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# PSYCHOLOGICAL TYPES, DECISION STYLES, AND ETHICAL DECISION-MAKING

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## **Introduction**

Concern over ethical behavior of managers of organizations has increased in recent years. This concern has been intensified recently by reports of unethical acts that include widely publicized abuses in the savings and loan industry collapse and managers' treatment of employees in organizational downsizing. Clearly, managers are confronted daily with decisions involving ill-defined ethical issues that have serious implications for an organization's future. Managerial decision-making processes in such situations are complex and not well understood by managers or organizational researchers (Waters, Bird and Chant 1986).

A number of models have appeared in the business ethics literature recently which were intended to explain individuals' ethical decision-making. These models, such as those presented by Hunt and Vitell (1986), Dubinsky and Loken (1989) and Jones (1991) propose consistent relationships between (1) individual differences and ethical judgments, (2) between ethical judgments and ethical behavioral intentions, and (3) between behavioral intentions and actual decision-making behavior. Ethical judgments is the degree to which an individual considers a particular behavior to be ethical. Behavioral intentions is a person's belief that she/he will perform a specific action (Dubinsky and Loken 1989). Behavioral intentions is an important intervening variable that links ethical judgments with actual behavior.

Jungian psychological types and preferred decision styles provide a well-documented method of assessing individual differences. These individual differences have been proposed as factors which may affect ethical judgments and ethical decision-making behavior (Fleming 1985; Herden and Lyles 1981; Kroeger and Thuesen 1992). Decision styles refer to different ways in which individuals process information and make decisions. These decision styles are based on Jung's (1971) psychological types of sensing/intuition and thinking/feeling.

The overall purpose of this study was to determine whether or not individual differences based on the Jungian psychological types and associated decision styles influence ethical judgments regarding issues common to business organizations. Additionally, we evaluated the linkage between ethical judgments and ethical behavioral intentions. The business ethics issues are presented in six short scenarios and represent a variety of business situations. It was expected that ethical judgments of the business scenarios would be associated with differences in the respondents' functions of thinking and feeling as well as differences in decision styles. Ethical behavioral intentions were expected to be positively related to ethical judgments.

The next section describes the relevant concepts associated with Jungian personality theory. A brief review of the pertinent literature and the rationale for the proposed relationships between the constructs are presented. We then discuss the research methodology and present the findings of the study. Finally, implications for management practice and further research are discussed.

### **Literature Review and Theoretical Rationale**

A significant amount of research has been directed recently toward explaining and predicting managers' ethical decision processes in organizations. These processes are likely to be affected by many individual differences factors as well as situational factors (Hunt and Vitell 1986; Trevino 1986; Wortruba 1990). A number of researchers have shown that individual differences are important antecedents to ethical decision-making (e.g., Hegarty and Sims 1978; 1979). In addition, several explanatory models have emphasized the importance of personality variables in explaining ethical behavior. Jungian psychological types and decision styles are among psychological constructs which may affect the ethical decision-making process (Fleming 1985; Herden and Lyles 1981; Kroeger and Thuesen 1992).

#### **Psychological Types**

The Jungian theory of psychological type (Jung 1971) provides a useful framework for studying individual differences in managerial decision-making. Two psychological dimensions of particular importance are the ways that individuals acquire information and the ways that they make decisions about the information that has been acquired (Ruble and Cosier 1990). Jung refers to these dimensions respectively as "perception" and "judgment." Perception is represented by two contrasting psychological types of sensing (S) and intuition (N). Judgment is represented by two opposing psychological types of thinking (T) and feeling (F). Jung believed that individuals develop a preference for either S or N and either T or F.

The S psychological type individual prefers to acquire information that is factual, precise, concrete, and practical—hard data that deal in specifics. The N psychological type individual prefers to receive information by looking at the whole of a situation and focusing on the overall meaning. The T psychological type individual uses a logical, analytical process to make rational judgments or decisions and tends to be impersonal. The F psychological type individual prefers to make judgments based on personal and subjective values (Ginn and Sexton 1990).

Since S/N refers to information acquisition and T/F describes different approaches to making judgments or decisions, the T/F dimension appears to be particularly relevant to the analysis of judgments about business situations. Once data have been perceived, individuals next make judgments or decisions. First we examine how T individuals prefer to make judgments or decisions and then we describe the preferences of F individuals.

T individuals prefer to make judgments or decisions based on a logical, rational set of principles. These persons tend to make decisions in an impersonal, value-free, and objective fashion, stressing rational economic business objectives. The thinking individual uses formal methods of reasoning, logic, models, rules, and principles in making decisions (Fleming 1985; Nutt 1986).

In contrast, F individuals prefer to make judgments based on personal and subjective values. The feeling type process produces humanistic and value-laden judgments (Fleming 1985). Feeling involves consideration of decisions in personal terms — the personal stakes of individuals and groups who will be affected by a decision. The feeling individual assesses the values involved for each alternative, how people will react, and whether the likely results will enhance the outcomes for individuals or groups (Fleming 1985; Nutt 1986).

Based on the different decision criteria of the two psychological types of thinking and feeling, it seems reasonable that these individuals would differ in their judgments of unethical situations. Therefore, the following hypothesis is proposed:

H1: Significant differences in ethical judgments will exist between groups of individuals based on their T/F orientation.

### **Decision Styles**

One of the recent uses of the Jungian psychological typology in the business world is in the assessment of decision-making behavior (Murray 1990). The term “decision styles” has been used to refer to individual differences in the way that people process information and make decisions. Ruble and Cosier (1990) noted that only two of the Jungian psychological dimensions, perception and judgment, are used in research on cognitive style. Individuals combine their dominant perceiving and judging functions, thus determining a relatively permanent decision style. The possible decision styles are ST (sensing-thinking), NT (intuition-thinking), SF (sensing-feeling) and NF (intuition-feeling) (Frisbie 1988).

A number of researchers have discussed attributes of various decision styles (e.g., Davis, Grove and Knowles 1990; Hoy and Hellriegel 1982; Mitroff and Kilmann 1975; Nutt 1986; 1990). The ST individual is a systematic, impersonal decision maker, concentrating on specifics and factual details which can be verified. Practical, matter-of-fact decisions are made primarily through an impersonal evaluation of hard data. Individuals serve the goals of the organization. The NT decision-maker also approaches problems with impersonal analysis, but focuses broadly on many alternative solutions to problems. A broad range of hypothetical possibilities originate in the intuitive mind of the decision-maker. Decisions are then made in a formal, impersonal, and value-free manner, directed toward the corporate good. The SF decision maker focuses on factual details and analysis of data, while interacting with others and showing consideration for them. Information is processed through feeling, using value-laden personal judgments. Problems are solved primarily through examining values and considering stakeholders in decisions. The NF decision maker perceives problems in a gestalt manner and recognizes many possible solutions. This type of individual focuses on

idealistic general concepts. Humanistic and value-laden decisions result from the feeling-type processing.

A number of studies have linked decision styles with management variables. For instance, Kilmann and Thomas (1975) found that individuals with different decision styles prefer different ways of managing conflict. Mitroff and Kilmann (1975) and Kilmann and Mitroff (1976) found that preferences for different types of organizations vary with different decision styles. Also, Schweiger and Jago (1982) investigated the relationship between decision styles and preferences for autocratic and participative management styles.

Several researchers have suggested that differences in individuals' preferred decision styles may be related to differences in preferred ethical decision criteria (e.g., Fleming 1985; Kroeger and Thuesen 1992). Fleming (1985) offered a framework of underlying decision criteria which were classified according to individuals' preferred decision styles. The framework proposes that individuals within each of the decision style categories will use different sets of criteria when analyzing ethical situations and making decisions. As an example of differences among the sets of criteria, Fleming suggested that ST individuals would refer to laws, rules, or codes of ethics when considering decision alternatives. Individuals who prefer the NF style, with their realistic approach to problems and emphasis on interpersonal relationships, would adopt humanistic and value-laden processes in arriving at ethical judgments and decisions.

Fleming's propositions make an important contribution to the ethics literature. He contends that individuals with different decision style preferences would view ethical situations differently. Though this proposition offers a valuable addition to the ethics literature, Fleming offered no empirical support for his ideas. Therefore, the following hypothesis is posited:

- H2: Significant differences in ethical judgments will exist among groups of individuals with different preferred decision styles.

### **Ethical Judgments and Ethical Behavioral Intentions**

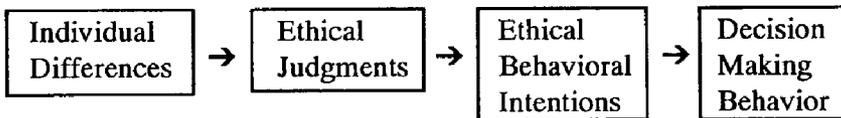
The Theory of Reasoned Action (Ajzen and Fishbein 1980); (Fishbein and Ajzen 1975) suggests that attitudes toward a behavior are followed by intentions, which, in turn, may be followed by actual behavior. Utilizing this conceptual base, Dubinsky and Loken (1989) and Hunt and Vitell (1986) proposed models of ethical behavior which suggest that individuals form ethical judgments in decision situations which have an ethical component, and that these ethical judgments are followed by ethical behavioral intentions prior to actual behavior. Thus, ethical behavioral intentions may be an important link in the ethical decision-making process. Ethical behavioral intentions are hypothesized to be related to ethical judgments in the following manner:

- H3: Ethical judgments will be positively related to ethical behavioral intentions.

### Model of the Hypothesized Relationships

A model of the hypothesized relationships is presented in Figure 1. Hypotheses one and two deal with linkages between individual differences (psychological types and decision styles) and ethical judgments, while hypothesis three is concerned with linkages between ethical judgments and ethical behavioral intentions. The final linkage shown in Figure 1 (intentions-behavior) was not empirically tested in this research, but was inferred from the Theory of Reasoned Action (Fishbein and Ajzen 1975).

**Figure 1: Model of Hypothesized Linkages**



### Methodology

#### Subjects

Participants in this study were students enrolled in upper level management courses in a medium-sized Mid-Atlantic university. Participation was voluntary, and because of the nature of the study, students were assured that their responses were confidential and anonymous. Respondents ranged in age from 19 to 40 years, with a mean age of approximately 22 years. Of the 128 respondents, 37.5 percent were female and 62.5 percent were male. Approximately 65 percent of the respondents were seniors, while about 35 percent were juniors. A majority of the respondents were business majors (62 percent).

#### Measures

**Myers-Briggs Type Indicator.** Individuals' psychological types and preferred decision styles were measured through administration of the Myers-Briggs Type Indicator, Form G (MBTI) (Myers and Myers 1987). The MBTI is a forced-choice, self reporting personality assessment instrument which is based on Jungian personality type theory. This instrument is used to measure the basic preferences of individuals regarding their psychological types and preferred decision-making styles. The MBTI has been widely used in research and applied settings (Ruble and Cosier 1990). Carlson (1985), in a review of psychometric studies, reported reasonable estimates of validity for the MBTI.

**Questionnaire.** The other measures and ethical scenarios utilized in this research were presented in a two-part questionnaire. The first section presented six ethical scenarios, the Multidimensional Ethics Scale (Reidenbach, Robin and Dawson 1991), and a behavioral intentions measure. The second section gathered classification data and provided a place for participants to record their psychological types as determined by the MBTI instrument.

**Ethical Scenarios.** This study utilized ethical scenarios to investigate the patterns of respondents' ethical judgments and ethical behavioral intentions in a number of business situations. Scenarios have been an important tool for research regarding business ethics (Weber 1992). For instance, Fritzsche and Becker (1983) and Weber (1990) used scenarios to evaluate ethical judgments. Also, Laczniak and Inderrieden (1987) and Stead, Worrell, Spalding and Stead (1987) utilized scenarios in their investigations of ethical behavioral intentions.

Six scenarios were selected to provide a variety of different business situations while minimizing the validity problems associated with respondents' fatigue and boredom. Four of the six scenarios were gathered from previous research (Fritzsche and Becker 1983). The other two scenarios were chosen by the authors to represent contemporary business issues relating to the environment and employee downsizing. These scenarios offer a considerable range of positions with respect to perceived unethicalness. A summary of the scenarios and sources from which they were obtained are presented in the Appendix.

**Ethical Judgments.** Ethical judgments of respondents were assessed using the Multidimensional Ethics Scale (MES) (Reidenbach and Robin 1988; 1990; Reidenbach, Robin and Dawson 1991). Participants' responses were recorded on a seven-point scale for each of the eight items of the MES. This semantic differential scale is anchored by bipolar adjectives. An ethical judgment score was derived by computing the mean across the eight items. The higher the score, the more unethical a scenario was judged to be.

Reidenbach and Robin reported that item scores demonstrate a high degree of reliability with coefficient alphas ranging between 0.71 and 0.92, with an average reliability of 0.8. Also, acceptable levels of convergent, divergent, and predictive validity were demonstrated. For this study, reliabilities for the MES ranged from 0.831 to 0.941.

**Ethical Behavioral Intentions.** Following Hunt and Vitell (1986), ethical behavioral intentions was determined by asking individuals to read the scenarios and then to express the likelihood that they would perform the behavior. A seven-point semantic differential scale was utilized to assess behavioral intentions. The scale was anchored with "highly likely" and "highly unlikely." A high score indicated that the respondent would be highly unlikely to perform the particular behavior.

## **Procedure**

Respondents completed the MBTI in one class period. The questionnaire bearing the business scenarios, the MES, the behavioral intentions measure, and classification data was completed during the subsequent class period. Differences among group mean responses of participants' psychological types and associated decision styles were evaluated using the analysis of variance technique (ANOVA). The relationship between participants' ethical judgments and ethical behavioral intentions was evaluated by regression analysis.

Table 1: Descriptive Statistics and Pearson Correlation Matrix

VARIABLES	Means	s.d.	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
1. T/F	0.30	0.46	1.0000															
2. EJ (1)	4.45	1.27	.2125*	1.0000														
3. BI (1)	4.25	2.05	.1373	.7839**	1.0000													
4. EJ (2)	5.15	1.50	.1949*	.0153	-.0140	1.0000												
5. BI (2)	5.27	1.96	.0972	.0680	.145	8.8047**	1.0000											
6. EJ (3)	5.16	1.32	.2520**	.1477	.1486	.4029**	.3409**	1.0000										
7. BI (3)	4.87	1.78	.2497**	.2133*	.2994**	.2643**	.3386**	.8225**	1.0000									
8. EJ (4)	5.37	1.18	.2114*	.2666**	.2324**	.1715	.1645	.1854*	.2586**	1.0000								
9. BI (4)	5.41	1.54	.0739	.2879**	.4377**	.1003	.2851**	.1272	.2893**	.7794**	1.0000							
10. EJ (5)	5.62	1.46	.2396**	.0836	.0875	.1649	.0790	.2901**	.2470**	.1128	.0217	1.0000						
11. BI (5)	5.59	1.83	-.0212	.0498	.1228	.0595	.0782	.1126	.1602	.1343	.1589	.6625**	1.0000					
12. EJ (6)	6.07	1.21	-.0024	-.0338	.0165	.0321	.0190	.2177*	.2062*	.0656	.0359	.1260	-.0269	1.0000				
13. BI (6)	6.21	1.40	-.0388	.0054	.0917	.1053	.2034*	.1615	.2147*	-.0587	.1179	.2097*	.1737*	.6837**	1.0000			
14. Age	22.20	2.68	-.0894	.1275	.1341	-.0674	-.0470	.0004	.0945	-.0183	.0509	.0145	-.0040	.0969	.0699	1.0000		
15. Rank	2.63	0.58	-.1248	.0415	.1204	-.0620	-.0061	-.0290	.0434	.0882	.1764*	.0575	.1285	.2715**	.1680	.2438**	1.0000	
16. Major	1.38	0.49	-.0631	-.1773*	-.1754*	-.0105	-.0362	-.1433	-.2134*	-.0129	.0417	-.0344	.1086	-.0711	.0192	-.0049	.0386	1.0000

\* p &lt; .05 T/F = THINKING/FEELING PSYCHOLOGICAL TYPES

\*\* p &lt; .01 EJ = ETHICAL JUDGMENTS

BI = BEHAVIORAL INTENTIONS

### Results

Table 1 presents a correlation matrix of the variables included in the study. This table indicates a number of positive and negative correlations among the variables. These correlations are generally consistent with the a priori expectations. The results indicate a statistically significant correlation ( $p < .05$ ) between the T/F psychological type preferences and ethical judgments for the first five scenarios. The results also indicate a strong relationship ( $p < .01$ ) between ethical judgments and ethical behavioral intentions.

The respondents' T/F orientation and preferred decision styles were determined using the MBTI instrument. The T orientation was preferred by 69.8 percent with 30.2 percent preferring the F orientation. The distribution of preferred decision styles was: STs-50.8%, SFs-19.8%, NTs-19.0%, and NFs-10.3%. A statistically significant difference was found between males and females for the T and F psychological types (chi-square value = 11.61,  $p < .001$ ) and the associated decision style preferences (chi-square value = 13.50,  $p < .005$ ).

Table 2 provides the mean scores and standard deviations of ethical judgments for all respondents and the mean scores of ethical judgments for the T and F psychological type groups. The higher the score, the more unethical the situation was judged to be. Scenario six was viewed by the respondents as the most unethical business situation, while scenario one was seen as the least unethical situation.

**Table 2: Ethical Judgments of Scenarios**

Scenario	Overall Mean	SD	T Mean	F Mean
1	4.45	1.27	4.26	4.85
2	5.15	1.50	4.96	5.60
3	5.16	1.32	4.97	5.66
4	5.37	1.18	5.21	5.75
5	5.62	1.46	5.41	6.17
6	6.07	1.21	6.08	6.08

In five of the six scenarios, the mean scores for the T psychological type group were greater than the F psychological type group. This potentially important finding indicates that the T psychological group viewed the potentially unethical situations less harshly than the F psychological type group.

Testing for hypothesized differences between the T and F psychological type groups for each scenario was performed using an ANOVA model. The dependent variable was the ethical judgment score on the MES, and the independent variables were the T and F psychological type groups. The ANOVA results for each scenario that were statistically significant are shown in Table 3. All models proved significant at the 0.05 level except for scenario six. Therefore, hypothesis one was generally supported by the results.

Age, rank, and major were included in each of the models as control variables. None of these control variables were significant and T/F remained significant for the first five scenarios.

**Table 3: Statistically Significant Differences between T and F Psychological Types**

<b>Scenario 1</b>					
Source	df	Sum of Squares	Mean Square	F Stat.	Prob. F
Model	1	9.11	9.11	5.86	0.017*
Error	124	192.66	1.55		
Total	125	201.77			
<b>Scenario 2</b>					
Source	df	Sum of Squares	Mean Square	F Stat.	Prob. F
Model	1	10.87	10.87	4.90	0.029*
Error	124	275.21	2.22		
Total	125	286.08			
<b>Scenario 3</b>					
Source	df	Sum of Squares	Mean Square	F Stat.	Prob. F
Model	1	13.43	13.43	8.41	0.004**
Error	124	198.08	1.60		
Total	125	211.51			
<b>Scenario 4</b>					
Source	df	Sum of Squares	Mean Square	F Stat.	Prob. F
Model	1	7.76	7.76	5.76	0.018*
Error	124	165.83	1.35		
Total	125	173.59			
<b>Scenario 5</b>					
Source	df	Sum of Squares	Mean Square	F Stat.	Prob. F
Model	1	15.24	15.24	7.55	0.007**
Error	124	250.27	2.02		
Total	125	265.51			

\* p < .05  
 \*\* p < .01

ANOVA models were also utilized to test for differences in ethical judgments among the four decision style groups. The ANOVA results for the two scenarios that

were statistically significant and the accompanying probabilities are presented in Table 4. The MES values served as the dependent variables and the independent variables were the four decision styles. Differences between the decision style groups were significant at the 0.05 level for scenario 2 ( $p=.024$ ) and scenario 3 ( $p=.026$ ). These results offer limited support for hypothesis two.

Additionally, Tukey multiple comparison tests were performed to identify significant differences among the various pairs of decision style groups. This test was performed as an additional technique to further evaluate hypothesis two. A statistically significant difference was found ( $p<.05$ ) between the SF (mean= 5.72) and NT (mean=4.73) decision styles for scenario 3. No significant differences were found among the various pairs of decision style groups for scenario 2.

**Table 4: Statistically Significant Differences between Preferred Decision Styles**

<b>Scenario 2</b>					
Source	df	Sum of Squares	Mean Square	F Stat.	Prob. F
Between Groups	3	21.10	7.03	3.24	0.025*
Within Groups	122	264.98	2.17		
Total	125	286.08			
<b>Scenario 3</b>					
Source	df	Sum of Squares	Mean Square	F Stat.	Prob. F
Between Groups	3	15.38	5.13	3.19	0.026*
Within Groups	122	196.13	1.61		
Total	125	211.51			

\*  $p < .05$

A regression model was used to evaluate the relationships between ethical judgments and ethical behavioral intentions. Table 5 presents the results of the regression analysis.

**Table 5: Regression Analysis: Ethical Judgments Related to Ethical Behavioral Intentions**

<b>Independent Variable</b>	<b>R-Squared</b>	<b>t-Statistic</b>
<b>Ethical Judgments</b>		
Scenario 1	.6144	14.170***
Scenario 2	.6476	15.217***
Scenario 3	.6765	16.234***
Scenario 4	.6074	13.906***
Scenario 5	.4389	9.928***
Scenario 6	.4674	10.517***

\*\*\*  $p < .001$

The R-squared values ranged from 0.44 to 0.68 and all were significant at the 0.001 level. Therefore, hypothesis three was supported. These findings indicate a strong relationship between ethical judgments and ethical behavioral intentions.

### **Conclusions and Managerial Implications**

This study utilized empirically tested constructs to determine if differences in individuals' psychological types and decision styles could partially explain individuals' differences in judgments of several potentially unethical business situations. The relationship between ethical judgments and ethical behavioral intentions was also examined. Generally, the findings of this study supported the hypotheses.

First, groups of individuals with a T psychological type differed significantly from those with an F psychological type regarding their judgments of unethical business situations in five of the six scenarios. It seems rational to believe that individuals who possess a T orientation, whose mode of judgment is logical, analytical, impersonal and focused on rationality, would judge unethical situations differently than those with a F orientation, who tend to be alogical and concerned with matters of ethics and justice.

A potentially important addition to our understanding of business ethics is the finding that Ts judged unethical business situations less harshly than those with an F orientation across five of the six scenarios. While other authors (e.g., Fleming 1985; Kroeger and Thuesen 1992) have suggested a relationship between psychological type and ethical decision-making, this study expands the current knowledge by finding a directional relationship between psychological type and ethical judgment. Therefore, the T/F orientation of individuals seems to be a potentially important explanatory variable in models of ethical decision making.

Second, since the four decision styles represent very different styles of data acquisition and decision processes (Herden and Lyles 1981), differences in ethical judgments among these groups were expected. Statistically significant differences in ethical

judgments among groups with different decision style preferences were found in scenario two and scenario three.

One possible insight into this result may be gleaned from the degree of ethicalness of the issue presented in the scenario. For instance, differences in judgments among the groups for scenario number six, rated as the most unethical, did not approach statistical significance, while differences for the first five were either significant or approached significance at the 0.10 level. Thus, when a scenario is judged to be highly unethical, differences in decision styles may not be relevant. At the other extreme, individuals do not make ethical judgments in decision situations where no ethical dimensions are perceived (Hunt and Vitell 1986).

Third, a strong link was confirmed between ethical judgments and ethical behavioral intentions. This result is consistent with previous research which indicates behavioral intentions are preceded by ethical judgments and may be followed by behavior.

### **Implications for Managers**

The results of this study have far-reaching implications for management practices. The finding that individuals with a T psychological type differ significantly from those with an F psychological type regarding ethical judgments is particularly important as the United States workforce becomes more diverse. Much has been written about the current and projected changes in the U.S. workforce. As an organization's workforce becomes more diverse, management also needs to be aware of changes in the psychological type preferences of its members. If significant changes begin to develop in the psychological type preferences, these changes could have a significant impact on the organization's ethical decision-making.

A particular concern is the potential change in ethical judgments and ethical behavior that new entrants into the workforce may bring as they assume managerial positions. As these individuals join the workforce and become managers, their differing psychological types may affect ethical decision-making in organizations. As minorities and people of other cultures enter the managerial ranks, differences in their psychological type preferences may affect ethical decision-making.

Another important issue is the increased reliance on teams and teamwork and their effect on ethical decision-making. Teams comprised of various psychological types may experience conflict in making ethical decisions. Kroeger and Thuesen (1992) note that the T/F psychological types represent the most significant source of conflict among team members. Organizations should ensure that team members are prepared to effectively resolve these conflicts, which may stem from differences in psychological types.

As suggested by Fleming (1985), knowledge of differences in psychological types and preferred decision styles could be used effectively in management development programs relating to business ethics. Based on this results of this study, differences in ethical judgments of various psychological types provide new insights to managers about how ethical decisions are made. These management development programs could provide information to managers about their own ethical decision-making criteria and could also enhance their awareness of the ethical judgments of other managers. This would

result in more effective evaluation of alternatives and possibly lead to improved organizational decision-making.

How might organizations proceed to address the issues raised in this study? One recommendation is to determine the composition of psychological types and decision styles of an organization's managers and team members. This action can be accomplished by administering the MBTI periodically to managers and team members. If these personality dimensions change significantly as the workforce becomes more diverse, organizations should consider offering ethics training to ensure compliance with ethical standards such as a code of ethics.

A second suggestion is to ensure that managers and team members understand the ways that different psychological types and decision styles affect ethical decision-making. Through increased understanding of different viewpoints, managers and team members can lessen the level of conflict and may actually improve the quality of their ethical decision-making. These issues could be addressed through an organization's management development programs.

The findings of this study present important implications for managers to consider in ethical decision-making. However, the use of students as respondents may present a concern in interpretation of the findings. Though the subjects in this study were adults and primarily business students, few of the students had actual business experience. While this approach is appropriate for exploratory purposes, caution should be used in interpreting the results. Therefore, replication of this study with practicing managers would add greatly to the usefulness of the findings.

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### Appendix

Scenarios	Source
After being barred from selling in a foreign market, a bicycle manufacturing company paid a foreign businessman \$500,000 to smooth the way to sell bicycles in that country and net about \$5 million annually.	Fritsche & Becker 1983
The president of an economically hard-hit timber company planned a major timber cut, but subsequently discovered that a rare bird species would be destroyed. The president ordered the timber cut.	*
An employee revealed to a new employer critical product developments made by former employer.	Fritsche & Becker 1983
A flour milling company developed a new milling process which created more dust than emission control equipment could handle. The company ran the process on the third shift while pollution would not be detected.	Fritsche & Bekcker 1983
A personnel manager refused to prepare a plan to eliminate older managers and was fired.	*
An auto parts contractor found that a transaxle tended to fail at 120% of rated capacity. Specifications called for the part to carry 130 percent of capacity. The contractor did not reveal the test results to the car maker.	Fritsche & Baker 1983

\* Denotes scenarios chosen specifically for this study.