical (e.g., guilt).
- Stage 4: Action motivated by anticipation of dishonor, i.e., institutionalized blame for failure of duty, and by guilt over concrete harm done to others.

#### *Level 3: Post-conventional*

Moral value resides in conformity by the self to shared or shareable standards, rights, or duties.

- Stage 5: Concern about maintaining respect of equals and of the community (assuming their respect is based on reason rather than emotions). Concern about own self-respect, i.e., to avoid judging self as irrational, inconsistent, nonpurposive.
- Stage 6: Concern about self-condemnation for violating one’s own principles.

Source: Kohlberg (1994)

In the third component of Rest's model, moral motivation, the moral alternative selected in step 2 either is or is not given priority over other values or alternatives. In other words, Rest suggests that in the second step all possible moral alternatives are considered and the alternative perceived to be the most moral is selected. Then, in this third step, the moral alternative is compared to amoral alternatives. If the moral alternative is prioritized over the other alternatives, ethical intent is established.

The final component, moral behavior, involves "ego strength, perseverance, backbone, toughness, strength of conviction, and courage" (Rest & Narvaez, 1994: 24). In short, this component requires a person to overcome obstacles to perform the chosen ethical act. To the extent that decision makers persevere and enact the ethical intent established in component 3, they demonstrate moral character and moral conviction.

Rest's four component model can be summarized as having an input of moral awareness, a judgment process that consists of five steps (generation of alternatives, calculating the outcomes of each of the alternatives, choosing an alternative based upon the decision maker's level of moral development, prioritizing the moral alternative over the other alternatives, and overcoming implementation obstacles), and an output of moral behavior. The decision rules used to select the ethical behavior are based on the level of moral development, that is, how one believes cooperation is obtained in society and one's notion of fairness. Although Rest did not specify moderating factors on his four-component model, his book does cite research indicating variables that affect the ethical decision making process. Some of these variables, including years of education, religion, geographic location, and years out of school, are contained in Rest's

Defining Issues Test (DIT), a multiple-choice survey instrument used to indicate an individual's stage of cognitive moral development.

There is a danger with the manner the four component model is frequently applied by researchers. Rest stressed that the ethical decision process is highly iterative: "There are complex interactions among the four components, and it is not supposed that the four represent a temporal order such that a person performs one, then two, then three, then four – rather the four components comprise a logical analysis of what it takes to behave morally" (Rest & Narvaez, 1994: 24). Despite this notice, researchers often present his model as an inviolate stage process. The result is that the decision process frequently is depicted as if two, separate decision processes take place, whereby first a decision is made solely based on ethical considerations (in other words, as if only the ethical attribute of the alternatives are considered), and then a separate decision process takes place to compare this choice to all amoral alternatives. This two-step process creates an either/or proposition where either the most ethical choice is selected or some amoral choice is selected. This does not reflect the iterative process described by Rest or the compromises and trade-offs that are often made during the decision process. Put another way, many researchers present decision making as if the ethical attributes are considered apart from all other decision attributes. I suggest it is more accurate to model the ethical decision process as one where multiple attributes, including both moral and amoral attributes, are considered concurrently in a one-step judgment process. Again, this does not conflict with what Rest says, but it does conflict with how his model is often interpreted.

Multiattribute utility theory (Baron, 2000) is a way to include several attributes in the judgment process at the same time. The theory simply suggests taking a weighted average of the values of each of the attributes of the alternatives. The weighting reflects the importance of the

attribute to the decision maker. In this way the ethical attribute is viewed as one factor among many and it can be offset using compensatory reasoning. Compensatory reasoning is when an unacceptably low level of an attribute can be offset or compensated by a high level of another attribute to make the alternative acceptable overall. In contrast, in non-compensatory reasoning, each attribute must meet a prescribed level or the alternative is rejected. For example, a person shopping for a new car may have three attributes – color, gas mileage, and price – that will determine which car is selected. Assume the car buyer's preferences are for a blue car costing no more than \$20,000 with gas mileage of at least 25 miles per gallon. Now assume the car buyer finds a blue car that gets 40 miles per gallon with a price of \$22,000. Using compensatory reasoning the car buyer might consider the high gas mileage a worthwhile tradeoff for the price being higher than her preference. Using non-compensatory reasoning, the car would be rejected because it did not meet the minimum qualifications for each of the three attributes. When incorrectly interpreting Rest and presenting the decision process as a two-step process, researchers are depicting the first step as a non-compensatory decision process where the ethical attribute is the only one considered and the most ethical choice must be chosen. No trade-offs are possible. Then in step two of the process, that one ethical alternative is compared to the amoral alternatives. The decision becomes a dichotomous choice, forcing decision makers to choose either the ethical response or an amoral alternative. In contrast, the multiattribute model explains the selection of a choice that is between the most ethical choice and the amoral choice. There is a trade-off between the level of ethics and other attributes that are desirable to the decision maker. Given that most ethical decisions are not black and white, but contain many shades of gray, a decision process which accounts for this continuous rather than dichotomous result is more likely to reflect actual behavior.



The frequent misinterpretation of Rest is a result of the method he used to derive the model. Since he started with the outcome, it is accurate to say the steps in his model had to take place, but that greatly simplifies the actions and interactions that took place to reach the endpoint. This idea can be seen in the popular comic strip “Family Circus.” Frequently the artist depicts one of the children, Billy, going to a destination such as the neighbor’s house. Rather than proceeding in a direct route to the house next door, Billy gets sidetracked and does things such as chasing the cat, kicking a ball, romping through a pile of leaves, and more. Billy eventually makes it next door and back, but to model his behavior as a path straight from his front door to the neighbor’s door and then back home again does not adequately or accurately describe it. However, if you start with the outcome, as Rest did, and imagine what took place, you could correctly state that Billy was at the neighbor’s house and did return home. A model based on this approach would simultaneously be correct and yet also be misleading. Likewise, Rest’s model is correct, but misleading.

An important contribution of Rest’s model is the distinction between moral intention and moral behavior. Intended behavior does not always result in actual behavior (Weber and Gillespie, 1998). This is consistent with the behavioral research as described by the theory of reasoned action (Fishbein and Ajzen, 1975) and the theory of planned behavior (Ajzen, 1985). We often fail to do things we intend to do, and it is proper to acknowledge this within the model.

The four-component model, like all the existing ethical decision making models, has several serious limitations. The most significant weakness is that it does not account for non-rational, non-deliberative thought in spite of the fact that Rest acknowledges that people possess an intuitive ability to make decisions as well. Rest writes:

Making moral judgments seems to come naturally to people. Even young children seem to display fits of moral outrage when they sense something unfair or wrong

was done to them. As adults in our society, we face immensely difficult moral problems in allocation of health care, the arms race, social justice for minorities, use of military force, and so on. And yet, despite the enormity and complexity of these issues, most people seem to have at least intuitions about what is morally right or wrong regarding such issues as abortion, the military draft, affirmative action, and other issues. It almost seems as if humans are genetically built to make moral decisions or are quickly conditioned by social experience to make them. (1986:8).

This quote highlights that a behavioral model of ethical decision making should include both deep and shallow choice in order to account for both deliberative choice and for the intuition that Rest describes above.

Other models, though likewise focused on an active, deliberative approach to moral judgment, also contribute to our understanding of ethical decision making. The next model was developed by Trevino (1986).

### **3.2.1.2 Person-Situation Interaction Model**

Trevino (1986) also proposed an ethical decision making model that used Kohlberg's moral development theory. However, Trevino sought to highlight that ethical behavior is not solely determined by cognition, and consequently her person-situation interactionist model explicitly includes individual and situational variables that moderate an individual's cognition and behavior. Trevino's model begins with an ethical dilemma triggering moral cognition. Similar to Rest's model, her cognitive stage is driven by Kohlberg's cognitive moral development theory, suggesting that the manner in which a decision maker resolves an ethical dilemma can be explained by his or her level of cognitive development. The last stage of Trevino's model is ethical behavior. The relationship between cognition and behavior is moderated by individual and situational factors. Trevino posits that situational factors also affect the cognitive process directly. Trevino's contributions include the recognition that moral cognition alone does not

determine behavior and the addition of a range of moderators on the ethical choice process. Whereas Rest moved beyond cognition by suggesting other steps that must be taken to engage in moral behavior, Trevino moved beyond cognition by highlighting that the steps performed in decision making are moderated by a number of different factors. Her moderators include factors internal to the individual and factors inherent to the situation. She classifies situational moderators into those relating to three categories – the immediate job context, organizational culture, and characteristics of the work – and includes factors such as reinforcement, external pressures, organizational culture, referent others, and role and responsibility. Her individual moderators include ego strength, field dependency, and locus of control.

Viewing Trevino's model as a system reveals the input as the ethical dilemma, the process as ethical judgment based on Kohlberg's moral development (identical to Rest's model) and the output as ethical or unethical behavior. Having the ethical dilemma as the starting point implies that the ethical dilemma triggers the cognition process, but Trevino does not discuss how this would occur. Since the interactionist model relies on Kohlberg's cognitive moral development model, the decision rule is the same as Rest's. The strength of this model is the proposed moderators which are included as part of Table 3.2.

### **3.2.1.3 Contingency Model of Ethical Decision Making**

The marketing field has also contributed models to the research in ethical decision making.

Ferrell and Gresham (1985) provided a model that is similar to Trevino's model in many aspects.

Ferrell and Gresham also begin with an ethical issue prompting individual decision making.

These authors argue that three types of moderators influence decision making: individual factors, significant others, and opportunity. Next Ferrell and Gresham propose that the decision leads to behavior and then to an evaluation of that behavior. This last step provides feedback to the

**Table 3.2: Components of Existing Decision Making Models**

<b>Model:</b>	Rest (1986)
<b>Components:</b>	Awareness, alternative generation, cognition, prioritization, planning, behavior.
<b>Moderators:</b>	Stage of moral development, ego strength, perseverance, backbone, toughness, strength of conviction, courage, education, religion, geographic location, and years out of school.
<b>Model:</b>	Trevino (1986)
<b>Components:</b>	Trigger (ethical dilemma), Cognition, Behavior
<b>Moderators:</b>	Stage of moral development, ego strength, field dependence, locus of control, reinforcement, normative structure, referent others, obedience to authority, responsibility for consequences, role taking, resolution of moral conflict, and other pressures.
<b>Model:</b>	Ferrell and Gresham (1985)
<b>Components:</b>	Trigger (ethical dilemma), cognition, behavior, feedback
<b>Moderators:</b>	Knowledge, values, attitudes, intentions, social network ties, roles, codes of conduct, corporate policy, rewards and punishment.
<b>Model:</b>	Hunt and Vitell (1986)
<b>Components:</b>	Cultural, industry, and organizational environments, trigger (ethical dilemma), alternatives, consequences, deontological norms, deontological evaluation, probabilities of consequences, desirability of consequences, importance of stakeholders, teleological evaluation, judgment, intentions, behavior, feedback.
<b>Moderator:</b>	Situational constraints

process. In their model, the ethics of a decision are determined by individual knowledge and values, the influence of significant others, rules, rewards, and punishments of the organization.

Like Trevino (1986), Ferrell and Gresham (1985) implicitly include awareness of the ethical dilemma as the input in the decision process. The judgment process is called “individual decision making” and although that component is not explicitly described in the article, they appear to claim that it is derived from the application of utilitarianism, rights, or justice reasoning. The output is behavior. Ferrell and Gresham then include a feedback loop. The

decision rules applied in this model are the ethical theories. Like the interactionist model, the main contribution of this model is the moderators. The moderators are grouped into three categories: individual factors, significant others, and opportunity. Individual factors include a person's knowledge, values, attitudes, and intentions. Significant others refers to the influence of organizational peers and superiors and also external groups. Opportunity is the absence of barriers to prevent unethical actions and rewards given for unethical behavior.

#### **3.2.1.4 General Theory of Marketing Ethics.**

Hunt and Vitell (1986) provided yet another viewpoint on ethical decision making. Their approach is notable because they directly incorporate two types of ethical reasoning into their model. Hunt and Vitell propose that people reach an ethical judgment through a deontological evaluation and a teleological evaluation of the alternatives. In other words, they suggest that people arrive at an ethical decision by considering the rights and duties individuals have and the motivation behind the act, as well as by considering the consequences resulting from the act. In Hunt and Vitell's model the social environment and personal history lead to a perceived ethical problem, perceived alternatives, and perceived consequences of the alternative. In the deontological phase, the alternatives are evaluated based on deontological norms to provide one component of ethical judgment. In the teleological phase, a utility theory-type approach is taken whereby the probability and desirability of the consequences are examined. Similar to Rest (1986), Hunt and Vitell have an "intentions" step between judgment and behavior, signifying that the ethical judgment may be different from what we actually intend to do. Lastly Hunt and Vitell acknowledge that situational constraints moderate behavior, and they also include a feedback loop.

This model is valuable as it presents a different decision rule from the Rest and Trevino models. Here the decision is made based on deontological and teleological evaluations and includes, to some extent, the influence of others. Although not specified by Hunt and Vitell, parts of their model incorporate concepts from the theory of reasoned action (Fishbein & Ajzen, 1975) as it includes the probability and desirability of the consequences and the importance of others as two factors used to evaluate the decision. Like the other models, however, this model does not accurately portray ethical choice because it does not account for the intuitive approach for making an ethical decision and does not include the effect of emotions.

### **3.2.2 Extensions to Existing Models**

In addition to the complete models of ethical decision making that I have discussed, researchers have offered extensions to build these models. An influential extension is the issue-contingent model proposed by Jones (1991).

#### **3.2.2.1 Issue-Contingent Model**

Although the previous models noted that the ethical issue triggered the decision process, they did not discuss how the attributes of the ethical issue affect the process. Noting this absence, Jones (1991) proposed an issue-contingent model of ethical decision making. In his article Jones discusses the previous decision making models and then primarily relies on Rest's model to present a decision making model. His framework augmented the existing models with a six-factor set of variables related to the ethical issue. Jones claims these attributes of the moral dilemma affect multiple components of the ethical decision process. He called these factors "moral intensity." The six proposed variables are:

1. Magnitude of Consequences - the level of intensity is related to the sum of harm caused or benefit received by the act (i.e., seriously injuring fifty people has a higher intensity than seriously injuring three people)
2. Social Consensus - the degree of social agreement pertaining to the act (i.e., bribing an official in California has a higher intensity than bribing an official in China)
3. Probability of Effect - a joint function of the probability the act will take place and the probability the predicted result will occur given that the act takes place (i.e., selling a gun to a convict who has used a gun in a crime has a higher intensity than selling a gun to a law-abiding citizen)
4. Temporal Immediacy - length of time between the present and when the effects of the act take place (i.e., a result that will take place tomorrow has a higher intensity than a result that will take place twenty years from now)
5. Proximity - closeness of the decision maker to the victims or beneficiaries (i.e., layoffs within your department have a higher intensity than layoffs at a distant office)
6. Concentration of Effect - an inverse function of the number of people affected by an act and the level of the effect (i.e., four people losing \$20,000 has a higher intensity than 20,000 people losing \$4) (Jones, 1991)

Moral intensity captures an important idea in the decision making process – that the factors of the ethical issue itself alter how people respond. However, there is no underlying logic that ties the six factors together. It is difficult to know whether all of these are relevant or whether important factors still need to be identified. Empirical investigations of moral intensity have yielded interesting results. Some factors, primarily magnitude of the consequences and social consensus, have consistently been shown to significantly affect the moral reasoning

process, but support for the others has been much less consistent (Hayibor, 2000). I suggest it is likely that moral intensity is entirely mediated by emotions. For example, I posit that empathy mediates the magnitude of the consequences because as the consequences become more serious, the decision maker may have greater empathy for the other people involved. Without an increase in empathy, I suggest increasing the magnitude of the consequences will have no effect on the decision. This is because empathy, guilt, shame, and disgust serve as social guides to behavior (Haidt, 2003).

The influence of empathy as a moderator is suggested by work by Damasio (1994) . Damasio offers the example of a man who lost part of his brain in a freak accident when a long metal spike went through his head. Intelligence tests after the accident revealed no loss in rational cognition, but his social ability was dramatically compromised. He could not express empathy or sympathy for others, and without the guidance of moral emotions he could not get along with others. If this man were to participate in an experiment where the factors of moral intensity were varied, it is likely he would have no reaction to changes in the level of moral intensity since he cannot generate moral emotions. Without emotions, the factors of moral intensity are likely to be ineffectual and, therefore, any ethical decision making model should include emotions. For this reason it is important to account for emotions in ethical choice.

Other emotions have been shown to affect general decision making, which suggests they are likely to affect ethical choice as well. For instance, prompting anger results in greater use of heuristics, while prompting fear results in greater deliberation and a reconsideration of the facts (Loewenstein & Lerner, 2003). It is important for future research to investigate the role of emotion on ethical choice and the proposed model provides a framework to do so.



### **3.2.2.2 Moral Approbation Model**

A more recent extension to the ethical decision making model is moral approbation (Jones and Ryan, 1997). Jones and Ryan expand upon the ideas of Ferrell and Gresham (1986) and Dubinsky and Loken (1989) regarding the influence of referent groups by elaborating on the process by which individuals compare their individual desired action to the action expected by referent others. This is in accordance with Dubinsky and Loken, who note that “one will intend to perform a particular behavior if he or she has a favorable evaluation of performing the behavior and/or important others think the person should perform the behavior” (1989: 87). Jones and Ryan take this analysis a step further by detailing the steps leading to the anticipated moral action and by highlighting the possibility of a conflict between the individual’s desired behavior and the behavior as anticipated by the group.

Jones and Ryan do a good job of introducing the social element of ethical decisions and the importance of moral approval of others in an individual’s decision process. They also highlight that this external approval may at times conflict with a person’s internal ethical desires. However, they do not adequately address why the decision maker would care what others think or what would moderate the concern for social approval. Without addressing these ideas, they seem to assume that the moral approbation of all groups would be of equal importance to the decision maker or that moral approbation is some type of average of approval from all groups. In actuality the approval of some individuals and groups would be very important to the decision maker, while the approval of others would be meaningless. The manner through which this importance would be mediated is through emotions, in particular through moral emotions such as shame, disgust, guilt, and pride. A decision maker seeks the approval of others she believes are important because to do otherwise would risk being viewed with disgust by those others and feeling shame in one’s self. If the other group is not important to the decision maker its moral

disapproval will not incite shame or guilt and will have no affect on the decision choice. Thus, the addition of emotion helps explain why decision makers are concerned about the thoughts of others and the degree to which those thoughts matter. Later in this chapter I propose the addition of emotions to the decision making model to account for such feelings.

### **3.2.2.3 Moral Imagination**

One part of the ethical decision making process that has received increased attention in recent years is moral imagination (e.g. Butterfield, Trevino, & Weaver, 1996; Johnson, 1993; Moberg & Seabright, 2000; Werhane, 1998, 1999, 2002). Varying definitions have been proposed for this concept. According to Werhane (2002) moral imagination is a self-reflective process in which the decision maker mentally removes himself or herself from the situation and from any schemas that are dominating the situation, envisions possible moral consequences arising from the situation, and imagines and evaluates new possibilities. Johnson defines it as “the ability to imaginatively discern various possibilities for acting within a given situation to envision the potential help and harm that are likely to result from a given action” (Johnson, 1993: 202). Moberg and Seabright write that moral imagination is “a form of reasoning that serves as an antidote to decision environments that normally lead to morally defective choices” (Moberg & Seabright, 2000: 845). Moral imagination is needed to counter the presence of dominant schemas that sometimes lead to unethical behavior (Werhane, 1999). Moral imagination has primarily been discussed in terms of the generation of possible alternatives when facing a moral dilemma, but Moberg and Seabright (2000) extended the concept further by stating that moral imagination is needed at every step of the ethical decision process. In their view, moral imagination is needed to creatively propose options not only when proposing alternatives to consider, but also when

determining decision rules and when deciding how to implement the decision. Thus, they argue that the level of moral imagination can moderate each component of the decision process.

Moral imagination is particularly relevant to this dissertation because the concept incorporates the idea that decision makers may unthinkingly rely on destructive schemas instead of engaging in deep choice. In this way moral imagination highlights differences between shallow and deep choice and implies that ethical context can be embedded in schemas (shallow choice) and enacted without explicit knowledge by the decision maker.

In summary, the previous ethical decision making models include the steps of appraisal, judgment, and behavior. The decision rules that are used to make a selection have been based on the cooperation and fairness rules upon which cognitive moral development was based and on deontological and teleological reasoning. Extensions to the ethical choice models include a detailed explanation of the influence of referent others and an emphasis on the need for creativity in order to break out from existing mental schemas and personal or organizational routines in order to imagine new possibilities.

In addition to the theoretical work that has been completed on ethical choice, substantial research has also empirically tested the various aspects of the model. I review this empirical research in the following section.

### **3.3 EMPIRICAL TESTING OF THE MODELS**

Over 150 research studies have tested the theoretical models discussed above. The majority of these studies sought to discover what factors moderate the ethical decision making process. Two review articles of the research, Ford and Richardson (1994) and Loe, Ferrell, and Mansfield

(2000), reveal which factors have been shown to be significantly related to the models and highlight which variables have not yet been investigated or emphasized. A list of the variables included in the articles they reviewed is contained in Table 3.3. Although all the factors included on the list have been shown to significantly affect the decision making process, the results are not consistent for all the variables. Those factors where the results are most inconsistent are noted with an asterisk and represent about 25% of the factors.

Individual factors have received the most attention in the ethical decision making literature. However, researchers should be concerned about the lack of agreement in the research findings. For instance, while several studies have concluded that females are inclined to be more ethical than males (e.g. Beltramini, Peterson, & Kozmetsky, 1984; Chonko & Hunt, 1985; Ferrell & Skinner, 1988; Ruegger & King, 1992), many other researchers found no significant difference based on gender (e.g. Browning & Zabriskie, 1983; Callan, 1992; Dubinsky & Levy, 1985; Hegarty & Sims, 1979; McNichols & Zimmerer, 1985.; Serwinek, 1992).

Numerous organizational factors also have been studied. Weber (1990) found a negative relationship between organization size and the level of moral judgment and reasoning. Murphy, Smith, and Daley (1992) found a positive relationship between organization size and operational ethics, but a negative relationship between organization size and marketing ethics. Dubinsky and Ingram (1984) and Hegarty and Sims (1979) obtained differing results regarding increased competitiveness and unethical behavior as Dubinsky and Ingram found no effect while Hegarty and Sims found a significant and positive relationship. Studies investigating the effect of industry type also showed both significant (Dornoff & Tankersley, 1975) and non-significant (Akaah & Riordan, 1989; Lazcniak & Inderrieden, 1987) effects. Other organizational influences that

**Table 3.3: Empirically Tested and Statistically Significant  
Factors of Ethical Decision Making  
(Ford and Richardson, 1994; Loe, et al., 2000)**

<b>Individual Factors</b>	<b>Social Factors</b>
<i>Personal Attributes</i>	<i>Referent Groups</i>
Cognitive Moral Development	Peer Group Influence
Nationality	Top Management Team Influence
Gender*	
Age*	<b>Environmental Factors</b>
	<i>Organization Factors</i>
<i>Education and Employment Background</i>	Opportunity
Type of Education*	Conduct Codes/Ethics Codes
Years of Education*	Rewards and Sanctions
Employment*	Organization Size
Years of Employment*	Organization Level
<i>Personality/Beliefs/Values</i>	<i>Industry Factors</i>
Machiavellian	Industry Type
Locus of Control*	Business Competitiveness
Role Conflict and Ambiguity	
Acceptance of Authority	<b>Issue Factors</b>
Moral Philosophy	Moral Intensity
Religion*	Type of Ethical Conflict
Note: Highly inconsistent results are marked with an asterisk (*)	

garnered mixed results include top management influence (e.g. Zey-Ferrell & Ferrell, 1982), peer group influence (e.g. Izraeli, 1988), and organizational level (e.g. Dalaney & Sockell, 1992).

The confusing mix of significant and insignificant results as well as positive and negative relationships warrants additional research on the influence of these factors. It appears the differing results stem from multiple factors. In some cases the theoretical support for the proposed relationship is weak, so inconsistent results are not unexpected. In other instances the results suggest that companies are not homogeneous and that studying different departments or functional areas within a company may produce different results. For instance, this may be the

cause of conflicting results regarding the effect of organizational size. In yet other cases the dissimilar findings may be attributable to methodological issues. For example, in the competitiveness studies, Dubinsky and Ingram (1984) did a survey at a corporation while Hegarty and Sims (1979) conducted a laboratory experiment. Previous research has shown that the experimental setting may influence the results (Trevino, 1992).

The effect of codes of conduct on ethical behavior and perception of ethical dilemmas has also frequently been studied. Hegarty and Sims (1979), Weeks and Nantel (1992), and Zahra (1989) found that codes of conduct were positively associated with ethical behavior. Singhapakdi and Vitell (1990) discovered that the extent of ethical policies in a company was related to awareness of an ethical problem.

The moderators of the ethical decision process can be sorted into four categories based on their specificity (specific or generalized) and their characteristics (people-based or situation-based) (Table 3.4). The first category contains those moderators that are specific to one person and is labeled individual moderators. It includes individual traits such as age, education, and acceptance of authority. Moderators that are people-based and related to a collective or a generalized application are categorized as social moderators. This includes peer group influence and top management team influence. These are considered generalized because the same factor can influence multiple dilemmas. For example, the top management team can influence multiple situations in an identical fashion. The third group of moderators is specific to the dilemma, but is not directly related to people. This group, issue moderators, is composed of the characteristics of the moral dilemma at hand. The factors of moral intensity and type of ethical conflict are contained here. Lastly, moderators that are not specific to a particular dilemma, but instead apply

**Table 3.4: Sorting of Moderators of Ethical Decision Making**

		Characteristics	
		People-based	Situation-based (not people)
Location	Internal to decision	Individual	Issue
	External to decision	Social	Environment

to multiple dilemmas and are descriptive factors of the situation, are environmental moderators. They include the presence of ethics codes, organization size, and industry type.

The aforementioned ethical decision making models and the related empirical research on moderators to the process provide insights into how people resolve ethical dilemmas. Yet by synthesizing these models and combining research from other disciplines, a behavioral model of ethical decision making that more accurately describes the process can be created. I build such a model in three steps. In the next section I incorporate many ideas from existing models and provide a detailed model of ethical deep choice. Then, I describe how deep choice is one component of the overall ethical decision making process that consists of appraisal, judgment, and behavior. Lastly, I explain how various types of emotion affect this decision process. Overall, the final model expands our understanding of ethical decision making and better describes the process used to resolve ethical dilemmas.

### **3.4 DEVELOPING A NEW MODEL OF ETHICAL DECISION MAKING**

In this section I build a behavioral model of ethical decision making. One component of this model is the deep choice process of ethical decision making. This deep choice process is based upon the theory of planned behavior (Ajzen, 1991) and it incorporates many aspects of previous ethical decision models. Then, I place deep choice within the overall model of ethical decision making. This overall model includes aspects from previous models. Lastly, I incorporate emotions into the model. I begin by describing the determinants to deep choice.

#### **3.4.1 Determinants of Deep Choice**

Existing models of ethical decision making offer surprisingly few details about the factors involved in making an ethical choice. The most often cited decision strategy is based on the theory of moral development. This theory claims that people choose among alternatives using one of six decision strategies ranging from self-interest to universal principles of justice. This categorization scheme is subject to criticism (as will be discussed in the following chapter) and even if one accepts its claims, by itself it does not adequately describe the process decision makers use when resolving ethical dilemmas in an active and deliberative manner. I offer a detailed model of this process that is based on the theory of planned behavior to explain this deep choice process. To adapt the theory for use in moral decisions, I suggest that potential actions and alternatives are evaluated based not only on the outcome of a behavior, but also on the behavior or action itself. I also include the effect of the emotions expected to be produced by the behavior. Especially relevant for ethical decisions are moral emotions that the decision maker anticipates feeling such as guilt, shame, and pride (Haidt, 2003). Including these heretofore

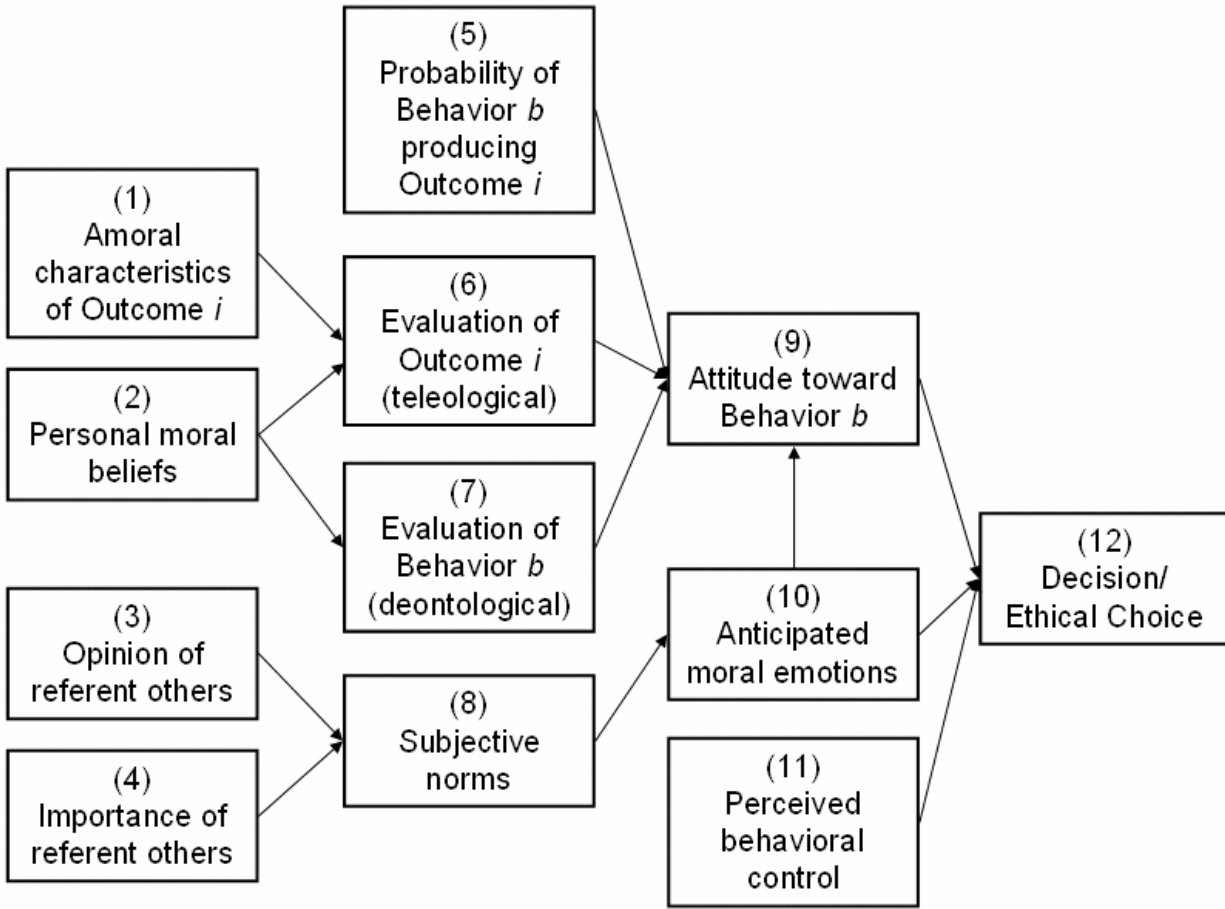


overlooked factors, this deep choice ethical decision making model improves our understanding of the ethical decision making process. The deep choice model is shown in Figure 3.2.

Deep choice is a process where a decision maker evaluates the attributes of available alternatives in order to select the alternative that is perceived to be the best choice. Ethical choice takes place when the issue involves a moral dilemma. It remains an ethical choice even if the decision maker ignores or is unaware ethical concerns are present.

The theory of planned behavior (Ajzen, 1991) forms the foundation of this deep choice process. The theory of planned behavior is derived from Fishbein and Ajzen's (1975) theory of reasoned action. The theory of planned behavior suggests that an individual's intention to perform a given behavior is determined by three factors: a person's attitude toward the behavior, the subjective norms regarding the action, and the perceived behavioral control the person has to perform the act. According to Ajzen, attitude toward the behavior, the first factor, is determined by an evaluation of the behavior as well as by the subjective probability that the behavior will produce the desired outcome. The second factor, subjective norms, reflects the influence of the opinions of others that are important to the decision maker. The approval or disapproval of these individuals and groups will influence the person's attitude toward the behavior and the choice made. The last factor, perceived behavioral control, reflects the perception a decision maker has regarding the "ease or difficulty of performing the behavior of interest" (Ajzen, 1991: 183). It includes the resources, opportunities, obstacles, and impediments to completing the action.

The adaptation of the theory of planned behavior to moral decisions can be approached in different ways. Beck and Ajzen (1991) proposed including perceived moral obligations as a fourth factor in determining behavioral intent. In their model, therefore, the attitude toward the



**Figure 3.2: Ethical Deep Choice Model**

behavior, subjective norms, perceived behavioral control, and perceived moral obligations combine to determine intent. Similar to the frequent, but incorrect, application of Rest’s model of ethical decision making, this implies that moral considerations are considered separately from general attitudes about a proposed action. As discussed earlier, I see no evidence or theoretical support to sustain a claim that moral factors are evaluated as a separate process. Empirical testing of the Beck and Ajzen model did reveal that moral obligation was a statistically significant factor in predicting behavioral intent. However, the authors did not report whether they conducted any additional statistical analysis such as path analysis, which could be used to distinguish between

direct and indirect effects. Based on their reported findings, it is possible that the attitude toward the behavior fully mediates the relationship between moral obligations and intent.

As discussed at the beginning of this chapter, decision making involves awareness, alternative generation, determination of the consequences of each alternative, selection of an alternative, and performance of the behavior. In the ethical deep choice model, I detail the process of evaluation and selection.

In agreement with Hunt and Vitell (1986), I suggest that two methods of evaluation take place in ethical choice: a teleological approach that is focused on the consequences of the alternative (box 6 in Figure 3.2) and a deontological approach that determines the appropriateness of the behavior separate from the that of the outcome (box 7). Several ethical theories fit within the teleological approach, including utilitarianism, hedonism, and justice reasoning. The common element of the teleological approach is that the decision maker is focused on the outcome or consequences or what achieves the “best” end. However, the determination of what constitutes the “best” varies among teleological approaches. Utilitarian theory’s definition of best is that which maximizes the collective good, regardless of the distribution of the harms and benefits. In hedonism the “best” is that which results in the greatest pleasure and least pain for the decision maker.

In contrast, a deontological evaluation process emphasizes the motives behind the actions that are taken and does not consider the outcomes. This includes duties that must be fulfilled such as upholding the rights of others regardless of whether the outcome is favorable or unfavorable. In other words, at times actions that generate positive outcomes are undesirable because the process that must be performed to achieve the outcome is unacceptable and unethical.

Several researchers have discovered that decision makers use both teleology and deontology to make a decision. Mayo and Marks (1990) found that both teleological and deontological philosophies have a significant influence on ethical judgments. McDonald and Pak (1996) found that multiple philosophies are used to make a decision. Akaah's (1997) results indicated that deontological and teleological considerations were both included, and further showed that the deontological approach is used as the primary decision method and the teleological approach is used as the secondary method. Taking this research into account, in my model I posit that both the teleological (box 6) and deontological (box 7) approaches influence the attitude toward the behavior.

As mentioned earlier, I posit that the moral and amoral attributes of alternatives are considered concurrently and suggest that multiattribute utility theory describes how this is accomplished. Multiattribute utility theory (Baron, 2000) states that decision makers consider the numerous attributes of the alternatives to make a selection. These attributes have a range of importance to the decision maker. Decision makers must determine both the level of the attribute in question and the importance they place upon it. This latter process is accomplished by weighing the importance of the characteristic to the decision maker. In my proposed model, the various moral and amoral attributes are simultaneously considered, as is represented by the amoral characteristics of the outcome (box 1) and personal moral beliefs (box 2) determining the evaluation of the outcome. Personal moral beliefs also influence the evaluation of the behavior (box 7)

The evaluations of the outcome and of the behavior combine with the subjective probability that the behavior will produce the outcome (box 5) to determine the attitude toward the behavior (box 9).

Included in the amoral characteristics of the outcome are the emotions the decision maker expects to feel after completing the decision process and engaging in the behavior. Put differently, these expected emotions are how one expects to feel about an outcome after the outcome occurs. They are the one emotional component that has been included in the rational decision process (Loewenstein & Lerner, 2003). For instance, if decision makers believe they will feel badly after performing a given act, that emotion will be used as information when choosing among alternatives. In this way, how one expects to feel is included in the decision process and it contributes to our attitude toward any action we may take.

Another important factor in deep choice is the subjective norms that the decision maker perceives apply to the decision (box 8). Subjective norms are the social pressure perceived by the decision maker to perform or not to perform a behavior. For example, an accountant in an aggressive corporate environment may perceive that others think that accounting rules can be “bent” in order to make greater profit as long as a law is not explicitly broken. The accountant would include this perception when evaluating possible alternatives, and may even be pressured to engage in such questionable accounting practices. In short, subjective norms reflect the notion that our evaluations are influenced by others. I suggest that others influence decisions in two ways. First, the opinion of others whom we respect and whose approval we seek serves as another input in the evaluation process and another attribute that is considered in regard to an alternative. The beliefs of these referent others regarding the moral and amoral considerations of the behavior and outcome inform our evaluation. Second, others can more directly influence one’s choice. This is particularly evident when two people disagree on the choice to make and one person has the ability to impose sanctions on the other. For example, in an organizational

setting, a supervisor or manager may threaten to fire a subordinate in order to get him to engage in a behavior with which he disagrees.

It is important to note that the opinions of others are not of equal importance – the opinions of some will carry significant weight on a decision, while the opinions of others carry no weight. As can be seen in the model, the opinion of referent others (box 3) and the importance of referent others (box 4) constitute subjective norms. The inclusion of subjective norms in this model aligns with the work of Brass, Butterfield, and Skaggs (1998), who suggest that social relationships can be studied using a social network perspective to understand the influence of others on the ethical decision making process. They claim that the strength of network ties determines the level of accountability decision makers feel toward others. They define accountability as the perception of defending or justifying one's conduct to an audience that has reward or sanction authority.

With ethical decisions, the moral emotions such as guilt, shame, disgust, and pride are likely to mediate the effect of subjective norms. If decision makers believe they will feel guilty after completing the action, they will be less likely to engage in the behavior.

The attitude toward behavior (box 9) combines with anticipated moral emotions (box 10) and with perceived behavioral control (box 11) to determine a choice and form intent. Perceived behavioral control is taken directly from the theory of planned behavior. It represents the decision maker's perceived ability to take advantage of any resources and opportunities and to avoid any obstacles and impediments to enacting the choice.

In summary, this proposed deep choice model modifies and extends the theory of planned behavior to account for moral considerations and emotions. It does so by noting that decision makers evaluate both the outcome and behavior of the various alternatives and then apply moral

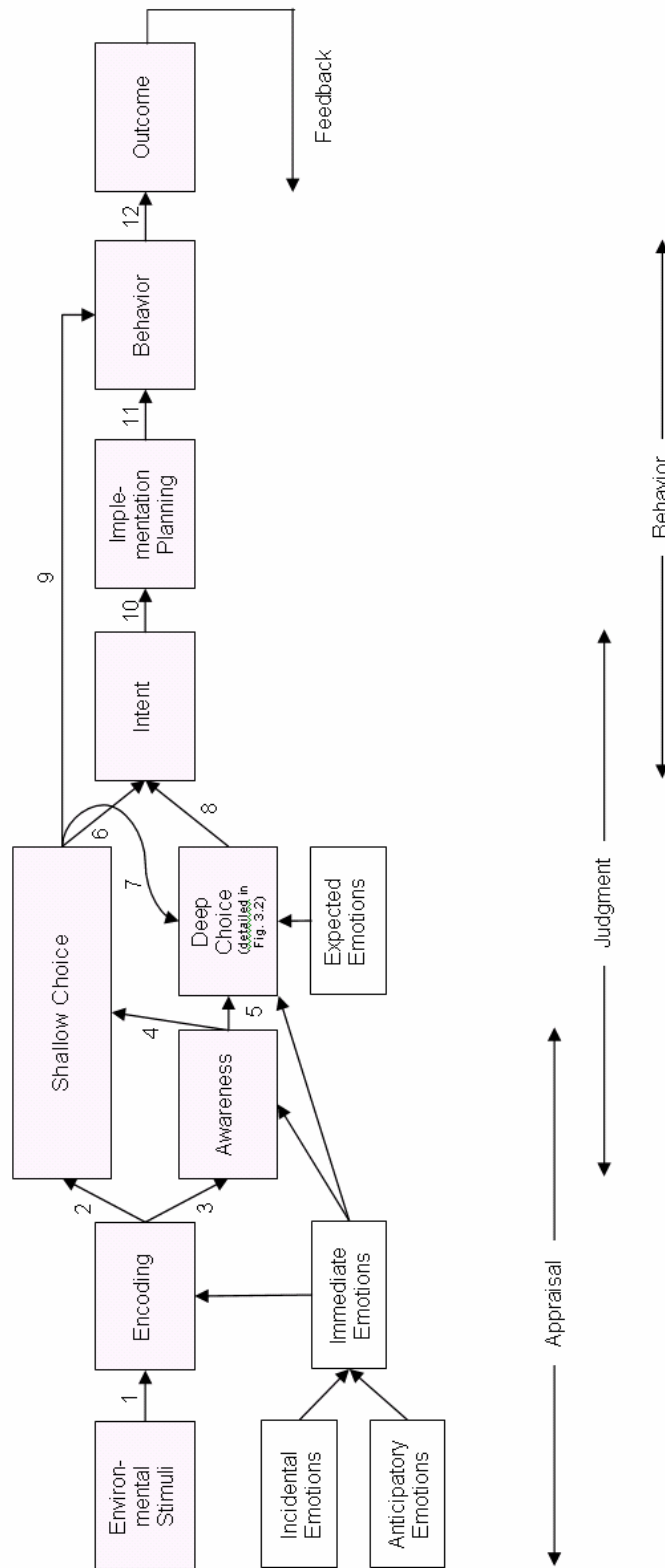
theories to determine the best choice. These choices are not devoid of emotion, since the emotion expected to be felt when the decision is enacted is included as an input in the choice process. These additions better reflect the process decision makers use to resolve an ethical dilemma.

Having described the deep choice process of ethical decision making, in the following section I provide a complete model of ethical decision making

### **3.4.2 Behavioral Model of Ethical Decision Making**

The theoretical antecedents for the behavioral model of ethical decision making come from several sources. The existing decision making models (e.g. Jones, 1991; Rest, 1986; Trevino, 1986), general decision making research (e.g. Baron, 2000; March, 1994), and the social cognition literature (e.g. Fiske & Taylor, 1991; Loewenstein & Lerner, 2003; Moskowitz, Skurnik, & Galinsky, 1999) all contribute to the model. The model I describe in this section is depicted in Figure 3.3.

Instead of implying that the moral aspect of decisions is processed separately from other considerations, I suggest that the moral aspect is one attribute of an overall decision process and that it is processed in conjunction with the other attributes. Thus, the decision process used for moral decisions is nearly identical to the one used for amoral decisions. The factors that distinguish a moral decision from an amoral decision are whether the dilemma contains aspects that affect others beyond the decision maker, whether the decision maker perceives he or she has a moral obligation that must be considered when resolving the dilemma, and whether the decision rules used to evaluate the alternatives include moral aspects. Note that if the first factor is present – the dilemma contains ethical aspects – the decision is a moral decision even if the



**Figure 3.3: Behavioral Model of Ethical Decision Making**



decision maker does not perceive it as being so and does not apply decision rules that include moral reasoning. In these cases where decision makers are blind to the moral issues, they are more likely to make an unethical decision.

Of course, not every decision is a moral decision. A decision to shut down a factory is a moral decision; choosing between wearing a red tie or blue tie ordinarily is not.

The behavioral model of ethical decision making is composed of three sequential and overlapping processes: an appraisal system, a judgment system, and a behavior system. The appraisal process begins with environmental stimuli. As discussed earlier, we are constantly bombarded with information from the environment. This information must be constantly scanned, but the volume of information present and our limited cognitive capacity requires that only a small subset of the information will capture our attention. To separate that which needs our attention from that which does not requires receiving the input from the environment and filtering it in our mind. That is, the stimuli have to be represented in the mind in order to determine if attention must be given to the information. The process by which this is accomplished is encoding.

Encoding translates the raw information from the environment into mental representations and places pieces of this information into cognitive categories based on the memories, experience, and learning of the decision maker (Kinicki & Kreitner, 2006). These cognitive categories represent groups of information that are considered similar based on their characteristics. These categories may be broad or specific and an item may be placed in multiple categories. For instance, a red sports car could be in the categories of transportation, car, two-seat car, fast car, and Porsche. These categories are mental pictures or summaries of a particular event or type of stimulus and are referred to as schemas. Formally, a schema is “a cognitive

structure that represents knowledge about a concept or type of stimulus, including its attributes and the relations among those attributes” (Fiske & Taylor, 1991: 98). If the event or stimulus is new to the decision maker, it will be placed in a broad schema. Through experience and learning, including symbolic knowledge, the information is categorized into increasingly specific schemas.

Schemas are necessary to process and make sense of all the information flowing toward us and typically they correctly and efficiently help us make sense of our environment. However, schemas can lead us down a wrong path. At times our expectations or motivations can induce us to mistakenly apply a schema, and the consequences of such an error can be severe. In the classic business ethics case involving the Ford Pinto, strongly held schemas in the minds of Ford managers led to the interpretation that the Pinto did not need to be recalled (Gioia, 1992). The schemas led to the incorrect interpretation of the reports that were read. This highlights the importance of not only developing, but also applying schemas that include recognition of the moral attributes of situations and events. Thus, moral encoding represents the first step in the ethical decision making process. Again, though, I stress that this process is not separate from the encoding of amoral attributes. I merely highlight that as part of the encoding process the moral attributes must be encoded along with the other attributes.

The encoding process can lead to three outcomes. The first outcome is not explicitly included in the model. This outcome is that the encoding process that determines the stimulus is not important to the decision maker and, thus, no further action is needed. Most stimuli fall into this category.

The second encoding outcome is an automatic and intuitive decision and behavior process. This instinctual response is one representation of shallow choice and is represented by path 2 in the model in Figure 3.3. At times we unconsciously determine that information must be

acted upon in an instinctive, reactive manner. In other words, the fact that we must respond might not enter our consciousness prior to a decision being made and an action being taken. For example, if you are walking down a plant-lined path in the woods and you suddenly come upon a rattlesnake in the middle of the path, you probably do not become consciously aware of the need to decide what to do before your mind and body quickly and automatically stop your forward movement. Haidt (2001) argues that most ethical decisions are made using this type of intuitive process and that explanations of ethical choice are merely post hoc creations used to justify the intuitive decision that was made. While it is likely that some moral judgments are made in this manner, more research is required to determine the extent to which this type of unconscious mode of thought is used in ethical judgment.

Once the information is represented in categories in the mind, a portion of it is deemed to be salient to the issue at hand and it captures the decision maker's attention. The process whereby the important information is brought to the attention of the decision maker is awareness. In my model, awareness is the outcome of the appraisal process.

In addition to an automatic and intuitive decision process described above, the encoding process may result in the decision maker becoming consciously aware that a decision must be made. This is represented by path 3 in the model. Awareness is given to the encoded information that is salient to the decision maker. Salience occurs when information is different from the surrounding environment, is unexpected based on prior knowledge and expectations, or is relevant to your motivational goal (Fiske & Taylor, 1991). This last factor could result in undue attention to those individuals or roles on which our outcomes depend (Fiske & Taylor, 1991: 249) and cause the decision maker to overlook factors of greater importance.

Moral imagination (Johnson, 1993; Moberg & Seabright, 2000; Vidaver-Cohen, 1997; Werhane, 1999) influences the appraisal process. According to Werhane (1999) part of moral imagination involves becoming aware that you face a moral dilemma by removing yourself from any schema that are dominating the situation. This forces the decision maker to consciously process the environmental information instead of relying on schemas that may lead to unethical behavior. The difficulty of this approach for decision makers is in knowing, a priori, when they must ignore a schema and when it is acceptable to use it or even know that it is being applied. Given the time demands placed on today's workers, it may not be realistic to insist that decision makers abandon schemas and consciously and actively review information whenever a moral issue is present.

Once awareness is formed and the decision maker realizes an ethical dilemma is present, the subsequent action proceeds in one of two directions. At this point the decision maker could determine that simple rules and heuristics will resolve the dilemma. This is the shallow choice approach. Possible rules include "do not break the law," "always be honest," and "place family first." When using these simple rules only one or a few attributes of the alternatives are determined or evaluated. These decisions would have a low level of decision complexity as is indicative of shallow choice.

At times no alternative will satisfy the rules of shallow choice. At this point the decision would be made using deep choice, as noted by path 7 in the model. Maheswaran and his colleagues found that people at times use both processes to reach a decision and, in fact, his research indicated that decision makers are most confident in their decision when the shallow and deep processes lead to the same decision (Maheswaran, Mackie, & Chaiken, 1992).

If shallow choice is not used, the decision will be made using the deep choice process. As opposed to shallow choice where simple decision rules are used and little time, effort, and resources are required, deep choice, as described earlier, is a complex process involving many sub-processes.

Using shallow or deep choice, the decision maker establishes intent. I use the same word as the theory of planned behavior to highlight that the final behavior may be different from that which is determined to be the best choice. Intent is the outcome of the judgment process and the input in the behavior process. The behavior process includes the input of intent, the process of implementation planning, and the output of behavior.

The decision is the first input into the behavior process. Decisions may be acted upon without any planning as to how the decision should be implemented, but often decision makers must develop a plan to enact the decision that was made using deep or shallow choice. Although implementation of the decision should have been considered in the choice process, it is not uncommon to encounter problems in the implantation stage that were overlooked earlier in the decision process. In fact, the decision may become so difficult to implement that decision makers may be required to return to the choice process to select another alternative. If decision makers do not encounter this problem, they will perform the behavior. The behavior will then produce an outcome which may or may not align with the expected outcome. Although I have not included a feedback loop on the diagram in order to simplify the model, the outcome will serve as an input into the decision process in subsequent periods through the use of memory and symbolically recorded information.

This model provides a more detailed description of the ethical decision making process than previous models. As with previous decision models, moderators affect many of the

processes included in the model. These moderators have received much attention in the literature, but one influential moderator, in fact one that may mediate many of the moderators explored in previous research, has been largely ignored. That moderator is the effect of emotions. I discuss emotions in the next section.

### **3.4.3 Emotion and Decision Making**

One key factor in both shallow choice and deep choice that has not received adequate attention in research on ethical decision making is emotion. A few business ethics researchers have noted its potential to influence decisions (e.g. Connelly, Helton-Fauth, & Mumford, 2003; Gaudine & Thorne, 2001), but overall it has received little attention. That emotion influences decision making seems largely self-evident, and, as Gaudine and Thorne (2001) note, the role of emotion in individuals' ethical decision processes has been discussed by researchers from a variety of theoretical and philosophical perspectives including Etzioni (1988), Gibbard (1990), Rawls (1971), and Solomon (1976). However, there is a long tradition of dominance of the rationalist approach of making decisions and a widespread belief that emotions negatively impact decisions and therefore should be eliminated. In fact, some research has proposed that emotions are the opposite of rationality and that cold logic is better because it is devoid of emotions.

This lack of attention given to the influence of emotions must be corrected for two reasons. First, to develop an accurate descriptive model of ethical decision making, one cannot simply overlook the role of emotions. Emotions have an effect on decisions and, thus, must be understood. Second, emotions do not always interfere with good choices, contrary to previous thoughts on the topic. At times, in particular when resources such as time and money are in short supply, it is beneficial to pay attention to what our emotions are telling us. Feeling a positive or

negative emotion about a decision alternative often provides important input into the decision process, even if we cannot rationally explain our feelings. Research has shown that experienced employees do rely on their feelings at times and are able to achieve better results by incorporating these feeling. Sometimes it is a lack of emotions that lead to poor decisions as when a lack of felt empathy for slaves resulted in treating them as sub-humans. But, certainly emotions are not always good. Studies show that being angry makes it more likely a person will not carefully consider the attributes of alternatives, leading to poor decisions. These three examples are just an introduction as to the effects of emotion, and yet they also highlight an additional reason emotion demands further research effort.

Current research on affect presents emotions as a monolithic concept. Yet, my first example highlights the use of affect as information in making a decision. In other words, felt emotions are sometimes used as a decision input, an additional attribute in the decision making process. The second example presents emotion as a mediator where the lack of emotion was more important to the decision and behavior than was the seriousness of the consequences of the issues at hand. The third example demonstrates emotion as a moderator to the decision process, changing which attributes are salient and the process used to decide. This often occurs unconsciously. I suggest that the factors of moral intensity (Jones, 1991) are entirely mediated by emotions. Thus, emotions influence the decision making process in multiple ways and it is a mistake to not acknowledge this fact. By moving beyond simply noting that emotions affect our behavior and by describing how, why, and when they affect our behavior, this research provides a significant contribution to our understanding of ethical decision making in organizations.

### **3.4.3.1 Defining Emotions.**

The term emotion is used in various ways in the literature so it is important to define my use of the term. Under the general heading of emotions researchers have included discussions of affective personality traits, moods, and, somewhat confusingly, emotions. Some researchers have attempted to remove this confusion by referring to the overall category as the study of affect and using the term emotion as one type of affect. I use this same approach in this paper.

The different types of affect are often distinguished by the intensity of the feeling, the duration of the feeling, and, to a lesser extent, whether the feeling is attributable to a specific cause (Gaudine and Thorne, 2001). Affective personality traits are low-intensity feelings which are inherent to the person and rarely change. They are not linked to a specific environmental stimulus. Moods are similar to personality traits in that they are low-intensity feelings and typically are not tied to a specific event or object. Moods occupy the middle ground in terms of duration, changing much more frequently than personality traits, but much less often than emotions. Emotions are high-intensity feelings that can change rapidly, and are almost always tied to a specific cause. In summary, affective personality traits are part of our personal disposition and often considered part of who we are. Moods last for awhile, but are not part of our enduring overall character and often arise from an unrecognized source. Emotions are high in intensity, are of short duration, and arise from a recognized cause. This last type of affect is the focus of this research.

### **3.4.3.2 The Influence of Emotions**

Gaudine and Thorne (2001) is the sole published paper specifically focused on accounting for the influence of emotion on the ethical decision making model. They distinguish emotion based on two factors: the level of arousal (high and low) and the feeling state of the affect (positive and



negative). The authors adopt Rest's ethical decision model and propose how the level of arousal and the feeling state affects the four components of the model. Although the authors should be applauded for addressing the research void on this topic, the model presented is limited due to a lack of specificity of emotions. The authors divide emotions into positive and negative affect, but all positive emotions do not influence the decision maker in the same way nor do all negative emotions influence the decision maker in the same way. For example, Lerner and Keltner (2001) found that fear and anger, both negative emotions, lead to opposite assessments of risk. Whereas fearful people expressed pessimistic risk estimates and risk-averse choices, angry people expressed optimistic risk estimates and risk-seeking choices. In addition, angry people reacted more like happy people even though anger is a negative emotion and happiness is a positive emotion. The Gaudine and Thorne model can also be improved by noting how both related and incidental emotions affect choice as well as by including how emotions often intensify as the decision time approaches. These two concepts are addressed in social psychology research and are discussed next.

Although business ethics researchers have devoted little effort to emotions, research on the effect of emotions on decision making has received a great deal of attention in the social psychology field in the last ten years (see Forgas, 2003 and Davidson, Scherer, & Goldsmith, 2003 for reviews ) and more recently in the organizational behavior area (e.g. Lord, Klimoski, & Kanfer, 2002). This research has made several important discoveries. It suggests that emotions are enacted after an unconscious or conscious appraisal process (Forgas, 2003). This appraisal is a cognitive process (Adolphs & Damasio, 2001), although different areas of the brain are activated as compared to what we typically term cognition. Moreover, research suggests that specific appraisals lead to specific emotions and that specific emotions lead to specific types of

behavior. Thus, by proposing how decision makers will interpret a situation, we can make statements about how we expect them to react. In general, emotions affect decision making by altering the salience and vividness of the decision factors – in other words, they alter the inputs to the decision – and by changing the method used to make a decision – that is, they alter the decision process itself. I propose that personal factors (i.e. personal disposition, ethical resilience) and situation factors (i.e. time pressure) moderate both the level of arousal and the response to the emotional arousal which changes the inputs and process of the decision making system.

Emotions affect decision making in several ways. The emotional reaction expected once the outcome is achieved is one emotional component that even rational choice theorists have included in the decision process. In other words, how one will feel about the outcome is often used as an input to the decision process. However, the influence of emotion can extend beyond this one factor. Loewenstein and Lerner (2003) have depicted the various ways emotion alters our thinking. Incidental emotions, that is, those emotions caused by people or events other than those specifically related to the dilemma under immediate consideration, can change our decision process, especially if we are unaware of their effect and thus unable to offset their influence. Loewenstein and Lerner also discuss how our feelings often change as an event date approaches. For instance, even though a student knows for weeks that she must give a presentation in front of the class, the level of anxiety is greatest just before the presentation. This is referred to as anticipatory emotions. Incidental emotions and anticipatory emotions combine to produce immediate emotions which affect judgment.

Research has indicated that emotions affect judgment (for reviews see Forgas & George, 2001; Isen & Baron, 1991). Significant relationships have been shown between positive affect

and cooperation (Forgas, 1998; McAllister, 1995), increased helping and generosity (Isen & Baron, 1991), creativity (Isen, 1999), and risk aversion (Mittal & Ross, 1998). Negative affect has been linked to systematic information processing (Jundt & Hinsz, 2002) and risk seeking (Leith & Baumeister, 1996).

Feelings, even when not directly attributable to the current situation, also influence decisions (Schwarz, 1990; Schwarz & Clore, 1988). Schwarz and Clore (1988) developed a model of feelings-as-information in which they suggest people use their current emotional state as information for assessing their judgment of external states. For instance, people in a positive emotional state rated their satisfaction with their life higher than did individuals in a negative emotional state (Schwarz & Clore, 1983).

Although many researchers have sorted emotions into positive and negative affect, these categories are not sufficient to predict the influence of emotions on judgment and on behavior. As mentioned above, decision makers respond in similar ways when angry (a negative emotion) and happy (a positive emotion) and respond differently when fearful (a negative emotion) (Lerner & Keltner, 2001; Loewenstein & Lerner, 2003). Other appraisal dimensions that have been used to categorize emotions include the amount of other-person control and the level of certainty in the outcome (Smith & Ellsworth, 1985).

A popular topic related to emotions in organizations is emotional intelligence (Bar-On & Parker, 2000; Mayer & Salovey, 1997; Salovey & Mayer, 1990). Emotional intelligence includes the identification and regulation of emotions. It includes three components related to the self and two aspects related to others (Goleman, 1995, 1998). The self-related processes are: (1) self-awareness of feelings and preferences; (2) self-regulation of emotions; and (3) self-motivation to engage in appropriate behaviors. The other-related components are: (1) the ability to empathize

with the emotions of others and (2) relationship skills that foster interpersonal emotion management. As compared to employees who score low on emotional intelligence appraisals, it is likely that emotions have less influence on the decision process of employees who score high on such measures. It is also possible that employees who are cognizant of and adept with the role of emotions can use emotions to manipulate others.

In summary, emotions can have a powerful effect on the decision process. Descriptive ethical decision models that do not include emotions are missing a significant factor. Moreover, emotions are influential in several ways: as anticipated emotions, as incidental emotions, and as expected emotions. By including emotions in the ethical decision making model in addition to the concepts discussed in the previous chapters, a model which better predicts and explains ethical choice and behavior can be built.

### **3.5 CHAPTER SUMMARY**

In this chapter I reviewed the existing models of ethical decision making and noted their contributions and weaknesses. I offered two new models to improve our understanding of how decision makers resolve ethical dilemmas. The first model is a detailed description of the determinants of deep choice. It suggests that decision makers evaluate both the behavior and the projected outcome of the various alternatives and that decision makers are influenced by other people. Importantly, I suggest ethical decisions are not made apart from other decisions, but rather that the morality of an alternative is one aspect or attribute among many that is considered when making a decision.

The second model depicts the overall ethical decision making process. This model is different from existing models in several ways. First, it details the encoding process decision makers use to understand their environment. This incorporates ideas from all the previous ethical decision making models which include an awareness factor, but this new model provides a greater understanding of this process by applying research from social psychology. The appraisal process – which includes encoding and awareness – highlights the importance of knowing how moral schemas are formed, what schemas that exist in firms, what factors necessary for an individual or organization to form moral schemas, and what causes moral schemas to be activated. Several of these concepts relate to moral imagination and, in this way, the model can be used to understand how moral imagination functions in decision making.

Second, the model accounts for an intuitive as well as a deliberative decision process. It builds upon what some researchers, including Rest, have mentioned, but which has heretofore not received attention in ethical decision models.

Third, the behavioral model of ethical decision making accounts for the influence of emotions. It highlights that emotions are not a monolithic factor, but rather are comprised of several emotion types including expected, anticipatory, and incidental emotions.

Fourth, the model does not rely on a single decision making strategy or rule, but instead highlights where evaluation occurs and suggests that different ethical theories and decision making rules can be used. This reflects the fact that many different ethical and unethical decision rules can be applied and acknowledges that no single ethical theory is universally accepted in all situations.

Overall, the new model surpasses existing models by incorporating existing concepts and by expanding and further detailing the decision process. In doing so it presents a more accurate model of how decision makers resolve ethical dilemmas.

#### **4.0 FIVE GUIDEPOSTS TO MEASURING ETHICAL QUALITY**

In this dissertation I study the process of ethical choice and how that choice is affected by situational factors. A discussion of ethical choice must include an investigation into what is an ethical choice, how to evaluate an ethical decision, or at least how to differentiate between good and bad ethical decisions. It must also investigate the research instruments used to measure ethical decisions. These tasks are complicated by the fact that several ethical theories are considered valid and no one theory dominates the others. This acknowledgement that there are several valid ethical theories foreshadows the difficulty of reaching consensus regarding the ultimate goal when making a moral choice. However, although no single rule or ethical theory dominates ethical choice, several factors that influence the quality of an ethical choice can be identified. These factors, which I refer to as five guideposts to measuring ethical quality, provide guidance for distinguishing between high quality and low quality ethical decisions. These five factors are identified and described.

In this chapter I discuss the theories and measurement tools related to ethical choice. I do so by focusing on four topics: (1) the determination of what is ethical; and (2) the theories related to determining the quality of ethical decisions; (3) the methods used to measure ethics; and (4) the guideposts to measuring ethical quality. The first has to do with ethical theories, the second involves theories of moral development, the third deals with the research methods of ethical

decision making, and the fourth concerns the factors that distinguish between high quality and low quality ethical decisions. I start by exploring the ethical theories.

#### **4.1 DETERMINING WHAT IS ETHICAL**

Various ethical theories, including utilitarian ethics, Kantian ethics, and virtue ethics, have been put forth to answer the question “What is the right thing to do?” Each theory takes a different path to answer that basic question. In this section I briefly review the dominant ethical theories and then argue that, while each theory is distinct, most of the prominent theories share common elements. Later in this chapter I suggest these common elements are factors in determining ethical quality. I begin with a discussion of utilitarian ethics.

Utilitarian ethics, often referred to as consequentialism, focuses on maximizing the overall net good for society. This is accomplished by performing a type of cost-benefit analysis in which the benefits to all of society for a given act are compared to the harms to all of society of the act and the alternative that produces the greatest net good is selected. Note that utilitarianism only considers the outcomes of an action; motives are not included when determining an ethical choice. Utilitarian ethics, like most of the ethical theories I will discuss, takes a universal viewpoint. By this I mean that decision makers do not only consider how an act affects them, but must impartially evaluate how everyone affected by the act will be benefited or be harmed.

In contrast to the focus on consequences of utilitarian ethics, Kantian ethics is concerned with the principles underlying an act. Thus, two people can perform an identical act and yet be judged differently using Kantian ethics if their motives for performing the act differ. For



instance, if a person agrees to help someone based on spirit of giving and a desire to assist the other in accomplishing something he could not otherwise do, that person would be evaluated favorably, while a person who helps based solely on a desire for the other person to “owe him one” would be evaluated unfavorably. Kantian ethics emphasizes the intrinsic value of human life and also favors acting in ways that can become a universal law. Behaviorally, recognizing the intrinsic value of all humans means that one should never coerce, deceive, or exploit others. Kant’s emphasis on universal law means that one must be willing to have all others act based upon the same reasons upon which you act and that one’s actions must be able to be performed by all people in a society without the act itself becoming logically impossible to achieve. For instance, a business person who does not honor a contract because it is something the person does not wish to do must be willing to let others break contracts whenever it is not convenient for them. Or, as a second example, a student should not forego studying and instead cheat on an exam by copying from a neighbor’s paper since, if this act were universalized and no students studied, no one in the class would know the correct answers and there would not be any student from which one could copy the answers (Velasquez, 1998). With Kantian ethics, morality is based on reason and can be discovered through personal reflection.

Justice ethics is another common ethical theory. Justice ethics is concerned with the distribution of the harms and benefits in a society. Several methods for distributing harms and benefits can be considered moral. First, harms and benefits can be distributed equally to all. Second, harms and benefits can be spread based on merit or contribution. Those who contribute more to the positive or negative outcome will be rewarded or punished based on their contribution. Third, the harms and benefits can be distributed based on need. This is typically how emergency medical treatment is allocated, with those who have the greatest need for

medical attention being the first to receive care. Lastly, at times rank or seniority is used as the allocation method.

Virtue ethics is a fourth ethical theory that is commonly discussed. In answering the question “What is the right thing to do” the virtue ethicist asks whether the act will promote the development of a virtuous character. Virtues include courage, honesty, and loyalty.

The application of the various ethical theories noted above may lead to the same conclusion. However, ethical theories can conflict and it is not uncommon that different theories suggest different actions. This creates difficulty when attempting to measure the quality of an ethical decision as it is unclear which standard to apply. Even though philosophers have attempted to resolve this dilemma for many years, the problem remains unsolved. The inability of a single foundational principle to adequately solve all moral problems has led some moral philosophers to abandon the notion of a single foundational principle of morality (Rest, Narvaez, Bebeau, & Thoma, 1999; Rest, Narvaez, Thoma, & Bebeau, 2000) and instead seek to discover other means to determine ethical choice.

Philosophers who have attempted to account for and resolve the problem of the plurality of ethical theories have done so in different ways. Some have argued that morality is not based on the “top-down” approaches of traditional ethical theories in which abstract principles are applied to specific cases, but rather stems from a “bottom-up” approach akin to the case law method used by courts to determine common law (Toulmin, 1981). Similarly, others suggest morality emerges from the specific experiences of the community dealing with specific events, leading to the community agreeing on the moral ideals to guide behavior (Walzer, 1983). In contrast, still other philosophers, while acknowledging there is debate within the philosophy community about a precise and all-encompassing moral theory, propose it is feasible to suggest a

“minimum conception of morality.” These philosophers argue there are common elements within the dominant ethical theories (Rachels, 1993). Rachels proposes that the concepts of reason and impartiality are included in all the dominant ethical theories and, therefore, can be used as a moral minimum. He conceives reason as meaning that a moral decision be based on criteria acceptable to other rational persons and impartiality as meaning that the interests of all those affected by a moral decision are taken into account. The concept of reason points to the use of universal principles. The principles would need to be universalizable, that is, they would need to be rules that could logically be enacted by everyone.

In regard to impartiality, Rachels’ view does not require that people act without regard to how it affects their own interests, but rather that the interests of others must be considered alongside of one’s own interests. This view of impartiality aligns well with the stakeholder theory of the firm (Freeman, 1984) in which managers in business organizations are to consider the impact of the firm’s decisions not only on shareholders, but also on the interests of employees, customers, the community, and others affected by the organization’s decisions. Impartiality rests on the basic philosophical principle that all individuals are assumed to start off as morally equal and that unequal treatment can only be justified based on valid moral grounds. Haslanger refers to this as the “non-arbitrariness principle” and states:

This seems to be what’s at issue in arguments against nepotism (giving preference to your relatives in jobs or admissions, etc.), racism, virulent nationalism, sexism. Can someone who engages in nepotism point to something special about his relatives beyond the fact that they’re his relatives? Can the racist point to any morally relevant differences between, say, white people, black people, Asian people, and so on that would make it appropriate to give some greater freedoms or privileges than the others? Racists have tried but the differences they point to tend to fall into one of two categories: either they’re based on racial stereotypes and so factually incorrect, or though correct they don’t legitimate the differential treatment (Haslanger, 2001: 3).

This minimum conception of morality, then, provides a way to overcome the plurality of ethical theories and provides guidance for measuring the quality of ethical decisions. However, an obstacle remains. The requirement of impartiality is not accepted by all philosophers and one ethical theory that has recently gained prominence, the ethics of care, does not include impartiality within its tenets. I discuss this theory next.

A major challenge has arisen in the past few decades in regard to the minimum conception of morality discussed above. In particular the requirement of impartiality has been questioned. The most vocal opponent to this requirement has been Gilligan as espoused in her ethics of care (Gilligan, 1982). Gilligan suggests that morality consists in relationships with particular individuals. More specifically, she views morality as the understanding of, giving attention to, and the emotional responsiveness toward the particular individuals with whom one has a relationship. Gilligan does not claim that care ethics replaces impartiality and universal ethical principles, but that “a final mature morality involves a complex interaction and dialogue between the concerns of impartiality and those of personal relationship and care” (Blum, 1988: 474). For Gilligan morality rests in the particular, not in the universal, and concerns how one should act in a specific relationship with a specific friend or child. One’s acts are not based in the role of the individual, but in the specific, concrete relationship with another person. For instance, morality is not based on being a father, but on being the father of Sarah; it is not based on being a teacher, but on being the teacher of Maureen. Moral action concerns connections to particular other people and the expression and continuance of these connections.

Gilligan’s care ethics appears to account for and justify the seemingly natural reaction that moral preference be given to those in close relationship with yourself. Many people agree with the concepts of care ethics and state that it is appropriate for a mother to favor her own baby

over another person's baby. However, some philosophers reject this notion of partiality and argue that it is unethical for a woman to treat her own baby differently unless there is some ethically valid reason for disparate treatment. Goodwin (1793) as described in Hinman (1998: 297) offers a dilemma that captures this conflict of impartiality in the dominant ethical theories:

Imagine a burning building in which two people are trapped: the archbishop of Cambay and his chambermaid. You are able to rescue only one of them, not both. Imagine, furthermore, that the chambermaid is your mother. Imagine, finally, that you have good reason to believe that the archbishop of Cambay will do many great things that will benefit a large number of people and that your mother will do much less to benefit humanity than will the archbishop. Which of the two should you choose to save?

Goodwin claims the ethical choice is to save the archbishop since he will have the greatest positive effect on society. This conflicts with the instinct of many who would suggest that the proper action is to save your mother. Care ethics accounts for and supports this latter decision. Note it claims to do so not by applying a universal rule of "Save mothers first," but rather by stating that you are to save *your* mother first. It is the particular relationship, not the generic role of child, that is the motive for your action.

Some philosophers have attempted to provide insights into these types of dilemmas by arguing for the existence of two types of ethical domains: an impartial domain of universal ethical theories and a partial domain of personal relationships. These domains also have been referred to as the public domain and the private domain (Hinman, 1998) and as macro-morality and micro-morality (Rest et al., 1999). This creates a duality in moral reasoning in which ethical theories based on universal and impartial concepts apply in the public domain and ethical theories based on personal relationships and partiality apply in the private domain. However, even if you accept the two domain concept, problems still arise since many dilemmas, including the one from Goodwin above, span the two domains and there is no guidance for selecting one

domain over the other when this occurs. This is particularly problematic for studying ethical dilemmas in business since these problems often span both domains. For example, a dilemma involving balancing the interests of employees (with whom a manager would have a personal relationship) and those of the community (who are strangers to the manager) or even the interests of customers (who often are not personally known to the manager) involves both the private and public domains.

Instead of attempting to decide whether the partiality of care ethics can be morally supported and whether the two domain approach is useful, one can first explore whether care ethics is dependent on partiality as Gilligan claims or whether it is actually an application of impartial, universal rules. Gilligan argues that the particularism of care ethics is not the reduction of universal rules to the individual level of analysis because care ethics does not concern the application of rules to individuals, but rather is the concern of a particular relationship. She suggests each relationship must be viewed independently. Yet this seems to imply a type of relativism, whereby no general rules apply. It is unclear how one would know how to act in a relationship if no learning or rules from other relationships could be used to inform one's actions. Universal rules or collections of universal rules such as "Be loyal to friends" or "Nurture one's children" can be applied to a relationship and yet be applied in such a way that they are unique to that relationship. In this way the concepts of the ethics of care can be included and yet the universality and impartiality of traditional ethical theories can still upheld. The specific process of applying an impartial concept like "Nurture one's children" in a particular relationship is in the personal, but not ethical, realm of decisions. In other words, "nurturing one's child" may be enacted in one relationship by helping a child work through a problem by actively interacting with her and by offering helpful suggestions. However, in another relationship nurturing may

best occur by leaving the child alone to struggle through the problem herself. The different tactics used to best maintain and build the relationship are based on the particular person involved, but the tactics of interaction or non-interaction themselves are not ethical or unethical. The tactics are in the personal realm. These personal tactics can only be judged as ethical or unethical in relation to their fulfillment or lack of fulfillment of a universal ethical principle. The universal ethical principle is in the ethical realm. In this way I suggest that care ethics can be viewed on a universal basis and, thus, can meet the minimum conception of morality discussed above. Note that this is achieved through a combination of universal rules and particularistic actions. It encompasses both aspects of the duality discussed earlier. I will return to the issue of duality later in this chapter.

Based on the foregoing discussion, but while still acknowledging the ongoing debate regarding the issue of duality and the existence of a minimum conception of morality that encompasses all ethical theories, I accept the notion that impartiality and reason are a basis for determining ethics for the purposes of this dissertation and will use these two concepts within my measure of ethical quality. I should note, however, that agreement on this conception of morality is not required for this dissertation to provide interesting and useful results. I am interested in how managers reason through ethical dilemmas and, more specifically, how this process changes under different situational circumstances. It is valuable to discover if reasoning shifts from a universal focus to a company focus or from a universal focus to a personal focus as resources become scarce since these changes in decision making will have a significant influence on the firm. Thus, even if one does not agree that it is unethical for a decision maker to make a decision based solely on how she will be affected by the decision, it is still important for firms to realize

such a shift occurs so they can establish policies and procedures to ensure the company goals and values are upheld.

Having briefly discussed ethical theories and the idea of a minimum conception of morality, I now discuss the measurement ethical quality. To do so requires an introduction to moral development theory, as this provides a foundation from which the ethical quality of a decision can be judged.

## **4.2 KOHLBERG'S MORAL DEVELOPMENT THEORY**

The field of ethical decision making in business has been very strongly influenced by the work of Lawrence Kohlberg (1969; 1973) and also Jean Piaget (Piaget, 1932) upon whose work Kohlberg relied. Kohlberg was interested in moral development and it is his theory of moral development that has most often been applied to ethical decision making in organizations. Although originating as a developmental theory, Kohlberg's work is valuable in an organizational setting comprised of adults because the theory helps us identify the various types of moral thought and can be used to measure the level of development at a point in time. Kohlberg's theory has been criticized for various flaws, which I discuss below. To best understand Kohlberg's approach it is useful to understand his original theory, the criticisms of the theory, and its recent revisions. I next briefly summarize Kohlberg's theory of moral development.

Kohlberg believed morality was cognitively based (as opposed to socially based) and he sought to understand moral development by studying the reasons people gave to justify why actions were perceived as morally just. Kohlberg felt the actual decision or behavior was of little



importance since many different motivations can lead to the same action. For example, in the famous Heinz Dilemma, a husband faces an ethical dilemma in which his wife is sick and the pharmacist who has the drug is charging a price that is higher than Heinz can pay or borrow. Heinz must decide whether or not to steal the drug. A moment's reflection will lead to the realization that a justification to steal or to not steal the drug can be achieved via multiple means. The drug could be stolen based on the belief that the woman's right to life is more important than the pharmacist's right to property. Or it may be stolen because Heinz is emotionally closer to his wife than to the pharmacist and Heinz does what is best for her regardless of the effects on others. Or the drug might not be stolen based on the idea that stealing is morally wrong, or that the risk of being sent to prison is not worth the benefit of stealing the drug. To understand moral reasoning, then, it is not enough to simply know the decision that is made; you must understand the motivation for the decision. Thus, Kohlberg studied the justification given for an action or decision and not simply the action or decision itself.

In his initial study Kohlberg interviewed fifty-eight American boys every three years over a twelve year period. Their initial ages ranged from ten to sixteen years. Kohlberg sought to discover how the boys' reasoning changed as they matured. Based on his findings, Kohlberg proposed that individuals use one of six progressively more advanced levels of moral cognitive processes: a punishment and obedience orientation, instrumental hedonism, approval of others, authority-based morality, democratically accepted law, and individual principles of conscience (Rest, 1986). These levels were grouped into three, two-stage levels: the pre-conventional (stages 1 and 2), conventional (stages 3 and 4), and post-conventional (stages 5 and 6) levels. Kohlberg believed individuals advanced through these stages in an invariant sequence, but that not all people advance to the highest stages. However, he did suggest that people resolve ethical

dilemmas by using the highest stage available to them (Kohlberg, 1969). The stages are said to represent hierarchical integrations, whereby the previous stages are incorporated and advanced to form a new, higher stage. Decision makers are able to reason at stages lower than their current stage, but cannot reason at a higher stage until and unless they advance in the complexity of their thought.

Kohlberg also claimed that reasoning performed at the higher stages of moral development represented “better” and more desirable thought processes based on both cognitive and moral criteria (Trevino, 1992). He supported the cognitive aspect of advancement by claiming that the higher stages incorporated the lower stages of reasoning and also integrated more cognitively complex methods of thinking. He substantiated the moral aspect of advancement by suggesting that movement toward the higher levels of reasoning also moved individuals closer to the use of the formal criteria and the principles espoused by a long line of moral philosophers. In this way, progression through the stages are said to represent more advanced ways of thinking about one’s relationship to society and its moral rules and expectations.

James Rest used Kohlberg’s theory as a basis for a slightly different conception of moral development. Although justice reasoning forms the foundation of both theories, Kohlberg’s stages are based on increased cognitive complexity and a movement toward universal principles while Rest argues that stages are based on one’s perceptions of how to organize cooperation in society (Elm & Weber, 1994). In Rest’s theory, “moral thinking is based on assignment of rights and responsibilities in a social system to provide cooperation and stability” (Elm & Weber, 1994: 343). According to Rest, at the lowest stages of reasoning individuals are only concerned with obtaining cooperation so that their individual needs are satisfied and they do not make a

connection between the individual and the broader society. At the highest stages decision makers understand the need to organize cooperation at a societal level based on impartiality and universal rules so that everyone within society can best prosper. The contrast between Kohlberg and Rest is subtle, but the outcome is that Kohlberg's conception is more individualistic and is derived through individual reasoning while Rest's theory is more social and is based on shared expectations regarding the logical requirements for an ideal system of cooperation.

### **4.3 MEASUREMENT INSTRUMENTS**

Kohlberg developed and tested his theory by presenting a series of moral dilemmas to decision makers and interviewing them about the reasons they gave to support their decisions. He coded the responses using a system he called the Standard Issue Scoring System (SISS). Kohlberg matched the responses he received to the various stage and half-stage levels within the theory to determine the highest stage of reasoning used by the decision maker. Since the process involved extensive interviews and subjective encoding, it took considerable time and was susceptible to bias on the part of the coders. Kohlberg's emphasis was not moral reasoning in business and his dilemmas did not include business situations. This limits the validity of the research instrument in business ethics. Weber (1990) tested whether managers reason differently in business contexts versus non-business contexts by presenting managers with three different ethical dilemmas. Two of the dilemmas took place in the business setting; one took place outside the business setting. The results indicated that managers used a significantly lower level of moral reasoning in the business versus the non-business context.

Due to the time required to conduct personal interviews, Weber (1990) sought a new method to survey managers. He developed the Moral Judgment Interview (MJJ), which includes three scenarios and a series of open-ended questions intended to, as closely as possible, replicate the interview method Kohlberg used. The new instrument was sufficiently correlated to Kohlberg's interview process to be considered an adequate replacement for it.

Rest also sought a more efficient instrument to measure moral development and developed the Defining Issues Test (DIT) (Rest, 1979). The DIT is a multiple choice device on which respondents are given either three (short-form) or six (long-form) dilemmas and asked to rate the importance of numerous factors in making a decision. Since it is a multiple choice device it is a recognition task and not a production task like the Kohlberg interview process or the MJJ. While the ability to recognize the moral response to a dilemma may be easier than the ability to derive a moral response and thus lead to higher measured level of moral development, Rest argues that Kohlberg's interview process and open-ended questions penalizes those who cannot properly articulate how they arrived at their ethical choice. Rest further claims that decision makers cannot recognize moral schemas beyond their current level of development and, therefore, suggests the DIT accurately captures the decision maker's level of moral development.

Rather than focusing on the specific stage of reasoning used to resolve ethical dilemmas, the DIT measures the extent to which a decision maker uses principled reasoning (stages 5 and 6) in moral judgment. Consequently, the score most commonly reported in DIT results is the P-score, which is the percentage of total responses using stage 5 and 6 reasoning. Other scores which are available, although less commonly reported are the D-score, which measures whether the responses that use non-principled reasoning are primarily based on conventional (stages 3

and 4) or pre-conventional (stages 1 and 2) reasoning, and the C-score, which measures consistency in responses.

After approximately three decades of research using the Defining Issues Test, Rest and his colleagues used meta-analysis techniques to analyze the validity of the instrument (Rest et al., 1999). They performed factor analysis on over 45,000 DIT survey responses received from various researchers. This factor analysis revealed that the six stages proposed by Kohlberg collapsed into three factors. Kohlberg's Stage 1 was not observed in the results, which Rest et al. attributed to the fact that the ages of the survey respondents would suggest that all had achieved at least a Stage 2 level of moral development. Respondents must have at least a minimal reading proficiency to take the survey and Rest and his colleagues suggest that all the subjects had already progressed beyond the most basic stage.

Rest's original stages 2 and 3 combined into one factor in the analysis. This new, combined factor is referred to as the personal interest schema. A person applying a personal interest schema justifies a decision as morally right by appealing to the personal stake the actor has in the consequences of an action. It includes individual prudential concerns and concerns for those with whom one has an affectionate relationship. Stage 4 remained its own factor. This schema is referred to as the maintaining norms schema and is concerned with maintaining the rules and laws of a society. Stages 5 and 6 combine into the post-conventional schema whereby decisions are made based on universal rules. One way to differentiate between these schemas is to consider the focus of analysis or object of consideration that is used to make the ethical decision. The focus of analysis is based on one's self, one's societal role, or a universal perspective for the personal interest, maintaining norms, and post-conventional schemas, respectively. The collapse of the previous stages into a smaller number of schemas raises

questions about the distinctions between the stages and the validity of the overall theory. This will be discussed later. However, it should be noted now that the higher stages were distinct and the lack of confirmation at the lower levels may be an artifact of the fact the studies are primarily given to adults and, therefore, reasoning levels below stage 3 may not be common in the survey sample. Rest and his colleagues refer to the refined version of moral development as a neo-Kohlbergian approach to moral development.

#### **4.4 CRITIQUING THE THEORY AND MEASUREMENT INSTRUMENTS.**

Although business ethics researchers have long used Kohlberg's theory as the basis for determining the quality of ethical thought, questions regarding the theory's validity remain. Several key questions must be addressed for the theory of moral development to assess the validity of cognitive moral development theory. These questions include:

- Are the stages distinct, or, in other words, is there the possibility of confounding or overlapping or subsuming across the stages of moral development?
- Is there a compelling logic for claiming the "higher stages" are indeed higher, or morally superior, or, phrased differently, what reasons support the idea that the stages progress from lower to higher or from less moral to more moral?
- Is the content of each stage strictly comparable to the others, or in other words, is there an overarching organizing principle that binds these together as a system?
- Are the stages technically stages and are they truly sequential stages?
- Are the stages invariant, that is, do people only move in an upward direction?

I shall address these questions below.

Kohlberg claims the higher stages of moral development represent more complex cognition and more principled reasoning. Recent work by Dawson (Dawson, 2002, 2003; Dawson, Xie, & Wilson, 2003) affords a method to investigate whether Kohlberg's stages represent a hierarchical order of reasoning and whether the higher stages correspond to greater use of principled reasoning. Dawson has developed a classification method called the Lectical Assessment System (LAS) to accomplish this task. It is a generalized developmental scoring system, and is based on two general models of development: Commons' general stage model (Commons, Richards, with Ruf, Armstrong-Roche, & Bretzius, 1984; Commons, Trudeau, Stein, Richards, & Krause, 1998) and Fischer's Skill Theory (Fischer, 1980). As a general model of development it is not content-specific and the moral domain is only one area to which it has been applied. The LAS classifies cognitive processes according to the hierarchical order of abstraction and the layers of structure. The Lectical Assessment System "describes explicit general criteria for determining the developmental level of performance in any domain of knowledge" (Dawson, 2003: 340). It has thirteen levels, although the first seven are typically achieved by age four, so the last six stages are the focus of any application of the LAS to adults. These "orders of hierarchical complexity" are posited to be "a series of hierarchical integrations of knowledge structures" (Dawson, 2003: 335). Each higher stage incorporates the previous stage and advances it in terms of logical complexity. More specifically:

Hierarchical complexity refers to the number of nonrepeating recursions that the coordinating actions must perform on a set of primary elements. Actions at a higher order of hierarchical complexity: (a) are defined in terms of the actions at the next lower order of hierarchical complexity; (b) organize and transform the lower order actions; (c) produce organizations of lower actions that are new and not arbitrary and cannot be accomplished by those lower order actions alone (Commons et al., 1998: 240).

The sequence in complexity moves from a definitional structure, to a linear structure, to a multivariate structure. After a person matures beyond infancy, these three structures occur first at a representational, concrete level and then at an abstract level. For instance, at the representational, definitional level, people can name attributes that define an action or experience. They then can combine multiple actions from lower levels into a single representation in the mind. For instance, children can represent the concept of Disneyland in their minds by realizing that Disneyland means being able to do activities such as riding the teacup ride, seeing Mickey Mouse, and eating cotton candy. They can combine these actions into a single representation of what Disneyland is. This is the single representations level within the Lectical system.

At the next level people can combine several of these representations into an ordered relationship based on a single aspect of the representations, in this example the aspect used may be the level of fun associated with the representation. Thus, children can make statements such as “Going to Disneyland is my favorite thing to do and going to McDonald’s is my second favorite thing to do.” Dawson calls this level “representational mappings.”

When they progress to the next higher level, children realize that representations have multiple aspects that can be considered such as fun, scary, and tiring, and can think about incorporating these multiple aspects of experiences into a more complex understanding of what each experience represents. Dawson calls this level “representational systems.”

After people are able to integrate multiple aspects of concrete experiences into an overall system, they next advance to an abstract level of thinking. Dawson claims this is the level where people can first define the qualities that make a person trustworthy, rather than merely describing a time when they felt they could trust someone. This highlights the ability to go from a collection



of concrete experiences to abstract concepts and experiences that have not been seen or lived. This is the “single abstractions” level.

At the next level, abstract mappings, abstractions such as trust and respect can be simultaneously considered and then ordered in terms of importance based on a single aspect of the abstractions. For instance, upholding commitments can be important both to trusting someone and respecting someone. These two abstractions can be ordered on the basis of how important it is to uphold commitments in each of them. This is the first level of cognition where people discuss ideas such as compromise and building trust.

Multiple aspects of abstractions are coordinated at the next level of cognitive complexity, the abstract systems level. According to Dawson:

the concept of personal integrity, which is rare before the abstract systems complexity order, [is discussed at this level and] refers to actions such as the coordination of and adherence to notions of fairness, trustworthiness, honesty, preservation of the golden rule, and so forth.... Concepts such as verbal contract, moral commitment, functional, development, social structure, and foundation are also uncommon before the abstract systems complexity order” (Dawson, 2003: 342).

The highest level within the Lectical Assessment System is the single principles level. At this level the abstract systems of the previous level are coordinated into principles. Concepts of a social contract and of philosophical principles are exhibited at this level.

As mentioned above, the Lectical Assessment System is meant to be independent of any single domain. However, Dawson (2003) sought to compare her scoring system to Kohlberg’s Standard Issue Scoring System (SISS) to determine the extent to which moral development could be explained by cognitive complexity. She applied the LAS to 637 moral judgment interviews that had previously been scored by the SISS and found a very high correlation of 0.88 between the two scoring systems. The mapping of Kohlberg’s stages to LAS levels is shown in Table 4.1.

**Figure 4.1: Correspondences between Kohlbergian Stages and Lectical Complexity Orders**

<b>Kohlberg Stages</b>	<b>Lectical Complexity Orders</b>
Stages 5 and 6	Single principles
Stage 4	Abstract systems
Stage 3	Abstract mappings
Stage 2/3 (transitional stage in Kohlberg)	Single abstractions
Stage 2	Representational systems
Stage 1	Representational mappings

The results of the SISS and the LAS comparison support Kohlberg's claim that the progression through the stages of moral development represents an increase in cognitive complexity. The mapping of the individual stages to the individual levels requires additional investigation to determine if the concepts behind the stages and level align, however. In general it makes sense that the representational, abstract, and principled levels correspond to the pre-conventional, conventional, and post-conventional stages, respectively. At the pre-conventional stage people focus on how actions affect themselves. This may result from an inability to think of concepts beyond what one has personally experienced as is captured by the representational level in LAS. Likewise, at the conventional level (stages 3 and 4) within Kohlberg's theory, reasoning requires the application of abstract reasoning in order to understand and evaluate your actions on the basis of how they integrate with your group or with society. Lastly, the post-conventional level in Kohlberg's system and single principles level in LAS both represent the application of principled reasoning. There are details which still must be resolved, however. For

instance, Dawson claims that role-taking does not take place until the abstract mapping level in the LAS, which aligns with stage 4 reasoning in Kohlberg's theory. However, role-taking may occur at stage 3 within Kohlberg's system as individuals seek to determine how to win the social approval of those in their social group such as their family or their work department. Thus, while the LAS provides some support for the idea that Kohlberg's levels do become cognitively more complex, more research is needed to further confirm or deny the linkage between the two systems.

The idea that people proceed toward principled reasoning as indicated by high levels on the LAS can also indicate people are applying higher moral concepts. This is especially true if one accepts the minimum conception of morality discussed earlier and the claim that the application of universal principles is reflective of higher levels of moral reasoning. Increased cognitive complexity and a movement toward the use of universal principles are the basis of Kohlberg's theory of moral development, so the Lectical Assessment System provides support for Kohlberg's theory.

The LAS substantiates the idea of an underlying logical structure based on the level of cognitive complexity and a progression toward universal principles. It is also possible to support an underlying structure for moral development based on the focus of analysis being used, as Rest (1979) does by viewing development as progressively more inclusive ways of social coordination. At the lowest stages of moral development, stages 1 and 2, decision makers are focused on how actions will affect themselves. They may consider how others are affected, but only to the extent that they can create a tit-for-tat exchange where the other person's outcome will result in a better outcome for themselves. At stage 3, decision makers consider not their own outcomes in isolation, but rather how their group will fare. This level encapsulates the previous

level since the decision maker is part of the group and thus will be benefited and rewarded as part of a collective of people. At the next stage, stage 4, the decision maker considers the affects not just on herself and not just on her group, but also how society will be affected by considering how her actions comply with societal rules and norms. Lastly, at the post-convention level of stages 5 and 6, decision makers consider universal principles and how individuals, groups, and societies can all flourish. In this way each stage of reasoning includes the stage below it, but also incorporates additional aspects to represent a higher level of social thinking.

The combination of these two structures provides a logic that binds together the levels of cognition into an overall system and allows a way to compare the various levels and stages and also supports the idea that higher stages represent higher stages of moral reasoning.

In regard to the question as to whether Kohlberg's stages are distinct stages or true stages, it is correct that the original six stages that Kohlberg identified are not based on deductive logic and are theoretically unsound. The inductive approach used by Kohlberg to develop his theory would not necessarily identify all the potential stages people use to make ethical decisions and there is no reason to assume that his observations would lead to distinct levels. This is especially true given the sample he used: a relatively small number of boys in a longitudinal study. However, empirical evidence based on cognitive complexity provides support for stage distinctness, at least once individuals progress beyond the lowest stages. True developmental stages should show a consolidation of learning, a short transition phase, and then consolidation of learning at a higher level. This process of consolidation, transition, and consolidation will produce a step-like curve when viewed over time or when surveying large populations at different cognitive levels. Dawson, Xie, and Wilson (2003) applied the Lectical Assessment System to 378 moral judgment interviews originally conducted and analyzed by researchers

applying Kohlberg's Standard Issue Scoring System (SISS) and found step-like distinctions between the stages. The authors also investigated the correlation between the LAS and the SISS. The correlation between the two scoring systems was 0.92 and the authors concluded that the two systems measure a single latent trait, namely hierarchical complexity. The two scoring systems aligned better at Kohlberg's stage 3 and higher, perhaps indicating a lack of specificity at the lower stages of his model. It is interesting that similar results were obtained in the meta-analysis of DIT results, lending further support to the idea that either the lower stages are not correctly specified or that the survey respondents have progressed beyond the lowest levels.

In a separate article, Dawson (2002) used probabilistic conjoint measurement (Rasch analysis) to model the results of previously performed Kohlberg Moral Judgment Interviews and found support for distinct stages at stage 3 and higher and some support, though less strong, for distinct stages below stage 3. Moreover, the research suggests the possibility of a new stage between Kohlberg's stages 3 and 4. Again, this points to specificity of stages at the higher levels of Kohlberg's model, but a lack of specificity at the lower stages. Overall these results indicate stage distinctness and sequentiality based on the cognitive complexity of survey answers.

In regard to the invariance of the stages, most researchers, including Rest, have abandoned Kohlberg's idea that people progress through the levels of moral development and do not regress to lower levels. Situational circumstances, including factors such as time pressure and the business environment, affect the level of reasoning that is used to resolve an ethical dilemma.

While the Lectical Assessment System answers several key questions regarding the validity of Kohlberg's theory, other questions remain unanswered. Moreover, only limited guidance is offered to assist managers in resolving particular ethical dilemmas. Kohlberg's theory and the measurement systems of Kohlberg, Rest, and Dawson all include principled

reasoning as highest stage of development and reasoning. However, real managers making real decisions must go beyond the identification of a single ethical principle in order to make the most ethical decision possible. The plurality of ethical theories requires consideration of multiple principles and the ranking of the principles in regard to the specific dilemma being confronted. In other words, the absence of a single dominant ethical theory requires managers to consider multiple theories and principles and choose among them. This, then, is the application of universal principles to the particular situation. It is interesting to note that the LAS, which moves from an identification stage, to linear ranking stage, to multivariate stage at the lower levels, only includes the identification stage at the principles level. However, when making decisions it is not enough to simply apply a principle, one must select the appropriate principle from the various ethical principles available. In other words, Kohlberg's theory and the related measurement instruments need to be expanded beyond merely identifying and applying an ethical principle and instead acknowledge that a higher level of complexity is used when decision makers rank the importance of ethical principles in a particular situation. Kohlberg's theory does not account for this higher order of complexity and the LAS does not attempt to measure it, although the underlying structure suggests a principle mapping level and a principle systems level be included in the measurement system.

To add these levels of cognitive complexity, researchers need to account for the duality I briefly discussed earlier. This duality is between the universal rules to be applied and the application of those rules in specific circumstances. Instead of avoiding this irresolvable conflict, I acknowledge it and offer guidelines or rules-of-thumb to help resolve the conflict. The inherent duality means that not all of these guideposts can each be met for every decision, but they do provide guidance for distinguishing between high-quality ethical decisions and low-quality

ethical decisions. These guideposts capture the complexity of ethical decision making that must be addressed to properly measure the quality of an ethical decision. Without this addition, the blind application of a universal principle could be seen as a high level of reasoning when, in fact, it is not. If an ethical principle is blindly applied without considering other ethical principles, it does not represent superior ethical thought and the principle is likely to be applied in instances when it should not be used. Certainly when considering two decisions, one in which a principle was blindly selected and another in which multiple ethical principles were considered and a specific one was identified as the most appropriate for the particular circumstance, the latter represents a higher level of ethical thought. However, Kohlberg, Rest, and Dawson do not account for this phenomenon.

The plurality of ethical theories makes it impossible to provide rigid rules to overcome the inherent universal and particularistic duality in making ethical choices for specific circumstances. Still, certain factors can be highlighted as important factors in gauging the quality of an ethical choice. Five guideposts can be identified as relevant to measurement of ethical quality. They are:

1. Reason
2. Degree of impartiality
3. Explicit identification of ethical principles and virtues
4. Particularistic application of universal principles and virtues
5. Complexity of decision analysis<sup>1</sup>

These various components of ethical quality are not reducible to each other, yet all lead to higher quality ethical decisions. One potential method for reasoning through an ethical dilemma

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<sup>1</sup> Barry Mitnick provided important insights in the development of these guideposts.

is to systematically assess each of these components when making an ethical decision. For instance, similar to the first formulation of Kant's Categorical Imperative and Rachels (1993) concept of reason, one should consider whether a response can be universalized and whether another rational person would accept the logic of one's analysis. Second, one should investigate whether the suggested action treats people impartially, and if not, one should determine if it at least treats people in such a way that others would agree that the partiality is warranted, such as a mother's partiality for her own children. Third, one should consider whether specific ethical principles have been identified and should avoid the unthinking application of an ethical principle that may not be appropriate. Fourth, one should question whether the application of a universal principle has been applied with consideration for the specific situation and individuals involved in the dilemma. And fifth, one should note whether multiple ethical theories, including those considering the motives as well as those considering the outcomes, been evaluated in choosing the ethical principles on which to base the decision.

These five factors noted above are only general criteria for determining the quality of an ethical choice. Note that these guideposts may conflict with each other when resolving a particular ethical dilemma and that there are no comprehensive rules telling one how to balance these factors if they cannot all be achieved. For instance, there are no rules stating to what degree reason should be sacrificed in favor of partiality in a specific situation, or when the intuitive application of an ethical principle is sufficiently believed so that a complex analysis of multiple theories is not required. Nor can one definitively state when one ethical principle trumps another one. However, these five guideposts provide a guide to distinguish the quality of ethical choice and the more these factors are employed in an ethical decision, the higher will be the quality of the resulting decision.



I also wish to highlight that these factors are used to judge the output of an ethical decision. However, the plurality of ethical theories results in the possibility that high quality decisions can be based on different ethical theories. Therefore, high quality decisions can conflict with each other. For example, economist Milton Friedman may apply reason and impartiality, explicitly identify the ethical principles of the right to property and right to freedom, take into account the particular situation, and engage in a complex decision analysis and, thus, make a high quality ethical decision. However, others may emphasize different ethical principles and suggest different approaches to account for the particular situation. This second decision could also be of high quality and yet also be in stark disagreement with the decision made by Friedman. The five guideposts do not resolve such disputes; nevertheless they do allow us to make claims regarding the ethical quality of a decision.

#### **4.5 CHAPTER SUMMARY**

Measuring ethical choice is not an easy task. This difficulty stems from the fact that there is no pre-eminent philosophical theory. Therefore, the first step is to discover if there are minimum aspects that are common to each of the dominant ethical theories. I argue we can apply the application of a minimum conception of morality as described by Rachels (1993). He states that the ideas of impartiality and reason are common to the dominant ethical theories. These two factors are included as components of a measure of ethical quality.

The Lectical Assessment System (LAS) provides theoretical and empirical support for the idea of hierarchical stages based on cognitive complexity. The endpoint of the LAS is principled reasoning. When assessing cognition within moral domain, the LAS measures

movement toward universal moral principles. It does not, however, attempt to understand the complexity of organizing a system of ethical principles. The application of the LAS to Kohlberg interview data suggests that Kohlberg's stages of moral development signify increasing cognitive complexity in the range studied by Kohlberg and as measured by the LAS. This represents a movement toward principled reasoning. One can combine the LAS analysis with content analysis analyzing whether the focal object in decision making is the self, group, or society or whether decision makers use a universal viewpoint in order to determine if decision makers are indeed moving toward impartiality in their decisions. However, it is important that the dilemmas that are presented in any research instrument take place in a business setting, as the setting has been shown to affect the reasoning used (Weber, 1990). The instruments commonly used in business ethics research today lack validity since the dilemmas are not within the business context.

Each of the existing measurement instruments has advantages and disadvantages. The lengthy coding process and potential rater bias of the Kohlberg interview method and the Moral Judgment Interview limit their application. The sensitivity of these ethical choice measurement instruments is another concern. The range of moral cognition in businesspeople appears to mostly fall between stages 3 and 4, with the occasional stage 2 and stage 5/6. With such a small range it may be difficult for measures to capture results of significance.

The use of the Defining Issues Test is also problematic. The pre-defined multiple choice answers of the DIT, which makes it a recognition task as opposed to a production task, may overstate moral development. Moreover, the collapse of stages two and three in a meta-analysis of DIT results raises additional concerns. However, the P-score is the most commonly reported measure with DIT research and since the P-score only includes stage 5 and 6 reasoning, the collapse of the lower levels is not as troublesome as it first appears as it will not change the

analysis of the vast majority of studies. The conservative approach in using the DIT would be to not make claims about which level of reasoning is used and only discuss the extent to which universal principles are used. In other words, researchers should mostly focus on P-score results.

Since all the measurement instruments have potential problems, it is important to select an instrument that has the fewest potential problems for one's particular study until and unless new, better instruments are developed. For instance to test the effect of time pressure on ethical decision making that I discuss in this dissertation, the key information is not the absolute level of ethical reasoning, but the change in the level of reasoning. A second type of key information is the consistency of the answers in the time-pressured and non-time-pressured states. For this type of study, the DIT provides more stage and consistency scores and would be the preferred choice, but its lack of business dilemmas lessens its validity. It may be worthwhile to develop business scenarios that could be scored using a DIT-type approach.

To best measure the quality of an ethical choice other factors beyond those included in the current measures must be included. I refer to these factors as the five guideposts to ethical quality. These factors acknowledge the duality of the private and public domains in ethical reasoning by including components related to both universal principles and the particular ethical dilemma. In this way I include the minimum conception of morality as proposed by Rachels, and also note the complexity of specific ethical choices suggested by Gilligan. Although these guideposts will not always provide a definitive answer, they do serve as a guide for measuring the quality of an ethical choice.

In summary, although Kohlberg's original theory has many potential shortcomings, other instruments, particularly the Lectical Assessment System, adds validity to the theory and measurement instruments by providing theoretical and empirical support for a cognitive

hierarchy and distinctiveness of the stages. However, Kohlberg's theory does not account for the complexity of selecting among multiple ethical principles in a specific situation. In response I offer five guideposts to ethical quality to capture the complexity and inherent duality that results from the lack of a dominant ethical theory. These five rules-of-thumb advance our understanding and measurement of the quality of ethical choice.

## **5.0 THE DEVELOPMENT OF TRUST THROUGH DEEP AND SHALLOW CHOICE**

In previous chapters I have discussed and modeled a decision making process which suggests that people use both deep and shallow choice to make decisions. In this chapter I provide a specific example of this concept by describing how deep and shallow choice are used to determine the level of trust that is given to another party. I argue that at some times trust is formed by deliberately and consciously predicting and evaluating the actions of others (deep choice) and at other times it is determined through heuristics, simple rules, and intuition (shallow choice).

Two important results stem from the use of deep and shallow choice to determine trust. First, trust determined through shallow choice is often not a result of directly or intentionally evaluating the trust attributes of a person or organization. Trust is often embedded within a choice and this trust is automatically activated by employing a rule or heuristic. In other words, decision makers frequently act according to the level of trust that is embedded within the role, stereotype, or rule that is activated. Second, since deep and shallow choice are two different methods of making a decision, a question that arises is whether there are differences in the decisions made using deep choice alone, shallow choice alone, or a combination of shallow and deep choice. I suggest that decisions that are made with the most confidence use high levels of both deep and shallow choice. Worded differently, we are most confident of our decision to trust another when both our calculations and our intuitions indicate we should trust the other.

The goals of this chapter are to provide an application of deep and shallow choice, to show how the use of shallow choice results in the activation of embedded trust, and to demonstrate how confidence in a decision varies based on the application of dual-process cognition.

In this chapter I begin by describing and defining trust. I find that a key factor in trust is that the trustor (the person or organization that places their trust in another) forms an expectation about how the trustee (the person or organization for whom the trustor acts and the referent of the trust) will act. I next discuss how trust has been categorized in the past and offer an expanded classification scheme. I then use my previously derived decision model to describe how trust is determined using deep and shallow choice. Last, I offer a description of the types of trust created using deep and shallow choice.

## **5.1 DEFINING TRUST**

Trust has received significant attention by management scholars and its many facets have been explored in numerous ways. For example, Barney and Hansen (1994) explored trustworthiness as a source of competitive advantage; Ring and Van de Ven (1994) and Browning, Beyer, and Shelter (1995) investigated trust in interorganizational relationships; McAllister (1995) looked at trust in dyadic relationships between individuals; Jones (1995) examined trust-based solutions to the problems of opportunism; Strong and Weber (1998) discussed whether trust is embedded in culture; Das and Teng (1998) examined trust in strategic alliances; and Grazioli and Jarvenpaa (2000) discussed trust and Internet fraud.

The large number of articles on trust has produced a wide range of definitions of the term trust. Zucker (1986: 58) noted that “recognition of the importance of trust has led to concern with defining the concept, but the definitions proposed unfortunately have little in common.” Others have described definitions of trust as a “confusing potpourri” (Shapiro, 1987: 624) that “lack conceptual clarity” (Bluhm, 1987: 334). Some progress has been made since those articles appeared about twenty years ago, yet in 1999 Kramer was still led to conclude that even though “social scientists have afforded considerable attention to the problem of defining trust..., a concise and universally accepted definition has remained elusive” (Kramer, 1999: 571). Hosmer (1995: 381) found common threads within the numerous trust definitions and suggests that the “definitions seem to be based, at least in part, upon an underlying assumption of a moral duty with a strong ethical component owed by the trusted person to the trusting individuals.” This notion that trust involves morals and ethics is reinforced by Mayer, Davis, and Schoorman’s (1995) model of organizational trust which includes two ethics-related components, benevolence and integrity, as well as a third component, ability, as the antecedents of trust.

Appendix B lists several definitions of trust. By extracting the key components from each trust definition a surprising overlap of key ideas among the trust definitions is revealed. For instance, Rotter’s (1967) definition of trust is “an expectancy held by an individual or group that the word, promise, verbal or written statement of another individual or group can be relied upon.” A dissection of this definition reveals four main components: an expectancy by the originator of the trust, a commitment by the referent of the trust, a reliance or dependence on the part of the trustor, and, implicitly, that a relationship exists between the two parties. When another party can be relied upon based on their “word, promise, or verbal or written statement” we can refer to that party as a promise-keeper, or somewhat more broadly, as a party that has

integrity. When you rely upon or are dependent on another you are vulnerable to that other party. Therefore, the core factors of Rotter's definition are expectation, integrity, vulnerability, and interrelationship.

Other definitions can also be deconstructed to reveal their main components. Cummings and Bromiley (1996: 303) define trust as:

an individual's belief or a common belief among a group of individuals that another individual or group (a) makes good-faith efforts to behave in accordance with any commitments both explicit or implicit, (b) is honest in whatever negotiations preceded such commitments, and (c) does not take excessive advantage of another even when the opportunity is available.

A belief about the action of others is an expectation about their behavior. Good faith efforts to honor commitments and honesty in negotiations are both captured by the idea of integrity, and not taking advantage of another when it is possible to do so requires avoiding exploitation when there is the potential for opportunism. Therefore, the key parts of Cummings and Bromiley's definition of trust are an expectation, integrity, vulnerability, and self-restraint in times of potential opportunism. Mayer et al. (1995) go a bit further by moving from trust being simply an expectation, to being a willingness based on an expectation. Mayer et al.'s definition of trust is the "willingness of a party to be vulnerable to the actions of another party based on the expectation that the other will perform a particular action important to the trustor, irrespective of the ability to monitor or control that other party." The authors do not explain the significance of distinguishing between a willingness to be vulnerable and an expectation about one's vulnerability. They do point out that having trust in another is different than engaging in an action based on that trust, but it is not clear how engaging in an action based on a willingness differs from engaging in an action based on an expectation. A "willingness" does not appear to add an important distinction to the trust definition. Other than the addition of "willingness,"



several of the previously mentioned components are present in Meyer et al.'s definition. In this definition, trust is a willingness based on an expectation that occurs when a party is vulnerable and must rely on the self-restraint of the other party. The essence of Meyer et al.'s definition then is a willingness, expectation, vulnerability, and self-restraint when there is the potential for opportunism.

A synthesis of the core ideas of these three trust definitions, along with the other definitions listed in Appendix B, reveals that definitions of trust consistently include four main components: an expectation by the trustor about the actions of the trustee, integrity by the trustee, the possibility for opportunism (that is, the trustor is vulnerable), and self-restraint by the trustee to reject opportunism. An important dimension implicit in many of the definitions of trust and explicitly included in Mayer et al.'s model (1995) of trust is that the trustee must have the ability and competence to engage in the action. Trust cannot form if the trustor does not believe the trustee can perform the action. Combining these concepts, therefore, I define trust as:

*An expectation that an individual or organization will act with competence and integrity, reject opportunism, and keep faith with the interests of the trustor even when there is the possibility of opportunism.*

I wish to highlight two additional points about trust. First, by merely reviewing the existing trust definitions it is possible to overlook that trust is the outcome of a process—a decision process of evaluating the trustworthiness of another party. Trust is an expectation and this expectation is determined through a process that seeks to determine how the other party will act in some future circumstance where the trustor is vulnerable to the trustee. It is important to emphasize that trust is an outcome of an evaluation of trustworthiness for two reasons: (1) it emphasizes that trust is a decision; and (2) it highlights that trust does not exist by itself and is

not an independent notion. Trust must always be related to an object. It must always have a referent. You must trust in something and when you say you trust in “X”, you are saying you have determined “X” to be trustworthy. Second, trust is an expectation; it is not an action or a behavior. Behavior is influenced by trust, but trust is separate from behavior. The level of trust in another party is an important factor in determining the amount of risk taking that will take place in a relationship, but it is not the only factor. The perceived risk or vulnerability in a situation also plays a key role in determining what action will be taken. An example later in the chapter will clarify this point.

Having now defined trust, I turn to describing the ways trust has been categorized. Researchers have primarily categorized trust based on the process by which trust is derived. In the following section I will review the ways that trust has been categorized.

## **5.2 CATEGORIZING TRUST**

Researchers have categorized trust in several ways. Shapiro (1987) suggested there are three forms of trust: (1) trust as personal disposition; (2) trust as part of interpersonal relationships; and (3) trust as agency (as in agency theory) and risk. She focused on this third category, referring to it as impersonal trust, and detailed how impersonal trust is formed through a principal and agent relationship. Impersonal trust is based not on personal relations, but through procedures, structural constraints, barriers to entry (i.e. certification and licensing), and policing mechanisms.

More recently, Kramer (1999) summarized the trust literature and suggested dividing trust into two broad groups: trust as a psychological state and trust as choice behavior. Trust as a

psychological state involves expectations, assumptions, or beliefs and also more complex psychological states such as emotions and motivations. Trust as choice behavior is further divided into two sub-groups: trust as a rational choice and relational models of trust. The rational choice model claims that trust is driven by a “conscious calculation of advantages, a calculation that in turn is based on an explicit and internally consistent value system” (Schelling, 1960: 4). It assumes that individuals are rational. The second sub-group, relational models of trust, attempts to account for the fact that individuals do not always make rational choices or hold consistent value systems. Researchers in this group (i.e. Mayer et al., 1995; Tyler & Kramer, 1996) suggest that social and relational influences sway the level of trust. This work is grounded in sociological theory, especially Granovetter’s (1985) work on the effect of social embeddedness on economic transactions. Granovetter posited that on-going social relationships and social networks guide and, at times, restrict our behavior. Social identity theory (Brewer, 1981; Tajfel, 1974) also has been used to support the idea of relational trust. Social identity theory explains that part of an individual’s identity that is generated by the social groups to which an individual belongs and the importance the individual attaches to each group membership. In this context of trust, these group memberships affect the level of trust among group members and between groups. In summary, Kramer (1999) in essence posits three types of trust: trust related to psychological states such as expectations or emotions; trust related to calculated and consistent decisions; and trust based upon, or influenced by, the social network of the trustor. Although not discussed by Kramer, it appears logical that the expectations and emotions in the first trust type are derived from the calculations and social relations of the second and third trust types.

Beyond these broad groups, Kramer also classifies trust based on how it is formed. One such basis for trust is history (Kramer, 1999). In history-based trust, interactions with the other

party over time either confirm or refute the existing perceptions of trustworthiness of the other by directly demonstrating the other party's integrity and ability and the extent to which he or she engages in opportunistic behavior.

Closely related to history-based trust, in fact I would suggest it is a special type of history-based trust, is third-party based trust. Here information on the trust referent is provided by a trusted third-party who has a history with the trust referent. This form of trust is especially important when there have been no previous direct interactions between the trustor and the trustee. Third-party based trust can be in the form of gossip (Burt & Knez, 1995) and testimonials (Mitnick, 2000). Often the trust in the third-party is projected onto the trustee based on the third-party's recommendation. For instance, a positive recommendation by the Consumer Reports organization can result in trust by the trustor toward the trustee without any further analysis. In summary, both history-based trust and third-party based trust involve a process of determining another's trustworthiness based on past interactions with the trust referent. The interactions were either direct (history-based trust) or indirect (third-party based trust) relationships between the trustee and trustor.

Social categories are a third basis for trust in the current literature. Category-based trust is trust "predicated on information regarding the trustee's membership in a social or organizational category—information which, when salient, often unknowingly influences other's judgments about their trustworthiness" (Kramer, 1999: 577). Category-based trust can be linked to social identity theory, as was described earlier. One way this is shown is when trustors seek to positively differentiate their in-group by projecting positive characteristics that affect trust, such as honesty, integrity, ability, and benevolence (Mayer et al., 1995), to other in-group members.

Since this trust is given on the basis of group membership and not due to personalized information, it represents an impersonal form of trust.

Kramer notes that another form of impersonal trust is role-based trust. Role-based trust is “predicated on knowledge that a person occupies a particular role in the organization rather than specific knowledge about a person’s capabilities, dispositions, motives, and intentions” (Kramer, 1999: 578). As with other types of impersonal trust, the level of cognitive processing is reduced since once a level of trust is established in the role, minimal additional cognitive processing is required to determine trust in specific individuals who are placed in a given role. This is true even as particular individuals assume or relinquish the role. Kramer discusses the basis for role-based trust and why it is not dependent on any specific individual. He states:

Such trust develops from and is sustained by people’s common knowledge regarding the barriers to entry into organizational roles, their presumptions of the training and socialization processes that role occupants undergo, and their perceptions of various accountability mechanisms intended to ensure role compliance (1999: 578).

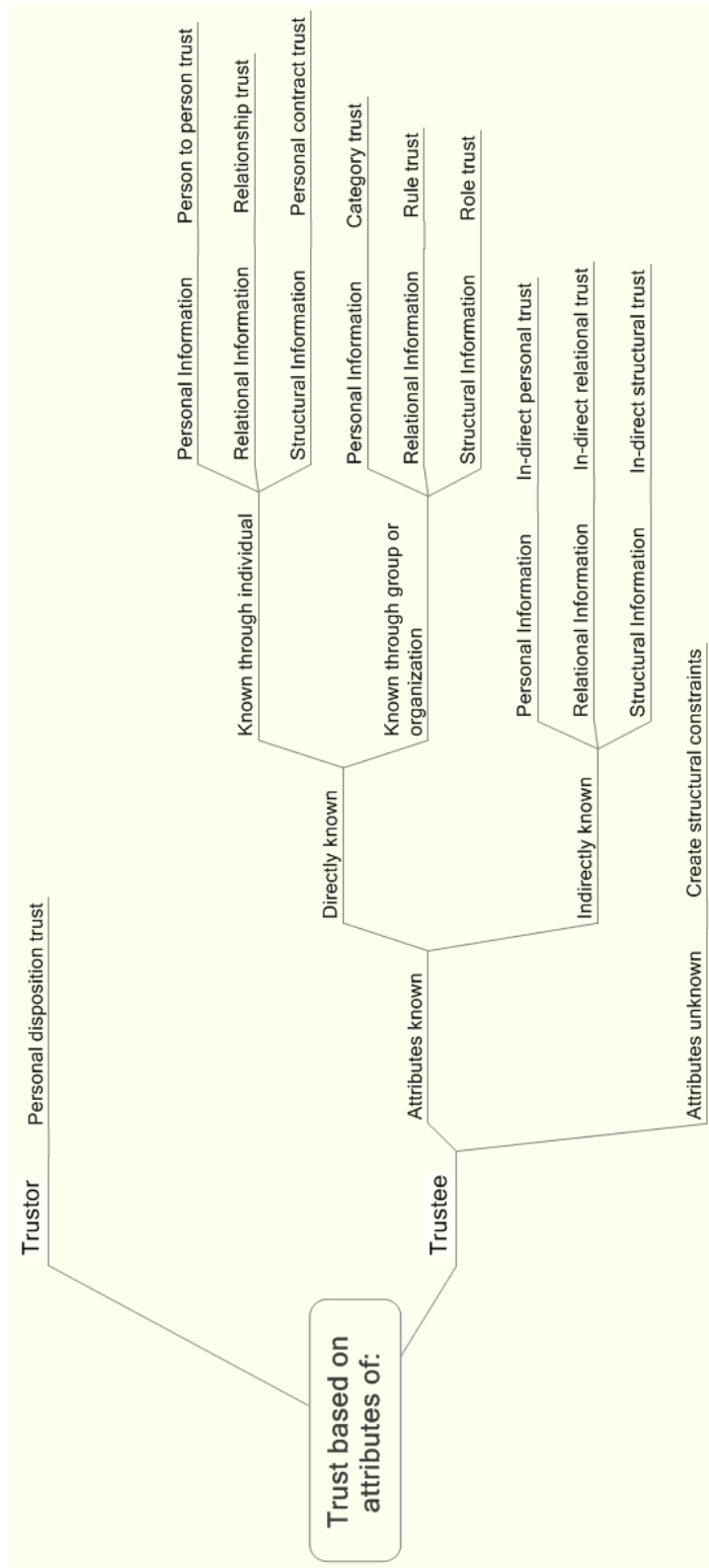
The final type of trust in the extant literature is rule-based trust. These rules are both formal and informal and, therefore, a trustor using rule-based trust makes assumptions about the degree to which the trustee knows and understands the rules as codified in procedure manuals and ethics manuals, and also the rules as determined through socialization. Thus, the cognitive decision shifts from one directly questioning whether the individual can be trusted to one questioning whether the individual has been socialized into the group when rule-based trust is used. When a trustor has confidence in a trustee’s adherence to the normative components of the explicit and implicit group rules, “mutual trust can acquire a taken-for-granted quality” (Kramer, 1999: 579) that utilizes shallow choice to determine trustworthiness. A history of numerous

individuals being successfully socialized into the group will further reduce the cognitive effort employed by trustors as the socialization of the trustees will increasingly be assumed.

In summary, the prior research has suggested trust is formed based on history, third-party endorsements, social categories, roles, and rules. All of these describe a process used to determine the trustworthiness of the other entity.

A more detailed analysis of the ways trust is formed can bring further clarity to the types of trust that exist and I present one in the next section. This detailed analysis is diagrammed in Figure 5.1 and Table 5.1.

At its most basic level, the formation of trust is distinguished by highlighting whether the trust is formed based on attributes of the trustor or attributes of the trustee. Individuals are predisposed to different levels of trust. Those more highly predisposed to trust may not be aware that they are more trusting than others. It is likely this predisposition to trust is activated in the encoding stage of the decision process. Trusting individuals are less likely to encode a situation as a vulnerable situation and are more likely to unconsciously trust others more than those individuals who have a low predisposition to trust. Trusting individuals may also grant trust more readily and may be more willing to accept violations of trust and yet continue to trust another party. In this way the attributes of the trustor (his or her disposition to trust) are an important variable in the determination of trust. Rotter (1971; 1980) discusses how individuals are predisposed to higher or lower levels of trust. He posits that early experiences determine a person's predisposition to trust others.



**Figure 5.1: Flowchart of Trust Types**

The attributes of the trustee are also critical in determining the level of trust that is formed. The trustor must discover if the trustee has the levels of ability, benevolence, and integrity (Mayer et al., 1995) that warrant trusting him or her. To do so the trustor must have knowledge of the trustee, or, in the absence of such knowledge, must create a structure that will provide an acceptable level of trust.

Knowledge about the other party is obtained either directly or indirectly. Knowledge is directly obtained when the trustor bases the trust decision on knowledge the trustor discovers himself or herself. This knowledge can be information received through direct interaction with the trustee or direct interaction with the groups and organizations to which the trustee belongs. In this latter case, the trustor does not know the trustee personally, but he or she does have first-hand knowledge about the group or organization of which the trustee is a member. The trustor then infers qualities of the individual from those of the group. This is accomplished through one or more of several methods which will be discussed later.

Knowledge is indirect when it is obtained through a third party. This knowledge serves as a substitute for direct knowledge about the trustee. The quality of this trust is moderated by the level of trust in the third party, so many times this trust will not be as strong or as resilient as trust derived from direct knowledge.

**Table 5.1: Trust Types**

		<b>Type of Information</b>		
		<b>Personal</b>	<b>Relational</b>	<b>Structural</b>
<b>Source of Knowledge</b>	<b>Individual</b>	Person to Person Trust	Relationship Trust	Personal Contract Trust
	<b>Group or Organization</b>	Category Trust	Rule Trust	Role Trust
	<b>Third-party</b>	Indirect Personal Trust	Indirect Relational Trust	Indirect Structural Trust



In summary, knowledge about the trustee can be direct or indirect. The trustor has direct knowledge about the individual or the group when that knowledge is obtained through direct interaction with the individual or the group. In other words, the trustor has a history with the individual or group. The trustor has indirect knowledge when the information is obtained through a third party. These three sources of information – direct knowledge from the individual, direct knowledge from the group, and indirect knowledge from a third party – form one dimension for sorting trust types as is shown in Table 5.1.

Another key factor in categorizing trust is the type of information that is known or sought about the trustee. This dimension of trust also has three components: information that is specific to the individual (i.e. his or her values and competency), information regarding the relationships the trustee has (i.e. the social network and strength of social ties), and structural factors that guide and control the trustee (i.e. contracts, organizational rules, and barriers to entry). I will briefly describe each of these.

The antecedents to trust are ability, integrity, and benevolence (Mayer et al., 1995). One way to forecast how the trustee will act when the trustor is vulnerable to the trustee is by obtaining information about the personal values and competencies of the trustee. This can be acquired through personal interaction with the trustee. When trust is developed by knowing personal information about the trustee that is obtained through personal interaction, I refer to this trust as personal trust. This is shown in the upper left-hand box in Table 5.1.

As Kramer (1999) noted, at times we choose whether to bestow trust on other parties based upon their membership in a group. Social identity theory can account for this behavior as it states that individuals often project positive characteristics onto in-group members. In regard to trust, individuals may project traits of competence, integrity, and benevolence onto in-group

members even without any personal knowledge of the other beyond group membership. In addition, trust may be given or reserved based on stereotypical information known about a group. Of course, the individual may not possess the stereotypical characteristics of the group, but without personal knowledge about the trustee, the trustor does not have information to counter the stereotype. The distinction within this category, then, is that the trustor has direct knowledge about the personal values and competencies of the typical group member, but does not have any personal knowledge about the trustee beyond his or her group membership. The source of knowledge is information about the group or organization. The values and competencies of the group are projected onto the individual trustee. In agreement with Kramer (1999), I call this type of trust category trust.

Knowledge about the values and abilities of the trustee also comes from third-party sources. The information is the same as that obtained through personal trust and category trust, but it is obtained via a third party instead of through personal interaction. In most cases the third party has had a direct interaction with the trustee, but this is not necessarily the case. The testament systems included on online shopping sites such as eBay and Amazon are an example of information that is used to establish this type of trust, which I refer to as indirect personal trust.

I next describe the far right column of Table 5.1. Here the type of information that is sought to make a trust decision is based on structural constraints that limit the actions of the trustee. The source of information about the structural constraint is obtained directly through a relationship with the individual, through direct knowledge of the group or organization to which the individual belongs, or through knowledge obtained from a third party. An example of trust based on structural information about a group is trust based on a CPA certification. Without

knowing anything about the individual other than his or her CPA certification, a trustor may trust the trustee based on knowledge about the requirements to become a CPA. These requirements include tests of competency as well as rules and enforcement mechanisms to encourage abidance to the rules. This is what Kramer refers to as role trust. In essence the trustor makes a judgment that the trustee will conform to the rules and structure of the group.

The classification scheme presented in Table 5.1 highlights the possibility of creating, and subsequently trusting, structural relationships at the individual level. This includes personal contracts between two people. These types of structural constraints are often created when no prior knowledge exists between two parties. Several of the mechanisms Shapiro (1987) suggests are use to create trust exist in this trust type. The trustor and trustee have or can create rules, monitoring mechanisms, and enforcement provisions to ensure trustworthy behavior. Trust in this case is based on the assumption that the trustee will conform to the rules and structure agreed upon by the two parties. I refer to this trust as personal contract trust.

In addition to structural knowledge obtained through direct knowledge of the individual or direct knowledge of the group, structural knowledge can also be obtained through third-party sources. I call trust based on this type of information indirect structural trust.

The final information type upon with trust is formed is relational information. This is included in the middle column of Table 5.1. This information type encompasses Kramer's notion of rule-based trust when the relational information is known about the group or organization. In this case the trustor knows the norms of the group and must determine whether the trustee is socialized into the group. This category is placed between personal information and structural information because it combines some elements of both. The factor that drives adherence to the group norms are the social relationships within the group. This contrasts with trust based on

structural information, which is largely based on sanctions that will be applied if the trustee does not follow the rules. Here behavior is driven by a desire to maintain and build relationships and not a desire to avoid punishment. The trustor determines whether the trustee will violate the group's relationships.

When the source of the information is the individual, the trustor determines whether the trustee will violate the personal relationship between the trustee and the trustor. In other words, at times the trustor may determine that the trustee will act in a trustworthy manner toward the trustor not based on the values of the trustee or based on any personal contracts with the trustee, but instead by determining that the trustee values the relationship between the trustee and the trustor. I refer to this trust as relationship trust.

Instead of having direct knowledge about the individual or group relations and social network, the trustor may obtain this information through a third party. I call this indirect relational trust.

To further clarify the trust types discussed above, Figure 5.2 presents a flow diagram of the trust types. It highlights that the key dimensions are whether information is known about the trustee or the trustor; whether it is known through direct or indirect knowledge; whether the direct knowledge is known about the individual or the group or organization; and whether that information is personal, relational, or structural information.

Two other types of trust also receive attention in the literature: fragile trust and resilient trust (Ring, 1996). Whereas other researchers have suggested trust involves three antecedents – ability, integrity, and benevolence – Ring's review of the management literature leads him to posit that there are two different types of trust: one based on only two of the attributes, ability and benevolence, and one based on all three of the attributes. The first type of trust, fragile trust,

is a calculated trust where risk and vulnerability are present, but the parties involved “rely on formal means (e.g. contractual) of governing their relationship” (Ring, 1996: 153). In essence, values and integrity do not come into play because control is exercised through structural processes. Within my typology this is either personal contract trust or role trust depending on whether the means of governing the relationship are directly with the individual or with an organization. Ring highlights that this type of trust is fragile in the sense that the parties will be willing to break the trust if it is in their interest to do so. This trust is not based on values. It is based on mutual self-interest and the formal arrangement that controls the other party. This basis for trust does not withstand violations to the trust since the trustor will quickly realize it is not in his or her self-interest to trust the other. Thus, Ring describes it as fragile trust.

Ring’s second type of trust, resilient trust, includes the notions of morals, competence, and goodwill and thus aligns with the antecedents to trust noted earlier. This trust is resilient because it will survive occasional digressions from trusting behavior. This is due to the relationship and loyalty that is present in resilient trust.

Several of the trust types in my sorting are resilient to occasional transgressions. The trust types in the personal and relational columns include values and go beyond a mere calculation of trust based on self-interest and, therefore, can be considered types of resilient trust.

Fragile and resilient trust are distinguished by how they are formed and by the qualities of trust they produce. In addition to classifying trust based on how it survives undesired outcomes, trust can be distinguished based on the level of confidence the trustor has in the trust. This is critical because a more confident trust will enable greater risk-taking in a relationship. An important determinant in the level of confidence of trust can be explained by the cognitive processes used to form trust. In the next section I describe how deep and shallow choice affect

the level of confidence in the trust that is produced. I begin by briefly reviewing dual-process theories of cognition.

### **5.3 DUAL-PROCESS THEORIES AND TRUST**

Over the past several decades and at an accelerating pace, researchers have suggested that individuals use two qualitatively different methods to process information in order to make judgments and solve problems. They have distinguished between a slow, detailed information-processing mode using high-effort systematic reasoning and a fast, simple, associative information-processing mode using low-effort heuristics and simple rules. Theories fitting this general classification are referred to as dual-process theories. Researchers have developed many related theories within the dual-process realm including those that distinguish between controlled versus uncontrolled processes (e.g. Bargh, 1999), conscious versus unconscious processes (e.g. Bodenhausen, Macrae, & Sherman, 1999), and affective versus cognitive processes (e.g. Bodenhausen et al., 1999). In my model I distinguish between the two processes based on the decision complexity of the process and I refer to the two modes as deep choice and shallow choice. The determinants of this decision complexity are: (1) the number of steps in the decision process; (2) the number of alternatives considered; (3) the number of attributes evaluated for each alternative; (4) the degree to which heuristic processing is used; and (5) the degree to which a decision uses compensatory versus noncompensatory analysis (see Chapter 3 for greater detail). Although the various dual-process theories contain some differences, the core idea remains the same among all the theories: “social judgments are not always formed on the basis of relatively effortful processing of judgment-relevant information; rather, judgments may also be

formed on the basis of relatively low-effort processing of more peripheral forms of information” (Chen & Chaiken, 1999: 80). Moreover, dual-process theories include the notion that individuals have limited cognitive resources and, therefore, that they seek to economize their information processes – that is, use to low-effort processing – whenever possible.

Three key antecedents are necessary for shallow choice to be employed in a decision. These antecedents are: (1) availability, that is, it must be stored in memory; (2) accessibility, that is, it must be able to be retrieved from memory; and (3) applicability, that is, it must be relevant to the decision being made (Higgins, 1996). Related to trust, the availability of a trust heuristic is dependent upon personalized or generalized knowledge of the trust referent. The accessibility of a trust heuristic relates to the ease with which the heuristic can be retrieved in the given situation. The applicability of a trust heuristic is the extent to which it includes information regarding the degree to which the trustee exhibits the antecedents to trust, namely, integrity, ability, and benevolence (Mayer et al., 1995).

Both deep and shallow choice are subject to biases. One potential bias results from a desire to preserve one’s existing beliefs or material interests (Chen and Chaiken, 1999). Specifically related to shallow choice and trust decisions, heuristics that reinforce the existing perceptions of trustworthiness are likely to be activated, while those heuristics that are counter to existing trustworthiness perceptions are less likely to be invoked. This bias can also affect deep choice. While actively processing information, data that is congruent with current trust assessments will be judged to be more correct than data that conflicts with current perceptions. For example, if you have a long-standing business relationship with a company and have developed a high level of trust in it, you will be less likely to believe a story that claims the firm is deceiving its customers. In addition, you will search for alternate explanations of the alleged

behavior in order to maintain and validate your current perceptions of the company. On the other hand, a person who has no prior trusting relationship with the organization will be more likely to accept the accuracy of the news story.

An additional bias can be explained using social identity theory. Social identity theory posits that part of a person's identity is based on the social groups to which a person belongs and the importance of those groups to the person (Tajfel & Turner, 1979; 1986). Individuals gain self-esteem by positively associating themselves with a group and seek to achieve and maintain "positive group distinctiveness" through comparisons with other groups that "protect, enhance, preserve, or achieve positive social identity for members of the group" (Tajfel, 1982: 24). In regard to trust, this desire to maintain positive group distinctiveness can influence both the deep and shallow methods of processing information and can lead to a rejection of information that suggests that members of one's own group are less trustworthy than members of an outside group.

Smith and DeCoster (2000) provide a physical basis for dual-process cognition based on psychological and neuropsychological evidence. They argue that the two modes of thought within dual-process cognition are derived from two separate memory systems and that these memory systems reside in different areas of the brain. One memory system is needed for "rapid learning of new information so that a novel experience can be remembered after a single occurrence" (Smith & DeCoster, 2000: 109). Memories in this memory system are created when learning a topic that was unknown. This process uses symbolic learning and a deliberative cognitive process. It is a slow process where symbolic information is used to make logical connections. The outcome of this process is then imprinted into memory. The other memory system operates in a much different fashion. It relies on a large collection of stored memories



which are connected in an associative manner. Instead of slowly and linearly analyzing information, this mode quickly recognizes patterns and similarities between the current situation and previous experiences stored in memories. These memories have been built over time in an incremental manner “so that the total configuration in memory reflects a large sample of experiences” (Smith & DeCoster, 2000: 109). In other words, in this process memories are added in an associative fashion where the current experience is related to previous experiences. When people face a situation they scan these memories seeking to discover if they faced a similar situation in the past. The use of these two types of memory systems aligns with deep and shallow choice. While evidence from psychology and neurobiology seems to support these claims, more evidence is needed to verify the veracity of these ideas. At this point, however, it does provide some support for the concept of two distinct cognitive processing modes.

Shallow or deep choice can be used to form any of the trust types. Typically the process evolves from a deep choice process, where no information is known and trust must be determined in a deliberative manner, to a shallow choice process as experience enables the creation and use of simple rules and heuristics. However, since the trustor is much more likely to know information about a group or organization than about a specific individual and is also likely to have a number of existing group stereotypes that can be automatically activated, category trust, rule trust, and role trust are more likely to be employed using shallow choice than are the other trust types.

The two memory systems described above afford the possibility of deep and shallow choice being two separate processes that could be simultaneously processed. However, it could be argued that the shallow choice process is completed so quickly that it processes information first and then the deep choice process is used. Maheswaran, Mackie, and Chaiken (1992)

examined the roles of heuristic and systematic processing in product selection processes and their results suggest that, at least at times, deep and shallow choice are separate processes that can be used simultaneously. Maheswaran et al. discovered that as the decision outcome became more critical to decision makers they increasingly used both brand-based (heuristic) informational cues and detailed, analytical (systematic) processing. In other words, as the importance of the decision increased, subjects did not rely solely on systematic processing (deep choice) or rely solely on heuristic processing (shallow choice), but rather used both processing methods to make a decision. Moreover, the level of confidence in the decision increased in an additive fashion when both methods were used. Thus, although a decision can be made using either deep or shallow choice, that does not exclude the possibility that a decision can be made using both processes concurrently and, in fact, their concurrent use leads to more confidence in decision making. Of course, the cognitive resources required to employ systematic reasoning are often not available due to time or other constraints and heuristics may not be available or accessible, so both processing modes may not always be used even when facing a critical decision.

The use of high and low levels of deep choice and high and low levels of shallow choice enable the description of four types of trust. I explain these trust types in the next section.

#### **5.4 FOUR TRUST TYPES: CONFIDENT, CALCULATED, INGRAINED, AND WEAK**

As noted above, the level of decision complexity used in trust judgments is not a single continuum from low complexity to high complexity processing, but rather deep and shallow

choice are separate processes that can be used separately or jointly. Table 5.2 presents four trust types based on the interaction of deep and shallow choice in determining trust.

Table 5.2 represents those situations when trust is formed, although by discussing only those instances when trust is formed I do not mean to imply that trust is formed in all situations. The upper right cell represents those times when deep choice is significantly used, but shallow choice is only minimally used or not used at all. In these cases the trustworthiness of the trust referent is determined through conscious, deliberative thought. In this situation a significant amount of information is acquired and evaluated. A trust decision is based on weighing the potential harms versus potential benefits. I refer to trust based on this situation as “calculative trust.”

The upper left cell in this model depicts those instances when both deep and shallow choice are used to a significant degree. Decision processes that combine these decision-making methods produce confident decisions (Maheswaran et al., 1992). For example, if your company has routinely renewed the contract with a supplier, it is likely your low-effort decision process would lead you to trust that firm enough to renew the contract with little re-evaluation. If, in addition to that history, you also call other firms that work with the supplier and discover that the supplier has consistently supplied quality goods and fulfilled its contracts, you will be even more confident that you can renew the contract. I refer to this as “confident trust.”

**Table 5.2: Trust Types based on Cognition**

		Use of Shallow Choice	
		High	Low
Use of Deep Choice	High	Confident	Calculative
	Low	Ingrained	Weak

The lower left cell shows those circumstances where shallow choice is used to a great extent, but deep choice is not. This is when routines, stereotypes, policies, heuristics, and “gut feelings” are the prime factor in making a trust decision. A common circumstance for this type of trust is when trust is given to a person with whom you have no personal experience, but you know the group to which he or she belongs. For instance, if you completed a management training program at a previous company and, thus, are familiar with the skills and values taught in that program, you may have a higher level of trust in a person that recently completed the same management training program than you would in another individual who has no such training. This would be true even if you do not know either of the individuals personally. This trust is “ingrained trust.”

Last, the lower right cell is “weak trust.” Here the trust decision is based on low levels of both trust processes. This trust is easily broken and it represents trust at its lowest level. In stark contrast to confident trust, which uses high levels of both deep and shallow choice for important decisions, weak trust is used only in cases where the outcome does not matter much to the trustor and where the trustor is not very vulnerable to the actions of the trustee.

These four trust types – calculated, confident, ingrained, and weak – capture the various forms of trust posited by previous researchers. History-based trust is calculated trust based on direct experience, while third-party based trust is calculated trust based on indirect experience. Category-based, role-based, and rule-based are all types of ingrained trust. Here trust is based not on personal interaction with the trustee, but on a presumed adherence to group norms. This adherence relates to group entry (category-based trust) or group functioning (role- and rule-based trust).

Confident trust is the trust type that is most desired. When making a critical trust decision, decision makers will seek to use both deep and shallow processes to determine the trustworthiness of the other party.

## **5.5 A DUAL-PROCESS MODEL OF TRUST AND TRUSTING BEHAVIOR**

Now that I have described dual-process theory in general terms, specifically discussed my deep and shallow choice, and explained several types of trust, I will use my model to show how deep and shallow choice is used to determine the trustworthiness of another party.

The process begins with appraisal. Appraisal involves stimuli in the environment being filtered through an encoding process to determine which environmental information should receive the attention, either consciously or unconsciously, of the trustor. In this case the relevant information relates to the trustworthiness of the trustee. This encoding process is performed unconsciously, but the outcome may lead to either a conscious awareness of the situation or an unconscious activation of a shallow choice process. Encoding is based on experience (through memories) and possibly through biological predisposition. Rotter (1971; 1980) suggests that personal trust dispositions are determined by early trust-related experiences and memories. Therefore, as described earlier, favorable early experiences regarding trust may lead a person to encode inputs in such a way that he or she is seen as having a trusting disposition. In other words, when Shapiro discusses trust as a personal disposition, he means that the encoding process performed by a trusting person is less likely to reveal a threat to trustworthiness and more likely to encode environmental stimuli as worthy of trustworthiness.

As noted in path 2 of the model, the decision process can proceed from encoding directly to shallow choice in an unconscious manner. This shallow choice is typically based on role-based, rule-based, or category-based trust. Simple rules, such as basing trustworthiness on membership in a group or a person's position in a company, are used to determine trust. These rules are not cognitively complex and, thus, are types of shallow choice. For instance, a police officer may be trusted simply based on his or her role, in this case the occupation as a police officer. No individualizing information is used to determine whether the officer is trustworthy. As Kramer explains "it is not the person in the role that is trusted so much as the system of expertise that produces and maintains role-appropriate behavior for role occupants" (Kramer, 1999: 578). In this example, the trustor relies on a social control mechanism of procedural norms and structural constraints as well as selection procedures that police officers undergo. Shallow choice, therefore, in the form of a simple rule of the trustee belonging to an organization, can account for category-based, role-based, and rule-based trust as described by Kramer.

As path 3 and then path 4 on the model indicate, trust can be determined by first becoming consciously aware that a trust decision must be made and then determining that a simple rule is adequate to determine the trustworthiness of the other party. Put a different way, shallow choice is not only used as a unconscious process, but often is used after a trustor becomes consciously aware a trust decision must be made. He or she then uses a simple rule or a heuristic to calculate trustworthiness.

An important fact about shallow choice is that a level of trust is embedded within shallow choice's heuristics, stereotypes, and simple rules. For instance, the presence of a police officer may activate a stereotype within a person's mind regarding police officers. Those individuals that have had previous experiences with police officers that demonstrated that officers can be

trusted will interact with this particular officer in a way that reflects the trust that is contained within the stereotype. However, another individual who had previous experiences with police officers that demonstrated that police officers cannot be trusted will interact with this particular officer in a way that reflects the lack of trust that is contained within the stereotype. In this way I suggest that trust is embedded in stereotypes and that the level of trusting behavior will be directly affected by the level of embedded trust.

The work of Uzzi (1997) is pertinent here. Uzzi examined the apparel industry in New York City and hypothesized the existence of two types of organizational ties: arm's length ties and embedded ties. Arm's length ties follow the general assumptions of neoclassical economic theory. In this type of exchange "[s]elf-interest motivates action, and actors regularly switch to new buyers and sellers to take advantage of new entrants or avoid dependence. The exchange itself is limited to price data, which supposedly distills all the information needed to make efficient decisions, especially when there are many buyers and sellers or transactions are non-specific" (Uzzi, 1997: 36). In contrast, relationships based on embedded ties are "characterized by trust and personal ties, rather than explicit contracts, and that these features make expectations more predictable and reduce monitoring costs." Furthermore, an actor using embedded ties "satisfices rather than maximizes on price and shifts her focus from the narrow economically rational goal of winning immediate gain and exploiting dependency to cultivating long-term, cooperative ties" (Uzzi, 1997: 37). Uzzi found that those parties that had embedded ties made greater use of automatic cognitive processes to engage in trusting behavior, noting:

"trust in embedded ties is unlike the calculated risk of arm's-length transacting in two ways. First, the distributional information needed to compute the risk (i.e., the expected value) of an action was not culled by trusting parties.... Second, the decision-making psychology of trust appeared to conform more closely to heuristic-based processing than to the calculativeness that underlies risk-based decision-making" (1997: 43).

I suggest that repeated and in-depth exchanges create a heuristic in which trust is embedded and that enables executives within these firms to avoid the monetary and time expenses of active cognitive processing. This in turn provides them with a competitive advantage as is suggested by Uzzi.

As noted earlier, research by Mayer et al. (1995) indicates that trustworthiness is based on the degree to which the attributes of integrity, ability, and benevolence are perceived to be held by the other party. According to Mayer et al., integrity is the “perception that the trustee adheres to a set of principles that the trustor finds acceptable” (1995: 719), ability is “that group of skills, competencies, and characteristics that enable a party to have influence within some specific domain” (1995: 717), and benevolence is “the extent to which a trustee is believed to want to do good to the trustor, aside from an egocentric profit motive” (1995: 718). Trustors using deep choice will diligently search for cues of integrity, ability, and benevolence. This search will be based on historical interactions the trustor has had with the trustee and interactions between the trustee and other parties. These three factors enable the trustor to determine the likelihood that the trustee will perform the trust action being considered. In other words, if an investigation of the trustor indicates the trustee has a good record of keeping his or her promises and operating with integrity, then the trustor will believe that there is a high probability that trustee will also uphold his or her commitment in this case. Ability also influences this probability assessment. Clearly, if the trustee does not have the ability to perform the action, any trustee statements claiming the action will be performed are irrelevant. The level of these three factors—ability, integrity, and benevolence—are compared to a levels considered acceptable to the trustor and a level of trust is established.



The level of trust is one of two factors that determine the extent to which the trustor will be willing to engage in trusting behavior in a given circumstance. The second factor is the potential gain or loss that can result from the specific situation at hand. This gain or loss potential determines the level of vulnerability of the trustor. The generalized notion of the level of trust in the trustee and the specific situational factor of the gain or loss potential combine to determine the trust behavior of the trustor. An example illustrates how these two factors determine the behavior of the trustor.

Assume you won a monetary prize in the lottery. To claim your prize your ticket must be delivered to the lottery office 300 miles away. Two possible delivery options are to use overnight mail and to personally drive to the lottery office. Within the overnight mail option you have three choices: Federal Express, UPS, or the United States Postal Service. Recalling your personal experience and the experience of others you determine that Federal Express will be the most likely to deliver your ticket to the lottery office without problems, or in other words, you determine Federal Express has the highest probability of performing the action. Furthermore, in past situations where a problem did arise, Federal Express was able to quickly track your package and deliver it to its destination. The company did not put its concerns above yours, but rather was empathetic to your problem and performed whatever actions that were necessary to deliver your package to its proper location as quickly as possible, even at the financial expense of the company. Thus, even when it costs the company extra money, Federal Express has proven you will achieve your desired result without being monitored by you. You, therefore, have a high level of trust in Federal Express. But, even that level of trust can fail to lead to trusting behavior based on the situation. Perhaps you would use Federal Express to deliver a \$250 winning lottery ticket, but you would deliver the ticket yourself if you had a \$2.5 million lottery ticket. Your

level of trust in Federal Express did not change, but the situation changed and your level of trust in the company was more than offset by the vulnerability of losing a \$2.5 million lottery ticket. Thus, a model of trust must account for the potential gain or loss in order to adequately estimate trusting behavior.

A final key point is the importance of feedback to the deep and shallow choice process. As mentioned, the history of the trustee is very important in the trust process. The outcomes of previous trusting behavior will create memories to be used in subsequent interaction. Over time outcomes developed through deep choice are likely to become part of a shallow choice process since these outcomes are likely to develop into heuristics and stereotypes.

## **5.6 CHAPTER SUMMARY**

In summary, trust is developed through deep and shallow choice. Deep choice involves a consideration of a range of alternatives and the selection of one alternative that maximizes the positive outcomes, or at least passes some minimally acceptable threshold. Shallow choice uses a different memory system and involves the activation of heuristics and stereotypes. Thus, the decision making process involves the retrieval of information in a systematic or heuristic fashion and the deliberate or automatic processing of that information. These processes determine the level of trusting behavior. In cases where shallow choice is used, the level of trust may not be explicitly determined based on personal information, but rather by the trust embedded in the role, routines or stereotype that is enacted.

Thus far I have presented deep and shallow choice as alternatives that decision makers can choose between, or if shallow choice is automatically activated, I suggested decision makers

could subsequently engage in deep choice if they desired. However, at times decision makers would prefer to use deep choice, but the resources to do so may not be available. A lack of money, limits to cognitive capacity, or a shortage of time may require a decision maker to use shallow choice. In the next chapter I explore what happens when decision makers do not have the desired amount of time to make a decision. Given the time constraints placed on workers today, it is important to understand how decision makers respond to time pressure in organizations.

## **6.0 ETHICAL SATISFICING UNDER TIME PRESSURE**

In this dissertation I revise and extend the ethical decision making model in three ways. First, I synthesize the existing ethical decision making models into a systems model that includes an appraisal process, a judgment process, and a behavior process. I propose that the judgment process is described by multiattribute decision theory whereby the ethical attribute of an alternative is just one attribute among many that is considered and weighed when evaluating the various alternatives. This contrasts with the approach usually proposed by researchers who suggest that the ethical attribute is exclusively evaluated first, and then the most ethical choice is compared to amoral alternatives to determine behavior.

The second way I alter the ethical decision model is to account for ethical decisions that are made in an intuitive and associative manner, what I refer to as shallow choice. An important conclusion drawn from the application of shallow choice is that shallow choice at times precludes an analysis of each attribute of the potential alternatives. In other words, the ethics of an alternative may not be deliberately and independently considered when making a choice, but instead be embedded within the stereotype or schema that is activated during shallow choice. The ethics of a decision, then, are not debated, but rather are simply activated without conscious thought.

The third modification to the ethical decision making process is the addition of emotions. Emotions are one type of affect. Affect is composed of three components: (1) affective

personality traits, which are on-going affective tendencies such as a happy disposition; (2) moods, which last for moderate time durations and typically do not have a specific, identifiable cause; and (3) emotions, which have the shortest duration and usually are attributable to a specific event. In my ethical decision making model I do not present emotions as a monolithic concept, but instead distinguish between different types of emotions, namely, incidental, expected, anticipatory, and immediate emotions. By expanding the ethical decision making model to specify all the steps decision makers take, by including both shallow and deep processes, and by accounting for the influence of emotion, the behavioral systems model of ethical decision making provides greater insights and predictability into the ethical decision making process.

Thus far I have presented my behavioral model of ethical decision making and the choice between deep and shallow choice as two options available to the employee. However, in today's business climate the decision maker is not always able to select between these two decision making methods. Situations may not afford the financial, mental, or temporal opportunities to engage in deep choice. In this chapter I use my ethical decision making model to discuss the consequences of having less time than desired to make a decision. In other words, I describe how time pressure affects ethical decision making. Time pressure has been described as "perhaps the most pervasive and troublesome aspect of organizational life" (Porter & Smith, 2005). Today's corporate managers face an ever increasing pace of change as technological advances and domestic and foreign competition rapidly alter market conditions and as layoffs and mergers – and the accompanying job consolidations – result in an expansion of tasks that must be accomplished in a given time period. Although theoretical and empirical support exists that indicates time pressure negatively affects decision quality (e.g. Andrews & Smith, 1996; Janis &

Mann, 1977; Kaplan, Zanna, & Wanshula, 1993; Kobbeltvedt, Brun, & Christian, 2005; Kocher & Sutter, In Press; van Bruggen, Smidts, & Wierenga, 1988), time pressure has received very little attention in the existing business ethics research. Yet, according to surveys jointly conducted by the Society for Human Resource Management and the Ethics Resource Center, time pressure is one of the top reasons employees cite as a cause for compromising organizational ethics (Joseph & Esen, 2000, 2003). This chapter seeks to provide insights into how the ethical decision making process changes under time pressure. The managerially relevant question is: “Given the presence of time pressure in business organizations, what is its impact on ethical decision making?”

In brief, I argue that ethical satisficing occurs. Simon (1957; 1997) originated the term “satisficing” to refer to decisions that are not based on maximizing the decision outcome, but rather finding solutions that are “good enough.” This contrasts with a basic assumption underlying rational choice theory which claims decision makers select a choice that maximizes their projected outcome. Ethical satisficing occurs when decision makers do not use ethical decision making models that are based solely on rationality and utility maximization, but instead they use behavioral decision models that include non-rational components and they make decisions that are merely satisfactory. Although ethical satisficing can result from numerous factors including the dominance of economic priorities and adherence to a role, in this chapter, I focus on ethical satisficing that results from time pressure. Moreover, I argue that under time pressure the acceptable choice will be at a lower level than when there is no pressure since decision makers will employ coping strategies and these strategies result in lower quality ethical decisions.

To understand how time pressure affects decisions and leads to ethical satisficing it is important to first understand the optimal procedure for making a decision, covered in the next section. After reviewing this literature, I review how people deviate from the optimal strategy when facing the constraints of time pressure.

## **6.1 TIME PRESSURE AND DECISION MAKING**

Before summarizing the research on ethical decision making and time pressure it is important to note that time pressure does not always lead to less desired results. A moderate amount of time pressure may lead to better decision performance as it may help the decision maker to focus on the topic at hand and also to decrease the search for and analysis of marginally relevant or irrelevant information (Tabatabaei, 2002). The relationship between time pressure and decision performance is represented by an inverted, U-shaped curve where both too little and too much time pressure results in poorer performance. This type of curve relating performance to arousal level was first shown by Yerkes and Dodson (1908).

To better discern the effect of time pressure on ethical decision making it is best to first briefly discuss the relationship between time and general decision making. A growing body of literature exists that explores this relationship.

Janis and Mann (1977) performed an extensive review of the decision making literature including works by Etzioni (1968), Hoffman (1965), Janis (1972), Katz and Kahn (1966), Maier (1967), Miller and Starr (1967), Simon (1976), Taylor (1965), Vroom and Yetton (1973), Wilensky (1967), and Young (1966) and extracted seven criteria necessary to make a high quality decision. These actions are:

1. Thoroughly canvass a wide range of alternative courses of action.
2. Survey the full range of objectives to be fulfilled and the values implicated by each choice.
3. Carefully weigh whatever is known about the costs and risks of negative consequences, as well as the positive consequences, that could flow from each alternative.
4. Intensively search for new information relevant to further evaluation of the alternatives.
5. Correctly assimilate and take account of any new information or expert judgment to which you are exposed, even when the information or judgment does not support the course of action initially preferred.
6. Reexamine the positive and negative consequences of all known alternatives including those originally regarded as unacceptable, before making a final choice.
7. Make detailed provisions for implementing or executing the chosen course of action, with special attention to contingency plans that might be required if various known risks were to materialize (Janis & Mann, 1977: 11).

It is not difficult to see that time pressure can affect the decision making process. From these criteria one can surmise that high time pressure may result in: (1) investigation of fewer alternatives; (2) errors analyzing the values of a choice; (3) incorrect weighing of the costs and risks of the consequences of the alternatives; (4) reduced searching for new information; (5) incorrect assimilation of new information; (6) lessened or lack of re-examination of known alternatives; and (7) a reduction or elimination of implementation and contingency plans. It is probable, then, that time pressure will significantly lower decision quality. These and other observations will emerge as explicit theoretical propositions later.

Researchers have determined that time pressure does, in fact, alter decision making and also have gained insights into how people attempt to cope with this pressure (e.g. Andrews & Smith, 1996; Janis & Mann, 1977; Svenson, Edland, & Karlsson, 1985; van Bruggen et al., 1988; Wallsten & Barton, 1982; Wright, 1974). A common response is for the decision maker to minimize the cognitive effort required for the decision (e.g. Beach & Mitchell, 1978; Payne, Bettman, & Johnson, 1988). The methods to do so are varied. In general this is accomplished by reducing the inputs to the judgment process – thereby decreasing the amount of data to be



analyzed – or by increasing the speed of the choice process. The former technique is referred to as filtering and the latter technique is called acceleration. Filtering and acceleration can also be used in combination.

### **6.1.1 Filtering as a Coping Strategy**

Information is filtered in several ways, all of which involve focusing on the information that is consciously or unconsciously perceived to be most relevant. In one of the early works studying the effect of time pressure on decision making, Wright (1974) found that subjects under high levels of time pressure considered fewer attributes to make a decision and focused more heavily on negative information. Negative information is information indicating the decision maker would be harmed or be made worse off. Wright interpreted this change as a shift to more risk-averse behavior. These results are similar to the findings of Svenson and his colleagues (Svenson et al., 1985) who found that decision makers under time pressure gave one attribute more weight in relation to the others and that the negative aspect of the most important attribute became the most important. Svenson and Edland (1987) found comparable results. Ben Zur and Breznitz (1981) tested the effect of time pressure on risky choice and also found that negative information became relatively more important under time pressure. This leads to the first proposition.

*Proposition 6.1: As time pressure increases, the attention given to negative information will increase.*

Wallsten and Barton (1982) studied how filtering interacted with changes in the payoffs of the decision. Similar to earlier findings, they found that subjects decreased the number of attributes analyzed as time pressure increased. However, when the researchers increased the payoff of the decision to high levels, subjects attempted to process all the attributes even in the

face of time constraints. The decision makers were largely unsuccessful, though, and ultimately based their decision on only three of the five criteria in the experiment. The second proposition stems from these results.

*Proposition 6.2: As time pressure increases, the number of attributes considered will decrease.*

The notion of people simplifying in order to cope with the limitation of human cognitive capacities and time constraints is grounded in Simon's (1957; 1997) research and his "Administrative Man." Simon points out that human limitations result in selection of sub-optimal choices. The decision made is not the best possible solution, but one that meets at least minimal requirements. Decision makers therefore operate within a bounded rationality and satisficing solutions are the result. I propose that time pressure creates additional boundaries on the ethical decision making process, causing ethical satisficing to occur.

To these propositions related to filtering that have been derived from the time pressure literature I wish to add a general filtering technique based on my discussion in previous chapters regarding deep and shallow choice. I suggest that under time pressure decision makers will increase their use of schemas to filter information and thus accelerate the decision making process. A schema is "a cognitive structure that represents organized knowledge about a given concept or type of stimulus. A schema contains both the attributes of the concept and the relationships among the attributes" (Fiske & Taylor, 1984: 140). Schemas enable people to "simplify, effectively manage, and make sense of information in their surrounding environments and guide the cognition, interpretation, and ways of understanding events or objects" (Lau & Woodman, 1995: 538). Managers "develop and utilize these mental representations in a wide variety of generic situations such as 'how to run a meeting' or 'how to work with an advertising

agency” (Porter & Smith, 2005). Once schemas are formed, further active cognition is not required. As time pressure increases, managers are likely to rely more on schemas than on additional data-gathering (Oliver & Roos, 2005). Thus, schemas help decision makers cope with time pressure and these schema become more important as time pressure increases. This discussion suggests the following proposition:

*Proposition 6.3: As time pressure increases, the use of schemas will increase.*

### **6.1.2 Acceleration as a Coping Strategy**

In addition to filtering, decision makers also cope with time pressure by accelerating the process of choosing among alternatives. Again, the means to do so are varied. Wallsten and Baren (1982) found that subjects under time pressure increased the pace at which they processed information. Payne, Bettman, and Johnson (1988) investigated decision making and time pressure and their results indicated that subjects first accelerated the speed of information processing, and if that was not sufficient, reduced the information to be processed by filtering information. Maule and Mackie (1990) found similar results. Benson and Beach (1996) found that decision makers increased the execution speed of their decision strategies or switched to simpler strategies. Switching to less complex decision strategies speeds decision processing since simpler strategies take less time to execute and are more likely to be completed within the time limit. Sometimes these two actions are combined and the decision makers speed up after switching. If time demands require a switch to simpler strategies and yet decision makers do not make that switch, the resulting decisions are often inconsistent in terms of rejection patterns and rejection thresholds (Benson & Beach, 1996). As in Simon’s satisficing model, these authors also found that people reduced the acceptance threshold and thus accepted alternatives under time pressure

that would not have been acceptable under a non-time-pressured state. This will increase decision making speed by increasing the number of acceptable solutions and thereby making it probable that an acceptable alternative will be found in a shorter timeframe. These results lead to Propositions 6.4, 6.5, and 6.6.

*Proposition 6.4: As time pressure increases, decision makers will process information at a faster pace.*

*Proposition 6.5: As time pressures increases, the use of less complex decision strategies will increase.*

*Proposition 6.6: As time pressure increases, the level of the minimally acceptable outcome will decrease.*

As mentioned earlier, the results of Wright (1974) and Ben Zur and Breznitz (1981) indicated that filtering led to increased salience of negative information and the selection of less risky alternatives. Busemeyer (1985) took the time pressure–risk analysis one step further by comparing behavior where the expected value of the outcome was negative versus when the expected value was positive. He found time pressure increased risk taking when the expected value was negative, and decreased risk taking when the expected value was positive. In other words, versus their typical risk taking stance, decision makers under time pressure are more willing to take a chance to switch a negative outcome to a positive outcome, but are less willing to take a chance to switch a positive outcome to a more positive outcome even if the absolute change in position is identical in the two scenarios. For instance, under time pressure people who have an expected loss of \$5,000 would take a risk for the chance at switching the \$5,000 loss to a \$5,000 gain (a difference of \$10,000), but would not take the same risk for the chance of

switching a \$5,000 gain to a \$15,000 gain (also a difference of \$10,000). This implies the following two propositions:

*Proposition 6.7: Decision makers under time pressure who are in a gain position will become more risk averse.*

*Proposition 6.8: Decision makers under time pressure who are in a loss position will become more risk seeking.*

Another means of acceleration is to change the type of decision rules used to make a choice. Decision rules are often divided into two types: compensatory and non-compensatory. Compensatory rules are more holistic than are non-compensatory rules. Compensatory rules take into account all attributes and an unfavorable attribute can be offset by a favorable attribute. Conversely, using non-compensatory rules, a single, negative attribute can make the alternative unacceptable. Non-compensatory rules are typically easier and quicker to use. Zakay (1985) found decision makers under time pressure used non-compensatory strategies more frequently, thus adding to the findings that time pressure leads to simplifying and acceleration techniques and suggesting Proposition 6.9.

*Proposition 6.9: As time pressure increases, the use of non-compensatory decision rules will increase.*

As far back as 1942, researchers found that time pressure leads to a fixation on one alternative and the omission of all other alternatives. Luchins (1942) found that subjects under time pressure did not realize when a new, though similar strategy, was needed and instead kept trying to apply the old strategy. This aligns with the findings by Gladstein and Reilly (1985), who found that a restriction in information processing ability results in a tendency to employ well-learned or dominant responses. The Luchins (1942) and Gladstein and Reilly (1985) studies

highlight the difficulty of breaking out of existing ways of thinking, especially when under time pressure. These results can be further explained by research findings indicating that a high level of time pressure also results in lower levels of creativity (Amabile, Conti, Coon, Lazendy, & Herron, 1996). The inability to develop new, creative solutions to problems is likely to contribute to the fixation on one, well-learned response.

*Proposition 6.10: As time pressure increases, the use of a dominant or well-learned response will increase.*

Janis and Mann (1977) suggest a coping strategy whereby subjects seek to avoid a decision entirely and this leads to Proposition 6.11:

*Proposition 6.11: As time pressure increases, the likelihood of avoiding the decision will increase.*

Because severe time pressure is likely to lead to stress reactions, studies of stress and decision processes are also relevant here. Stress induced by time pressure may lead to omission via premature closure (Janis, 1983). Premature closure occurs when a decision is made before all available alternatives are generated. Keinan, Friedland, and Ben-Porath's (1987) results support this conclusion. An additional result from their study was that time pressure led subjects to scan alternatives in a non-systematic manner and that this, in turn, led to lower quality decisions.

These results suggest the following:

*Proposition 6.12: As time pressure increases, the number of alternatives considered will decrease.*

*Proposition 6.13: As time pressure increases, decisions will be made in a less consistent manner.*

The Wallsten and Barton (1982) study noted earlier suggests that motivation plays an important role in time-pressured decisions. Decisions made under time pressure may not be different from those made without time pressure if the decision maker is not motivated – via rewards or punishments – to make a quality decision (Kocher & Sutter, In Press). One reason for this result is that unless a decision maker is properly motivated to make a quality decision, the process used to make a decision does not change. Studies that varied motivation (high/low) and time pressure (high/low) suggest decision makers use heuristics and other shallow choice mechanisms unless motivation is high and time pressure is low (Suri & Monroe, 2003). In other words, decision makers used systematic reasoning (deep choice) in only one of the four experimental conditions. A prime method used to motivate decision makers under time pressure is to hold them accountable for their decisions (Caldwell & Newman, 2005).

As with the filtering methods, I wish to augment the research from the time pressure literature regarding acceleration with additional acceleration techniques based on earlier chapters in this dissertation. An additional coping mechanism that is more generalized than the aforementioned techniques is the increased use of heuristics. While schemas are most often used to appraise the situation, heuristics are frequently used to make the decision. Heuristics are “general rules of thumb” that “reduce the time and effort required to make reasonably good judgments and decisions,” but there are “certain instances in which they lead to systematic biases” (Plous, 1993: 109). Although a few specific heuristics are identified in the previous propositions, I include Proposition 6.14 below to indicate more broadly that the use of heuristics will increase under time pressure. In addition to the increased use of shallow choice through heuristics, decision makers under time pressure often cannot take the time to engage in deep

choice, even if they desire to do so. Therefore, it is likely that deep choice by itself and the combination of deep choice and shallow choice will be used less frequently under time pressure.

*Proposition 6.14: As time pressure increases, the use of heuristics will increase.*

*Proposition 6.15: As time pressure increases, the use of deep choice will decrease.*

*Proposition 6.16: As time pressure increases, the joint use of deep and shallow choice will decrease.*

The inability to use deep choice results in shallow choice processes such as heuristics exerting greater influence on decisions. Certain heuristics are especially likely to influence decision making under time pressure. At times this will magnify the effect of other coping responses. For instance, a common heuristic that applies in time-pressured decision making is the availability heuristic. The availability heuristic refers to those instances where a choice is made largely based on what most easily comes to mind, or, in other words, what is most available in one's mind. This is potentially problematic since what most easily comes to mind may not accurately represent the current situation or dilemma. For instance, negative information and congruent evidence becomes more salient under time pressure. The combination of that increased salience and the greater likelihood of relying on heuristics such as the availability heuristic makes it likely that negative and congruent information will not only capture a decision maker's attention, but will also strongly influence his or her choice. In addition, decision makers are biased to preserve their existing beliefs or material interests (Chen & Chaiken, 1999). Therefore, heuristics that reinforce existing perceptions are likely to be activated, while those heuristics that are counter to existing perceptions are less likely to be evoked. Similarly, heuristics that support one's interests are likely to be used, while those that are counter to one's



interests are less likely to be employed. These tendencies are likely to increase under time pressure.

*Proposition 6.17: As time pressure increases, existing perceptions are more likely to influence decisions.*

*Proposition 6.18: As time pressure increases, heuristics which support one's interests are more likely to influence decisions*

### **6.1.3 Outcomes of the Coping Mechanisms**

The filtering and acceleration techniques result in specific outcomes. The increase in processing speed (Proposition 6.4) and the use of non-systematic choice processes (Proposition 6.13) will lead to errors and inconsistency and will lower decision quality. Also, as specific heuristics are evoked, such as the availability, risk, and self-interest heuristics, decisions that avoid losses, particularly to one's self, are likely to result.

*Proposition 6.19: As time pressure increases, decision quality will be reduced.*

*Proposition 6.20: As time pressure increases, decisions will be more self-interested.*

### **6.1.4 Relating the Coping Mechanisms to the Behavioral Model of Ethical Decision Making**

The propositions regarding the coping strategies discussed thus far are summarized in Table 6.1. These effects can be related to the behavioral model of ethical decision making developed in Chapter 3 and included here as Figure 6.1. Note that the decision making model includes three processes: an appraisal process, a judgment process, and a behavior process. Also note that these processes overlap to indicate that the output of the earlier process is the input for

**Table 6.1: Propositions Regarding Decision Making Under Time Pressure**

<b>Propositions related to reducing inputs to the judgment process</b>	
Proposition 6.1	As time pressure increases, the attention given to negative information will increase.
Proposition 6.2	As time pressure increases, the number of attributes considered will decrease.
Proposition 6.3	As time pressure increases, the use of schemas will increase.

<b>Propositions related to changes in the decision method of the judgment process</b>	
Proposition 6.4	As time pressure increases, decision makers will process information at a faster pace.
Proposition 6.5	As time pressures increases, the use of less complex decision strategies will increase.
Proposition 6.6	As time pressure increases, the level of the minimally acceptable outcome will decrease.
Proposition 6.7	Decision makers under time pressure who are in a gain position will become more risk averse.
Proposition 6.8	Decision makers under time pressure who are in a loss position will become more risk seeking.
Proposition 6.9	As time pressure increases, the use of non-compensatory decision rules will increase.
Proposition 6.10	As time pressure increases, the use of a dominant or well-learned response will increase.
Proposition 6.11	As time pressure increases, the likelihood of avoiding the decision will increase.
Proposition 6.12	As time pressure increases, the number of alternatives considered will decrease.
Proposition 6.13	As time pressure increases, decisions will be made in a less consistent manner.
Proposition 6.14	As time pressure increases, the use of heuristics will increase.
Proposition 6.15	As time pressure increases, the use of deep choice will decrease.
Proposition 6.16	As time pressure increases, the joint use of deep and shallow choice will decrease.
Proposition 6.17	As time pressure increases, existing perceptions are more likely to influence decisions.
Proposition 6.18	As time pressure increases, alternatives which support one's interests are more likely to be selected.

<b>Propositions related to changes in outcomes from the judgment process</b>	
Proposition 6.19	As time pressure increases, decision quality will be reduced.
Proposition 6.20	As time pressure increases, decisions will be more self-interested.

the next process. For example, the output of the appraisal process is the input into the judgment process.

The propositions related to filtering (Propositions 6.1, 6.2, and 6.3) alter the appraisal process in the decision making model. They do so by changing the salience of information to the decision maker. This then changes the information received by the judgment process in the decision making model.

The judgment process is affected by the various methods of acceleration (Propositions 6.4 through 6.18). More specifically, the choice process within the judgment process is altered by acceleration techniques. These include processing information at a quicker pace, switching to less complex decision strategies, lowering the acceptance threshold, and switching from deep choice to shallow choice.

Lastly, the behavior process is influenced by the outcomes of the judgment process. This is labeled as “intent” in the behavioral model of ethical decision making and it is the input into the behavior process. The filtering and acceleration coping mechanisms lead to decreases in the quality of the decision and to decisions that are more self-focused (Propositions 6.19 and 6.20). None of the aforementioned studies on time pressure and decision making addressed ethical decision making, although the strategies should apply to ethical decision making as well. I apply these coping strategies to ethical decision making in the following section.

## **6.2 TIME PRESSURE AND THE ETHICAL DECISION MAKING MODEL**

Now that I have reviewed the time pressure literature, I next suggest how these coping strategies affect ethical decision making. Having shown the connection to the behavioral model of ethical

decision making above, I use that model to discuss the effect of time pressure on ethical decision making. I do so by separately analyzing the appraisal, judgment, and behavior processes. I start with the appraisal process.

### **6.2.1 The Effect of Time Pressure on the Appraisal Process**

The first process in ethical decision making is the appraisal process where recognition and appraisal of an ethical issue occur. In the appraisal process inputs from the environment are filtered through an encoding process to produce a conscious awareness or an automatic reaction. Encoding is performed unconsciously and is subject to several of the coping strategies noted earlier. First, research shows that negative attributes are more likely to capture the attention of decision makers; that is, the negative attributes will become more salient than the positive attributes as suggested by Proposition 6.1. Other research indicates that high cognitive load – which occurs under time pressure – results in a decrease in empathy (Skitka, Mullen, Griffin, Hutchinson, & Chamberlin, 2002) and a failure to respond to others’ needs (Milgram, 1970). Combining these research results suggests the negative attributes that become most salient will be information indicating the decision maker himself will be harmed. This increased self-centered focus is likely to protect the decision maker at the expense of others. These ideas lead to the first proposition related to ethical decision making under time pressure:

*Proposition 6.21: As time pressure increases, decision makers will increase their attention on information that indicates they will be harmed and decrease their attention on information that indicates others and society as a whole will be harmed.*

The lack of time that is inherent in time-pressured situations can make it literally impossible for managers to scan all the issues in the environment and leads to a reduction in the number of attributes considered, as proposed by Proposition 6.2. In business this reduction in the number of items considered by decision makers makes it likely that those stakeholders who are not prominent will be overlooked by managers even if these stakeholders' interests are relevant. Also, the manager under time pressure who realizes he or she cannot scan all issues will tend to focus on the most salient issues. Carroll states that the fundamental role of the business institution is "to produce goods and services that society wants and to sell them at a profit" and he provides a model that "can assist managers in understanding that social responsibility is not separate and distinct from economic performance" (1979: 500, 503). However, managers may mistakenly apply the fundamental institutional role of business to their specific company and claim the fundamental role of their business is to make a profit. This is especially true given the relative size of the economic responsibilities section of his depicted model. Moreover, legal issues, which are also given high priority in Carroll's model, are likely to be given priority by managers. While Carroll's model has been criticized from a normative point of view (Kang & Wood, 1995), it is likely to be accurate from a descriptive point of view. Therefore, the items that are most salient – and are likely to be given higher priority – are more likely to be economic and legal issues, and less likely to be ethical issues. This leads to the next two propositions:

*Proposition 6.22: Decision makers under time pressure will consider the issues of fewer stakeholders than will those not subject to time pressure.*

*Proposition 6.23: Decision makers under time pressure will greater attention to economic and legal concerns and less attention to ethical concerns than will those not subject to time pressure.*

The increased use of schemas under time pressure (Proposition 6.3) results in fewer instances where deliberative thought (deep choice) is employed. While engaging in deep choice by no means ensures that ethical attributes will be considered, relying on schemas that do not contain ethical components guarantees ethics will be slighted. Therefore, if ethical considerations are not included in existing schemas, the odds of its inclusion under time constraints are low. This will lead to on-going neglect of ethical awareness. On the other hand, in those firms with extensive and well-learned ethics training, time pressure may lead to quick, and even unconscious, ethical decisions. Still, I suggest this outcome is the exception, and not the rule. Therefore, the final proposition related to the appraisal process is:

*Proposition 6.24: Managers working in companies that do not have ethics embedded in their existing schemas will make less ethical decisions under time pressure than they would under a non-time-pressured state.*

## **6.2.2 The Effect of Time Pressure on the Judgment Process**

As with decisions made under time pressure which do not include ethical considerations, decision makers facing ethical decisions under time pressure will process information at a faster pace. The next proposition is similar to Proposition 6.4, but this proposition is specified for ethical decisions. I include it here for the sake of completeness and parallelism between the two sets of propositions included in this chapter.

*Proposition 6.25: As time pressure increases, ethical decision makers will process information at a faster pace.*

As decision makers seek to minimize the cognitive effort required for a decision in order to cope with time pressure, several factors suggest ethics may not be considered. First, decision

makers may seek to reduce complexity by finding a simpler solution as suggested by Proposition 6.5. Ethical decisions are seldom black or white and often they are vague. Carroll (1979: 500) states that “ethical issues are often ill-defined and consequently are among the most difficult to deal with” and society may not present a clear-cut message about some of business’ responsibilities. In contrast, economic and legal issues are more clearly delineated and codified. This indicates that ethical issues bring complexity, not the desired simplicity, to a decision. Decision complexity, which is fully described in Chapter 2, is a gauge of the effort required to make a decision. A manager may simply avoid the complexity of including ethical issues by considering only the economic and legal ramifications of a decision. This leads to the next proposition.

*Proposition 6.26: Decision makers under time pressure will reduce the complexity of the decision by increasing their focus on the economic and legal attributes of the decision and decreasing their focus on the ethical attributes of the decision.*

Time pressure leads to the acceptance of actions that under non-time pressure circumstances would be rejected (Proposition 6.6). If an issue involves ethics, lowering the acceptance threshold will result in actions that are less ethical being accepted, which suggests the following proposition:

*Proposition 6.27: Decision makers under time pressure will accept lower quality ethical outcomes than will non-pressured decision makers.*

The propositions related to risk aversion and risk seeking (Propositions 6.7 and 6.8) apply to ethical considerations as well. The difficulty in using them in regard to ethical dilemmas is the

problem of determining which is a gain position and which is a loss position. For instance, which of the two following choices will be viewed as the loss position?

Choice A: Completing an unethical business transaction for a profit

Choice B: Upholding personal ethics, but losing the profit of the business transaction

According to the risk propositions, if compromising one's ethics is the loss position, employees would be willing to take a chance – perhaps loss of their job – in order to avoid abridging their ethics. However, if losing the business deal is viewed as the loss position, employees may close the deal and take a chance that others will not discover the unethical nature of the transaction. Therefore, perceptions of loss and risk become very important and they are not always clearly identifiable to an outside observer. Still, the general propositions are:

*Proposition 6.28: Decision makers under time pressure who are in a gain position will become more risk averse.*

*Proposition 6.29: Decision makers under time pressure who are in a loss position will become more risk seeking.*

Proposition 6.9, which involves compensatory and non-compensatory rules, is very applicable to ethical decisions. The desire to reduce the time required to reach a decision is likely to result in a greater reliance on deontological (i.e. reasoning based on duties and rights) versus teleological reasoning (i.e. reasoning based on consequences, such as utilitarian reasoning). This is due to the fact that deontological decision makers employ ideologically-based, non-compensatory rules which can be quickly applied while teleological decision makers use deliberative, compensatory rules that may require substantial time to analyze and apply. Thus, time constraints work against utilitarian reasoning by limiting the amount of time available to consider all the alternative actions.



*Proposition 6.30: As time pressure increases, the use of teleological ethical reasoning will decrease and the use of deontological reasoning will increase.*

Moral imagination is part of the judgment process in the behavioral systems model of ethical decision making. Moral imagination is “the ability in particular circumstances to discover and evaluate possibilities not merely determined by that circumstance, or limited by its operative mental models, or merely framed by a set of rules or rule-governed concerns” (Werhane, 1999: 93). Moral imagination occurs after awareness of an ethical dilemma is achieved and it is the process of generating and evaluating alternatives. Time pressure affects this process. Not only does a lack of moral imagination result from the coping strategies of applying a well-learned response (Proposition 6.10), I propose that time pressure leads to a lack of moral imagination based on research investigating time pressure and creativity. While a moderate amount of time pressure may positively affect creativity if that pressure is perceived as adding an additional challenge to the problem being presented, greater time pressure may undermine creativity (Amabile, 1988; Amabile & Gryskiewicz, 1987). Thus, time-pressured decision makers will cope by reducing the burden of the choice by fixating on one or few alternatives and they will discover or invent fewer creative solutions. These observations lead to next proposition:

*Proposition 6.31: As time pressure increases, the use of a dominant or well-learned response will increase and the use of moral imagination will decrease.*

Proposition 6.11 relates to avoiding a decision. In a similar vein, the lack of a clear answer in many ethical dilemmas, partly due to the lack of one preeminent ethical theory, makes these problems difficult to solve. At times people will avoid this difficulty by simply avoiding making a decision. As time pressure increases, decision makers may view the lack of time as an excuse for evading the decision. Thus, Proposition 6.32:

*Proposition 6.32: As time pressure increases, the likelihood of avoiding the ethical decision will increase.*

This lack of moral imagination, as discussed above, means that fewer ethical alternatives will be generated. Consequently, fewer ethical alternatives will be analyzed during the decision process. This is similar to Proposition 6.12 and leads to the next proposition:

*Proposition 6.33: As time pressure increases, the number of ethical alternatives considered will decrease.*

As with amoral decisions made under time pressure and captured by Proposition 6.13, ethical decisions made under time pressure will be made in a less consistent manner as compared to decisions made without time pressure. In the rush to make a decision before the deadline, decision makers may randomly “grasp at straws” if there is not a well-learned strategy that can be quickly employed. In these instances, decisions will be made in a less consistent manner.

Time pressure leads to increased usage of shallow choice such as heuristics, decreased usage of deep choice, and decreased use of both deep and shallow choice together (Propositions 6.14, 6.15, and 6.16). In these cases the inclusion of ethical considerations are dependent upon whether ethics is included in the simple rules and heuristics of shallow choice. If a company engages in extensive ethics training it is more likely ethical considerations are included in the corporate and employee rules and heuristics. Furthermore, it will reduce the decision maker’s perceived risk of making the ethical choice. This leads to the next proposition:

*Proposition 6.34: Companies with extensive ethics training will make more ethical decisions under time pressure than companies without such training.*

Proposition 6.17 suggests that existing perceptions will have a greater influence on decisions in time-pressured situations as the common biases to reinforce current beliefs and to protect personal material interests are enacted. With ethical decisions, managers in companies will be particularly swayed by their existing positions regarding the extent to which ethics should influence their decisions. Both the formal (e.g. expressed values and mission statements) and informal (e.g. tacit assumptions and unspoken rules) corporate culture (Schein, 1979) will greatly influence this perception. Since there is little time to reflect on what to do when under time pressure, the perceived managerial role and the company's standard operating procedures are likely to exert significant influence. This will combine with the common bias to preserve one's self-interest (Proposition 6.18), which in a corporate setting will result in protecting the corporation's interests, and suggests the following propositions:

*Proposition 6.35: As time pressure increases, corporate culture will exert greater influence on the ethical decisions of the corporation.*

*Proposition 6.36: As time pressure increases, the corporation's interests will exert greater influence on the ethical decisions of the corporation.*

Note there is a potential conflict between these two propositions. It is possible that a corporation with a corporate culture that strongly promotes ethics will not favor its own interests as time pressure increase. However, I suggest the vast majority of firms will respond to time pressure as indicated in Proposition 6.36.

### **6.2.3 The Effect of Time Pressure on the Behavior Process**

The behavior process begins with the choice that is made in the judgment process, moves to an implementation planning stage, and then ends with performing the behavior. Propositions 6.21

through 6.36 show the many ways that the choice made by the decision maker will be influenced by time pressure. For instance, the increased focus on the negative consequences to one's self and one's company (Proposition 6.21), the reduction in stakeholders that are salient (Proposition 6.22), and the greater focus on economic and legal concerns at the expense of ethical concerns (Proposition 6.23) all make it less likely that ethical issues will even be salient in the mind of decision maker. The choice made in the judgment process and the actions implemented in the behavior process will necessarily be less ethical if ethical considerations never enter the judgment process.

In addition, the choice and subsequent behavior are affected by many factors in the judgment process as decision makers seek to accelerate the decision method. For example, as decision makers seek to reduce complexity (Proposition 6.26), accept lower quality decisions (Proposition 6.27), and decrease the number of ethical alternatives that are considered (Proposition 6.33), the likely result is a less ethical choice than would be made if the decision maker was not under time pressure. If the choice is less ethical, then the behavior will be less ethical as well.

The exception to the decline in ethics noted above occurs when a company has a well-established and dominant presence of ethical considerations in its corporate culture. In these cases it is possible the choice selected under time pressure will be more ethical as the corporate policies are implemented with little individual cognition. The increased reliance on corporate schemas (Proposition 6.24) and heuristics (Propositions 6.31 and 6.36) means that the content of these cognitive shortcuts takes on increased importance. Thus, the ethical climate as established through formal and informal corporate culture and programs can dramatically affect choice and behavior under time pressure (Propositions 6.34 and 6.35).

In addition to those factors above, at times the process of determining the ethical choice and deciding how to implement the choice takes more time than is available. In other words, the deadline may occur before the decision maker is able to act and, thus, simply running out of time is one reason ethical behavior declines under time pressure. The rush to implement an ethical choice may also result in errors in implementation and result in unintended and negative consequences.

Together the previous propositions and possible errors in the implementation phase lead to the final proposition:

*Proposition 6.37: Increased time pressure will reduce the level and frequency of moral behavior.*

Table 6.2 summarizes the propositions relating to ethical decision making under time pressure.

### **6.3 CHAPTER SUMMARY**

This chapter explored how a common element in today's business environment, time pressure, affects the ethical decision making process. I began by reviewing the decision making literature to highlight that often it takes a substantial amount of time to make a quality decision. However, today's business climate frequently does not allow managers to deliberate about their decisions as job demands and time pressures require them to make a choice and move on to the next pressing concern. In such an environment, decision makers employ coping strategies to deal with the constraints of time pressure. When the decision involves ethics, these time-pressured decisions often become more self-focused and empathy and ethics may be short-changed. Since

**Table 6.2: Propositions Regarding Ethical Decision Making Under Time Pressure**

<b>Propositions related to appraisal process of the decision system</b>	
Proposition 6.21	As time pressure increases, decision makers will increase their attention on information that indicates they will be harmed and decrease their attention on information that indicates others and society as a whole will be harmed.
Proposition 6.22	Decision makers under time pressure will consider the issues of fewer stakeholders than will those not subject to time pressure.
Proposition 6.23	Decision makers under time pressure will greater attention to economic and legal concerns and less attention to ethical concerns than will those not subject to time pressure.
Proposition 6.24	Managers working in companies that do not have ethics embedded in their existing schemas will make less ethical decisions under time pressure than they would under a non-time-pressured state.

<b>Propositions related to judgment process of the decision system</b>	
Proposition 6.25	As time pressure increases, decision makers will process information at a faster pace.
Proposition 6.26	Decision makers under time pressure will reduce the complexity of the decision by increasing their focus on the economic and legal attributes of the decision and decreasing their focus on the ethical attributes of the decision.
Proposition 6.27	Decision makers under time pressure will accept lower quality ethical outcomes than will non-pressured decision makers.
Proposition 6.28	Decision makers under time pressure who are in a gain position will become more risk averse.
Proposition 6.29	Decision makers under time pressure who are in a loss position will become more risk seeking.
Proposition 6.30	As time pressure increases, the use of teleological ethical reasoning will decrease and the use of deontological reasoning will increase.
Proposition 6.31	As time pressure increases, the use of a dominant or well-learned response will increase and the use of moral imagination will decrease.
Proposition 6.32	As time pressure increases, the likelihood of avoiding the ethical decision will increase.
Proposition 6.33	As time pressure increases, the number of ethical alternatives considered will decrease.
Proposition 6.34	Companies with extensive ethics training will make more ethical decisions under time pressure than companies without such training.
Proposition 6.35	As time pressure increases, corporate culture will exert greater influence on corporate decisions.
Proposition 6.36	As time pressure increases, the corporation's interests will exert greater influence on corporate decisions.

<b>Proposition related to behavior process of the decision system</b>	
Proposition 6.37	Increased time pressure will reduce the level and frequency of moral behavior.

the constraints of time pressure lead to the acceptance of decisions which would otherwise be rejected, I refer to this behavior as ethical satisficing.

This research can be applied in several ways. First, this research can raise awareness of common biases and, in doing so, can remove or lessen their impact. If managers are cognizant that they are predisposed to common decision errors, they can take steps to counter these errors. For instance, managers can alternate playing roles, with one role being the devil's advocate, in order to challenge the data that appear to confirm existing hypotheses and ensure data that appear to reject existing hypotheses are given a valid evaluation. Brainstorming sessions can be used to guarantee that even under time pressure, a measure of creativity takes place. Outsiders to the decision process can be brought in after a choice is made to determine if the choice is worth the risk involved. All of these strategies can help to overcome what may be unobserved biases in the decision process.

Second, this research highlights the importance of establishing an ethical culture within a firm. Conforming to the corporation's rules and standard operating procedures when under time pressure can lead to either more ethical or less ethical decisions. The key factor is the content of the rules and procedures, both those formally expressed and those implicitly articulated (Schein, 1979). Corporations that establish systems to inform, practice, and reward ethical behavior will be more likely to avoid the consequences of unethical behavior than will those firms that claim to rely on individual judgment, doing nothing to encourage ethical behavior.

Lastly, an understanding and increased awareness of the potential for negative outcomes due to time pressure may inspire firms to address the root cause of the problem – the seemingly ever-increasing pace of the workplace. As layoffs are implemented and job tasks are added to the workloads of already busy professionals, the effects of time pressure are often an unforeseen and

unidentified cost of these workforce reductions. While it is easy to count the number of employees and calculate the total payroll cost, the risk of engaging in unethical activities due to time demands is difficult to quantify and rarely, if ever, considered, except perhaps in hindsight after the corporate reputation is tarnished or a major lawsuit is settled.

The propositions included in this chapter offer an explanation of corporate and government behavior in the past and present. Gioia frequently discusses how information overload, and the subsequent time pressure, of the Ford Recall Coordinator position contributed to poor decision making regarding the long-delayed recall of the Ford Pinto. He also tells of the power of organizational schema in that environment (Gioia, 1992). Further, the behavior of all levels of government in the Katrina disaster may partially be the result of an increased self-focus as each level of government wanted to protect its own reputation and power, even as its constituents were suffering.

The propositions presented here raise many interesting questions for future research. A significant question is how managers can best prepare employees to ethically cope with the increasing time pressure of their jobs. If schemas and heuristics are used more often, it becomes increasingly important to understand how schemas and heuristics are formed and how managers can insure that the proper ethical considerations are part of these schemas and heuristics.

Another important area for future research concerns perceptions of risk regarding ethics-related dilemmas. Time pressure alters an individual's degree of risk seeking and avoidance. However, past research has not addressed the question of how employees perceive risk in relation to corporate ethics and role responsibilities. Future research should address the question of whether employees view it as more risky to behave ethically or to agree to perform an



unethical act requested by their manager. Moreover, research must investigate how these perceptions are formed and how they can be altered.

This chapter explores an area that has received scant attention in the existing literature. This is in spite of the fact that time pressure is a common and often significant element in today's business environment. In addressing the issues presented here, we can gain a better understanding into the behavior of managers and also provide insights into how firms can promote ethical behavior.

## 7.0 CONCLUSION

How do managers resolve ethical dilemmas? What processes do they use? How do situational factors affect the process? For twenty years the decision making model used to answer these questions has remained largely unchanged. Except for the insight fifteen years ago that the type of ethical issue is a moderator to the model (Jones, 1991), Rest's four-component model (Rest, 1986) has dominated the research in ethical decision making in business for the last two decades. However, insights obtained through dual-process theories of cognition and the theory of planned behavior allow increased understanding about how managers make decisions. This dissertation applies these theories to gain a better comprehension of how managers determine solutions to ethical problems. In this chapter I discuss how these additions lead to four important contributions to the business ethics field and suggest avenues for future research.

The first and core contribution of this dissertation is the development of a new, behavioral-based model of ethical decision making. This model increases understanding of the ethical decision making process by noting the importance of two types of cognition – deep and shallow choice – and by including the influence of emotions on the decision process. Second, I critique the theory used to support the measurement of ethical quality and the instruments used in measurement. I find some support for the theory, but suggest it does not fully account for the complexity of ethical decisions. I then offer five guideposts of ethical quality in order to overcome this limitation. Third, I apply my behavioral model of ethical decision making to the

formation of trust. The behavioral model of ethical decision making describes trust formation more accurately than previous accounts of this phenomenon since it does not rely solely on a rational, calculated type of trust, but also includes trust based on intuition and organizational routines. Fourth, I apply my model to ethical decision making under time pressure. Time pressure is a common factor in today's business environment, but very little work has explored how this situational factor influences how managers resolve dilemmas. More broadly the study of time pressure provides increased understanding of how situational factors influence the decision process. I suggest managers engage in ethical satisficing as they respond to time constraints by selecting a choice that does not maximize the result, but rather is satisfactory given the situation. I will very briefly summarize each of these contributions beginning with my proposed behavioral model of ethical decision making.

Previous models of ethical decision making have focused on a rational decision process where all the attributes of all of the possible alternatives are evaluated in a systematic manner and the alternative that maximizes the desired outcome is selected. Clearly few, if any, decisions are made in such a fashion. Limited cognitive capacity, constrained financial resources, and a lack of time prevent a manager from always engaging in such a deliberative process. Furthermore, emotions, both those associated with the current dilemma and those derived from unrelated events, often alter the decision process. Simon (1957) was the first to offer a detailed account of such departures from rationality and suggested that decision makers satisfice, rather than maximize, when making decisions. If organizations can be understood in terms of their decision processes (Simon, 1997), it is critical to have accurate knowledge of the methods managers use to reach ethical decisions. A model that does not account for the use of intuition, instinct, stereotypes, heuristics, and schemas and does not include the potential influence of

emotions will not correctly predict and does not accurately explain behavior in organizations. The behavioral model of ethical decision making incorporates these factors.

Intuition, stereotypes, heuristics, and other mental shortcuts are included in the model through the recognition that two modes of cognition can be used to make decisions. I refer to these two processes as deep and shallow choice. Deep choice is a high-effort process in which various alternatives are identified and evaluated and a choice is made based on pre-existing preferences. This is the process that has typically been studied in existing ethical decision making research. A limitation of the existing research is that it typically implies that ethical principles are considered separately from the evaluation of the other aspects of the dilemma. I reject this belief and instead argue that the ethical attributes of a dilemma are considered concurrently with all the other attributes. I then apply multiattribute utility theory (Baron, 2000) and the theory of planned behavior (Ajzen, 1985, 1991) to generate a new model of ethical decision making when decision makers use deep choice (Figure 3.2).

Shallow choice has received little attention in the extant literature on ethical decision making. Shallow choice occurs when decisions are made using intuition, heuristics, stereotypes, rules-of-thumb, and other methods that require little cognitive effort. Shallow choice involves little deliberation and typically involves an associative processing scheme, whereby the current experience is associated with a past experience and that past experience guides current actions. Thus, memories and previous events play an important role in shallow choice. It is important to include shallow choice in a descriptive decision making model since often managers do not have the motivation or opportunity to engage in the deliberative, time consuming task of deep choice. It is also important to note the existence of shallow choice because decisions made using non-deliberative reasoning are more prone to biases than are those made using deep choice.

Furthermore, it is likely not all attributes will be considered when shallow choice processes are used. Instead some attributes will be embedded within whatever decision is selected without a conscious decision to do so. If the attributes that are overlooked are related to ethics, unethical and unintended consequences may result. The use of shallow choice is also likely to result in only the most salient stakeholders being considered in the decision, which will harm those stakeholders who are legitimate, but who are not highly salient.

Adding emotion to the ethical decision making model is another contribution of this dissertation. Although many managers attempt to keep emotions out of the workplace, the reality is that emotions at times have a significant impact on decision processes. Perhaps an event in a worker's personal life makes her happy; maybe the stress of an overworked manager makes her angry at the company or at her supervisor; or possibly empathy for the customer influences the work of a product safety manager. Research in the decision science field notes many ways that the activation of emotion affects one's decisions and to deny the fact that emotion occurs in business is to inaccurately describe today's organizational environment. The model proposed in this dissertation notes several ways emotions can affect decisions.

This dissertation also contributes to the field by offering five guideposts to ethical quality. Researchers have applied Kohlberg's theory of moral development as a means of measuring ethical quality. Concerns regarding the validity of Kohlberg's theory – including whether his stages represent true stages and whether the higher stages actually reflect higher moral judgment – have existed for some time. Recent research from developmental psychology supports many components of the theory of moral development. This research, the Lectical Assessment System (LAS), supports stage distinctiveness at the higher levels of Kohlberg's theory and also provides a logic for the hierarchy of the stages. However, Kohlberg's theory and

the LAS have important limitations. The theory of moral development and the LAS both include principled reasoning as the highest level. But, blindly following or applying an ethical principle may not represent an ethical choice, even though Kohlberg's theory suggests it would. I offer five guideposts to measuring ethical quality that acknowledge the duality of the private and public domains and the lack of a pre-eminent philosophical theory. In doing so, I present a method to assess ethical quality that both includes the application of universal principles and attends to the requirements of a particular situation.

The behavioral model of ethical decision making can be applied in a great variety of situations. I provide two theoretical applications in this dissertation. First, I describe how deep and shallow choice inform the development of trust in relationships. Critical in this discussion is the notion of embeddedness. Trust determined through shallow choice frequently is not conscious decision, but rather an outcome of fulfilling a role, enacting a stereotype, or following a corporate policy. In these cases the level of trust one gives to another and the trust one receives from others occurs in an automatic, non-deliberative fashion. The use of such shallow choice processes has not been fully explained in the literature. If one wishes to establish or expand business relationships, understanding that trust may be embedded in these shallow choice mechanisms assists managers in achieving their goals. I also offer a typology of trust types based on the source of information and type of information known about the other party in order to better understand the various types of trust that are present in the workplace.

The second application of the behavioral model of ethical decision making describes how managers respond to time pressure. I suggest managers engage in ethical satisficing, by which I mean that decision makers use various coping strategies including lowering their acceptance threshold, focusing on negative information, and becoming more concerned about the outcomes

for themselves or their companies, in order to arrive at an acceptable decision given the situational circumstances. Time pressure affects all three components of the decision making model: appraisal, judgment, and behavior. In the appraisal process time pressure affects the salience of information and the encoding of information. One way this occurs is through the activation of pre-existing schemas and this may result in ethical considerations being overlooked. One conclusion to be drawn from this idea is that, if managers desire ethical actions, they must know what schemas are prevalent in their organizations and how to incorporate ethical attributes into those schemas.

Time pressure also affects the judgment process. It often leads decision makers to reduce the complexity of the decision in one or more ways. For instance, managers are likely to look for alternatives that are clearly delineated and codified instead of taking the time to work through alternatives that are more nebulous. In general, economic and legal issues are more clearly defined than are ethical issues, therefore, the ethical issues are likely to be set aside when time pressure is present. Time pressure also lowers a decision maker's acceptance threshold, which means that some actions that would be rejected as unethical by decision makers who are not under time pressure may be deemed acceptable when those decision makers are under time pressure. Although there will be exceptions for companies that actively promote and encourage ethics, in general I suggest that the existence of time pressure will reduce the level and frequency of moral behavior in business as managers engage in ethical satisficing.

The above mentioned factors and the propositions in Chapter 6 reflect movement toward a theory of ethical satisficing that will predict and explain how employees act in firms with regard to ethical dilemmas and how firms can prevent unwanted actions stemming from these dilemmas.

## 7.1 AREAS FOR FUTURE RESEARCH

The behavioral model of ethical decision making offers many interesting and relevant research opportunities. Its size and complexity require that the model be tested in sections; however, the various components within the model present many fertile research areas. I wish to highlight some of the more interesting potential research projects and begin with the affects of time pressure.

The seventeen propositions related to ethical decision making and time pressure provide an entry into potential research. For instance, I suggest that economic and legal concerns gain increased salience versus ethical concerns when managers are under time pressure. This may explain behavior in disaster situations such as the Katrina hurricane. Those personnel and agencies that are most prepared for a disaster would have a lower perceived level of time pressure and this may result in these employees being more empathetic toward disaster victims as compared to less prepared managers. If a study confirmed this proposition, it would not only provide insight into how managers react in a crisis, but also add importance to preparing for such events.

Extant research is limited in understanding how perceptions of risk influence ethical decision making. We do not know if managers perceive the ethical choice as being most risky – perhaps because it may lead to the loss of their job – or perceive the unethical choice as being most risky – perhaps because the reputation of the decision maker and her company may suffer if the decision becomes public. This risk perception may explain why the company culture is important in determining how employees respond to ethical dilemmas (Trevino, Butterfield, & McCabe, 1998). Employees may simply select the action they perceive is the less risky choice. If that is the case, training and policy manuals should not only attempt to communicate values, but



also instill a perception that employees will not be punished for placing ethical values above other corporate concerns.

The shallow choice component of dual-processing cognition offers an intriguing possibility; it may be that all or nearly all ethical decisions are made intuitively and the explanations given by decision makers are merely post-hoc rationalizations (Haidt, 2001). If true, business ethics education must specifically give attention to developing moral intuition. Such training would be particularly valuable in time-pressured situations.

I have stressed that I believe ethical attributes are considered concurrently with other attributes. No studies have tested this assumption, although Beck and Ajzen (Beck & Ajzen, 1991) did find that ethical norms influenced intent. The question that arises, however, is whether ethical norms influence intent directly as a separate element, or if these norms are mediated by attitude toward behavior. A study similar to Beck and Ajzen's inquiry, but one that includes path analysis, can help determine how ethical norms influence decision making.

Over the past fifteen years the moral intensity construct has received considerable attention by researchers. However, few of the proposed factors have consistently shown a significant effect on decisions (Hayibor, 2000). I suggest these inconsistent results partly derive from the model being incorrectly specified. It lacks the mediator of emotion. The magnitude of the consequences or the temporal immediacy of the effects by themselves do not alter the decision. Rather, moral emotions including empathy, guilt, and shame must be activated. Without an emotional connection to those affected by the action, the factors of moral intensity are feckless. A research study that includes moral emotions will provide great insights into the affect of moral intensity in specific and ethical decision making in general.

In regard to measuring moral quality, expanding the instruments to include greater complexity in resolving ethical dilemmas would be a valuable contribution. Instead of considering the use of any ethical principle as the precipice of moral thought, an expanded instrument should account for the organization and prioritization of ethical principles in a specific situation. Carefully evaluating and ranking applicable ethical principles related to a specific dilemma represents a higher order of thinking than simply blindly applying any ethical principle. This integration of the universal and the particular represents a higher level of reasoning that is not recognized by current measures of ethical quality. This research would be particularly applicable in a global business environment. As companies grow and their business spans numerous countries and cultures, managers wrestle with the prioritization of potentially conflicting ethical norms and principles. This was recently highlighted when the Internet search company Google expanded into China. In its prospectus for its initial public offering, Google had stated its ethics policy in one, simple sentence, “Do no evil.” Recently the company provided a censoring filter as part of the Chinese version of the Google search engine. Consequently, the search engine does not return results for such words as “democracy.” The company took a utilitarian approach in explaining its reasons for succumbing to the Chinese government demand by claiming that providing some information is better for a society than providing no information at all. Google’s decision may be criticized, but the decision certainly was different than simply applying a principle without considering whether it is the best solution to the specific problem being faced.

In summary, the models and measures of ethical decision making in business have stagnated for too long and do not accurately describe the process managers use to make ethical decisions. In this dissertation I advance the field of business ethics by offering a new model that

not only includes an automatic, intuitive decision making process and a deliberative, rational decision process, but also includes the affects of emotion on ethical decision making. The development of this model provides a base for considering new ways to analyze and understand ethical choice including ethical satisficing, embedded ethics, and the coping methods used to respond to time pressure. These additions, as well as others within this dissertation, provide a more correct description of ethical decision making in business, enable greater understanding of the behavior of business managers, and make a significant contribution to the field of business ethics.

## APPENDIX A

### SUMMARY OF DUAL-PROCESS COGNITION MODELS

<b>Model and Domain of Application</b>	<b>Terminology and Properties of Low-Effort Processing</b>	<b>Terminology and Properties of High-Effort Processing</b>	<b>Assumptions about Relations between Processing Modes</b>
Bargh (1999) Stereotype activation	Uncontrolled : Use of stored scripts based on the routines of social interactions	Controlled: Use of conscious control to overcome stereotypes	People strategically conserve their limited mental capacity by using simplified modes of thought unless motivated to use an active cognitive process
Beach & Mitchell (1978) Decision strategy	Non-analytic Strategy: Use of fairly simple, pre-formulated rules that are applied by rote; Little information is obtained or analyzed	Analytic Strategy (aided and unaided): Use of a guided, systematic to analyze the decision and evaluate its components	Analytic strategies require higher degrees of analysis and higher resources (time, effort, and/or money)
Brewer (1988); Fiske & Neuberg (1988) Person Perception	Categorization: Use of information and evaluations associated with person's salient category membership (gender, race, etc.)	Individuation: Process and summarize multiple individual characteristics	Individuation requires specific motivation (e.g., due to interdependence) or perceived lack of fit to category; modes are alternatives

**APPENDIX A**  
**SUMMARY OF DUAL-PROCESS COGNITION MODELS (CONT'D)**

<p>Chaiken (1980);          Petty &amp; Cacioppo (1981)          Persuasion</p>	<p>Heuristic :Use of learned associations of salient cues like source attractiveness or message length with positive/negative evaluations</p>	<p>Systematic:          Effortfully search for relevant information and logically evaluate arguments</p>	<p>Systematic processing when specially high need for subjective confidence and processing resources are available; both modes occur simultaneously</p>
<p>Devine (1989)          Stereotype Use and Suppression</p>	<p>Automatic stereotyping: Apply stereotype information associated with group through past learning</p>	<p>Suppression:          Effortfully access personal beliefs about group, use to override stereotype</p>	<p>Low-prejudice people are motivated to engage in suppression; modes are sequential stages; suppression follows automatic stereotyping</p>
<p>Epstein (1991)          Experiential versus Rational Thinking</p>	<p>Experiential:          Activation of thoughts and feeling learned in association with stimulus through past experiences</p>	<p>Rational: Use of conscious, largely verbal thought to make judgments</p>	<p>Modes are activated by features of stimulus situation and the nature of the judgment being made; modes operate simultaneously</p>
<p>Fazio (1986)          Attitude Access</p>	<p>Associative access:          Use evaluation associated with attitude object through repeated pairings</p>	<p>Construct attitude:          Search for and summarize attitudinally relevant information</p>	<p>Associative processing when strongly associated attitude exists; modes are alternatives</p>

**APPENDIX A**  
**SUMMARY OF DUAL-PROCESS COGNITION MODELS (CONT'D)**

Gilbert (1989) Person Perception, Attributional Inference	Correspondent inference: Use trait associated (through semantic similarity) with person's observed behaviors	Attributional thinking: Process range of attributionally relevant information such as situational causes of behavior	Attributional thinking requires cognitive capacity; modes are sequential stages; attribution follows correspondent inference
Gilhooly and Murphy (2005) Problem type	System 1: Use a set of systems including reflexes and instincts that are formed through associative learning.	System 2: Apply abstract reasoning and hypothetical thinking; is constrained by working memory	The two systems interact and an important System 2 task is to override System 1 when appropriate while System 1 influences attentional focus of System 1
Grunert (1988) Consumer choice	Automatic processes: Use mostly unconscious thought, are learned very slowly, and are changed slowly	Strategic processes: Use conscious thought that is adapted to situational circumstances	Strategic processes requires greater effort and thus has capacity limitations
Martin, Seta, & Crelia (1990) Social Judgment and Correction	Automatic contextual influences; Prime or other contextual factor (e.g., mood) affects judgment	Correction: Engage in attributional thinking to detect the contextual influences and shift judgment to correct for it	Correction occurs only when both motivation and capacity are present; modes are sequential stages; correction follows contextual influence
Sloman (1996) Reasoning	Associative: Use of concepts that are related to cues in stimulus through well-learned associates	Rule-based: Use of symbolically represented rules in sequential fashion to reason or make judgments	Rule-based reasoning requires more capacity; modes operate simultaneously

## APPENDIX B

### DECONSTRUCTING DEFINITIONS OF TRUST

Author	Trust Definition	Key Factors
Rotter, 1967	An <u>expectancy</u> held by an individual or a group that the <u>word, promise, verbal or written statement</u> of another individual or group can be <u>relied upon</u> .	Expectation, Integrity (upholding commitments)
Gainbeta, 1988	A particular level of the <u>subjective probability</u> with which an agent assesses that another agent or group of agents will perform a particular action, both <u>before he can monitor</u> such action (or independently of his capacity ever to be able to monitor it) and in a context in which it <u>affects his own action</u> .	Expectation, Opportunism (inability to monitor), Interrelation
Ring & Van de Ven, 1992	(1) Confidence or predictability in one's <u>expectations</u> (Zucker, 1986) and (2) confidence in <u>another's goodwill</u> (Friedman, 1991).	Expectation, Integrity, Benevolence
Hosmer, 1995	Trust is the <u>reliance</u> by one person, group, or firm upon a <u>voluntarily</u> accepted duty on the part of another person, group, or firm to <u>recognize and protect the rights and interests</u> of all others engaged in a <u>joint endeavor or economic exchange</u> .	Expectation, Choice, Integrity (adherence to a code), Interrelation
Mayer, Davis & Schoorman, 1995	The <u>willingness</u> of a party to be <u>vulnerable</u> to the actions of <u>another party</u> based on the <u>expectation</u> that the other will perform a particular <u>action important to the trustor</u> , irrespective of the ability to <u>monitor or control</u> that other party.	Choice, Opportunism (vulnerable; cannot monitor an important action), Interrelation, Expectation

## APPENDIX B

### DECONSTRUCTING DEFINITIONS OF TRUST (CONT'D)

<p>Zaheer &amp; Venkatraman, 1995</p>	<p>In <u>contracting</u> behavior terms, trust reflects “the extent to which negotiations are <u>fair and commitments are upheld</u>” (Anderson &amp; Narus, 1990) and one party’s <u>belief</u> that its requirements will be fulfilled through <u>future actions</u> undertaken by the other party (Anderson &amp; Weitz, 1989).</p>	<p>Integrity (adhering to a code; upholding commitments), Expectation</p>
<p>Cummings &amp; Bromiley, 1996</p>	<p>Trust will be defined as an individual’s <u>belief</u> or a common belief among a group of individuals that another individual or group (a) makes <u>good-faith efforts</u> to behave in accordance with any <u>commitments</u> both explicit or implicit, (b) is <u>honest</u> in whatever negotiations preceded such commitments and (c) does not take excessive advantage of another even when the <u>opportunity is available</u>.</p>	<p>Expectation, Integrity (adherence to a code; upholding commitments) Opportunism</p>
<p>Hagen &amp; Choe, 1998</p>	<p>The <u>expectation</u> that the <u>promise</u> of another can be relied on and that, in <u>unforeseen circumstances</u>, the other will <u>act in a spirit of cooperation</u> with the trustor.</p>	<p>Expectation, Integrity (upholding commitments), Opportunism (unforeseen circumstances), Benevolence</p>
<p>Rousseau, Sitkin, Burt, &amp; Camerer, 1998</p>	<p>A <u>psychological state</u> comprising the intention to <u>accept vulnerability</u> based on positive <u>expectations</u> of the intentions or behavior of <u>another</u>.</p>	<p>Psychological state, Choice (acceptance), Opportunism (vulnerable), Expectation, Interrelation</p>
<p>Zaheer McEvily, &amp; Perrone, 1998</p>	<p>The <u>expectation</u> that an actor (1) can be <u>relied on to fulfill obligations</u>, (2) will behave in a <u>predictable manner</u>, and (3) will act and negotiate <u>fairly</u> when the possibility for <u>opportunism</u> is present.</p>	<p>Expectation, Integrity (uphold commitments; consistent; adhere to a code), Opportunism</p>



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