Chapter 3
Toward the Development of a Multidimensional Scale for Improving Evaluations of Business Ethics

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As both the subject and consequence of unethical business behavior grow in importance, so too does our need to study its antecedents, dynamics, and impacts. Several models of ethical decision-making already exist (Trevino 1986; Hunt and Vitell 1986; Ferrell and Gresham 1985) and wait to be informed and tested. Crucial to this process of testing and informing the models, which in turn leads to a better understanding of the ethical decision-making process, is a valid and reliable measuring device.

Current measurement practices are inadequate for studying this complex process. For example, a common measuring approach is to ask individuals to respond to a situation or an action having ethical consequence on a single item scale, typically, but not exclusively, anchored by "very ethical" and "very unethical" (e.g., Hawkins and Cocanougher 1972; Krugman and Ferrell 1981; George 1985; Browning and Zabriskie 1983). Variations on this type of measuring approach exist and the use of a single item measure is more pervasive than the four studies identified as examples.

The benefits of a multidimensional measure of ethics in business begin this presentation. It is followed by a brief review of the major moral philosophies that are used in the development of a multidimensional scale. The scale development procedure is described and is followed by an application of the scale. Finally, the authors identify several additional areas in which the use of the scales may prove beneficial for increasing understanding of ethical decision-making, both by researchers and practitioners.

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Value of a Multidimensional Scale

To develop a valid measure of individual ethical judgment it is important to begin with as complete an understanding of the content of the construct as possible (e.g., see Nunnally 1969). Then the breadth and complexity of the construct dictates the breadth and complexity of the measure used to capture it. A very specific and narrow construct only needs a specific and narrow measure, but a broad and complex measure needs more.

A reasonable beginning assumption is that individuals use more than one rationale in making ethical judgments, and that the importance of those rationales is a function of the problem situation faced by the individual. The result is a fairly broad and moderately complex construct. Each rationale used represents a necessary dimension in any measure that expects to capture a true sense of that ethical judgment. Thus, a multidimensional and multi-item measure seems to be needed to adequately represent this latent construct.

This approach for measuring the ethical judgment construct also allows the researcher to go beyond a simplistic understanding of "what" the respondent believes and begins the process of understanding "why" he/she believes it. It thus fosters a scientific understanding of the process. The importance of this aspect of the measure is illustrated in a later example developed in this article.

The Use of Contemporary Normative Philosophies

Following the preliminary work of Reidenbach and Robin (1988), five ethical philosophies were selected as the basis for developing the multidimensional scale. In the "Appendix" to this article each philosophy is described in moderate depth. Further, examples are provided of how the language and ideas of these philosophies have been applied in the everyday lives of individuals. The idea of the popularization of these world views is not new. The ethical behavior models of Ferrell and Gresham (1985), and Hunt and Vitell (1986) both state that such popularization exists. Further, these five philosophies encompass most of the "great" ideas for social survival, not just from the area of moral philosophy, but also from religion. Ideas of fairness, justice, contract, duty, consequence, greatest good and many others that come from the five philosophies can also be found in the Bible, the Koran, the writings of Buddha, and in other religions. Thus, the use of these philosophies provides a substantial beginning point for the development of a multidimensional scale to measure ethical judgments.

Each philosophy enjoys a well-recognized and heavily debated tradition. However, while each philosophy has its own unique conceptual core, there does exist a certain conceptual overlap among them. These major contemporary normative moral philosophies include theories of justice (Rawls 1971; Nozick 1974; Kristol 1978), relativism (Hoffman and Moore 1984, pp. 3–5; Stace 1937; Brandt 1959), utilitarianism, for which several variations exist (Smart 1973; Sartorios 1975; Singer 1976), egoism (Beauchamp and Bowie 1983; Donaldson and Werhane 1983, pp. 21–23), and deontology (Ross 1930; Kant trans. 1964).

Normative Philosophies as a Base for Measure Development

Two factors, common to all of the moral philosophies, are important to the development of measurement items. While the normative philosophies were described as "theories" in the preceding section, an important distinction between the normative and scientific use of the term theory must be made. Normative theories are prescriptive and usually not empirical, while the scientific use of the term is descriptive and at least suggestive of how the theory might be empirically tested.

Normative philosophies are idealizations much like the Ten Commandments and accordingly make much stronger statements about what ought to be rather than what actually is. This presents a problem for measure development, an activity designed to provide measures of what people believe is. When WHAT IS does not conform to WHAT OUGHT TO BE, are the measures invalid? The answer is not necessarily; no more invalid than the results of comparing measures of actual corporate behavior, for example, to codes of ethics developed by the corporation.

A second issue of using normative moral philosophies as a basis for scale development concerns the extent to which individuals are aware or knowledgeable of the different philosophies. It has been suggested that individuals, in varying degrees and extents, seem to rely, either knowingly or unknowingly, on the different strains of moral philosophy, typically teleology and deontology, for making assessments of the ethical content of a particular action (Ferrell and Gresham 1985; Hunt and Vitell 1986). The extent of this knowledge is not known. Certainly the language of some of the different philosophies, taught through fairy tales, fables, and early life experiences with family, friends, church, and other social institutions, is represented in our ethical evaluative process. The question remains, however, as to which philosophies have had the most impact on Western culture, and which have been incorporated into the ethical evaluative process of individuals.

Initial Scale Development Procedures

The development of the multidimensional scale followed the procedures outlined by Nunnally (1969), Churchill (1979), and Campbell and Fiske (1959). From a content analysis of the contemporary normative moral philosophies discussed in a previous section and in the appendix, initial items were developed (see Beauchamp and Bowie 1983; DeGeorge 1986; Donaldson and Werhane 1983; Hoffman and Moore 1984). For example, the egoist strain of moral philosophy relies heavily on the ideas

Table 3.1 A priori normative philosophy scales[a]

Justice scales:
Just/unjust
Fair/unfair
Does result/does not result in an equal distribution of good and bad
Relativist scales:
Culturally acceptable/unacceptable
Individually acceptable/unacceptable
Acceptable/unacceptable to people I most admire
Traditionally acceptable/unacceptable
Acceptable/unacceptable to my family
Egoism scales:
Self promoting/not self promoting
Selfish/not selfish
Self sacrificing/not self sacrificing
Prudent/not prudent
Under no moral obligation/morally obligated to act otherwise
Personally satisfying/not personally satisfying
In the best interests of the company/not in the best interests of the company
Utilitarian scales:
Efficient/inefficient
Ok/not ok if actions can be justified by their consequences
Compromises/does not compromise an important rule by which I live
On balance, tends to be good/bad
Produces the greatest/least utility
Maximizes/minimizes benefits while minimizes/maximizes harm
Leads to the greatest/least good for the greatest number
Results in a positive/negative cost-benefit ratio
Maximizes/minimizes pleasure
Deontology scales:
Violates/does not violate an unwritten contract
Violates/does not violate my ideas of fairness
Duty bound/not duty bound to act this way
Morally right/not morally right
Obligated/not obligated to act this way
Violates/does not violate an unspoken promise

[a]The actual form of the scale was as follows:
Just_:_:_:_:_:_:_ Unjust
The instructions that followed each scenario and preceded each listing of the 33 scale items were as follows: "Please give your beliefs to the action described in the scenario by placing a check (√) between each of the opposites that follow. Thank you"

of prudence, self promotion, acting in the best interest of the individual, selfishness, and personal satisfaction. Identifying the key concepts of each moral philosophy in this manner produced the original pool of 33 items shown in Table 3.1 along with the particular moral philosophy from which they were extracted.

As indicated earlier, each moral philosophy has a conceptual core, but certain aspects of each philosophy may embrace similar terminologies. To the extent possible, overlapping terms have been eliminated leaving those ideas and concepts which are central to a particular philosophy. The 33 items were submitted to a panel of three individuals knowledgeable of the five different moral philosophies. Table 3.1 represents a consensus of the individual judges. As a consensus it is recognized that Table 3.1 does not reflect a rigid and clearly nonexclusive partitioning of moral philosophical concepts. Such a discrete partitioning is unlikely because the terminologies of the different philosophies are not themselves discrete.

A pretest of the measure involving a sample of 218 business students was conducted. The pretest utilized the three scenarios shown in Fig. 3.1 (adapted from Dornoff and Tankersley 1975) as stimuli for the evaluation process, and the results of that effort are reported in an earlier *Journal of Business Ethics* article (Reidenbach and Robin 1988).

These three scenarios were selected because of the variety of ethical problems they presented and because of the variability of individual reactions to them. The principal purpose of this pretest was to resolve any item ambiguity or misunderstanding and to rectify any problems with the selected scenarios. Only four scale items were eliminated at this stage.

At this point the scale items were subjected to a second and third stage distillation process. Stage two involved a sample of 108 retail managers and owners divided randomly into two equal groups. One group evaluated the scenarios using the 29 items on a 5 point Likert-type scale while the other group evaluated the scenarios using a 7 point bipolar format. Factor patterns indicated that scale type did not influence the results and the 29 items were reduced to 14 items. The a priori criteria used in purging the items included: (l) consistency of the loadings across all scale/scenario data sets; (2) size of the loadings for each structure set; (3) low inter-item correlations with other dimension items; and (4) respondent's ability to apply the individual item. With respect to criteria 1 through 3, objective decision rules were developed for item deletion. Respondent debriefings and questionnaire comments also guided item classification and deletion decisions.

Three factors emerged from this stage and were subjected to a fourth distillation stage. In this iteration, 105 small business operators in a different but contiguous state evaluated the scenarios using the 14 scale items. Using the same analysis and item reduction criteria, the 14 items were reduced to 8 items, which formed the three factor structures shown in Table 3.2, and used in the current study.

Testing the Measures

Again proceeding along the guidelines established by Nunnally (1969), Churchill (1979), and Campbell and Fiske (1959), a final study testing the items was undertaken. Questionnaires were sent to 218 managers in a different type of business association

Fig. 3.1 Scenarios used in the study

Auto Scenario:

A person bought a new car from a franchised automobile dealership in the local area. Eight months after the car was purchased, he began having problems with the transmission. He took the car back to the dealer, and some minor adjustments were made. During the next few months he continually had a similar problem with the transmission slipping. Each time the dealer made only minor adjustments on the car. Again, during the thirteenth month after the car had been bought the man returned to the dealer because the transmission still was not functioning properly. At this time, the transmission was completely overhauled.

Action: Since the warranty was for only one year (12 months from the date of purchase), the dealer charged the full price for parts and labor.

Sales Scenario:

A young man, recently hired as a salesman for a local retail store, has been working very hard to favorably impress his boss with his selling ability. At times, this young man, anxious for an order, has been a little over-eager. To get the order, he exaggerates the value of the item or withholds relevant information concerning the product he is trying to sell. No fraud or deceit is intended by his actions, he is simply over-eager.

Action: His boss, the owner of the retail store, is aware of the salesman's actions but he has done nothing to stop such practice.

Retail Scenario:

A retail grocery chain operates several stores throughout the local area including one in the city's ghetto area. Independent studies have shown that prices do tend to be higher and there is less of a selection of products in this particular store than in the other locations.

Action: On the day welfare checks are received in the area of the city the retailer increases prices on all of his merchandise.

who had agreed to participate in the study. This was done to reduce any bias that might be associated with occupation. One hundred fifty-two questionnaires were returned for a 69.7% response rate. Respondents were also asked to indicate the probability of their undertaking the same action described in each scenario on a seven point scale anchored with "highly probable" and "highly improbable." In addition, respondents were asked to evaluate the ethics of the action on a seven point scale anchored with "ethical/unethical."

Table 3.2 Factor structures for the three scenarios

Variables	Factor one			Factor two			Factor three		
	R^a	S	A	R	S	A	R	S	A
Fair/unfair	0.05	0.05	0.05	0.18	0.28	0.12	0.10	0.15	0.16
Just/unjust	0.05	0.05	0.05	0.24	0.34	0.18	0.12	0.14	0.17
Morally right/not morally right	0.05	0.05	0.05	0.18	0.22	0.12	0.15	0.17	0.01
Acceptable/unacceptable to my family	0.05	0.05	0.05	0.15	0.24	0.26	0.08	0.25	0.13
Traditionally acceptable/unacceptable	0.21	0.29	0.07	0.05	0.05	0.05	0.05	0.09	0.03
Culturally acceptable/unacceptable	0.24	0.38	0.14	0.05	0.05	0.05	0.10	0.14	0.03
Violates/does not violate an unspoken promise	0.08	0.12	0.09	0.06	0.09	0.06	0.05	0.05	0.05
Violates/does not violate an unwritten contract	0.16	0.24	0.16	0.08	0.10	0.07	0.05	0.05	0.05

Percent of variance explained by three factor solution:
[a] R = Retail scenario = 80.9%, S = Sales scenario = 82.8%, A = Auto scenario = 74.0%

The scale items were submitted to a principal components factors analytic procedure utilizing a varimax rotation. A natural three factor solution, identical to the one produced in the last distillation stage and shown in Table 3.2, was generated.

The three dimensions that emerged in the evaluations of the three scenarios were then subjected to a variant of the multitrait-multimethod analysis (Campbell and Fiske 1959). The method used in this case is more appropriately referred to as a multitrait-multicontext analysis with the three scenarios representing the different contexts. This approach has precedence in the research literature (Heeler and Ray 1972, p. 365) and has been employed previously by Robertson and Meyers (1969). The purpose of both the multitrait-multimethod and multitrait-multicontext approaches is to establish convergent and discriminant validity.

The purpose of convergent validity is to confirm that the constructs or traits are independent of the approaches used to measure them. The concern is that the results are not an artifact of the measuring instrument. This concern was addressed in stage two of this analysis when a split sample produced identical results using different measurement scales. At least for the two measures tested, the constructs do not seem to be an artifact of the scaling procedure.

The multitrait-multicontext approach used in this study tests what is perhaps a more interesting and important concern. In this analysis the convergent validity question is concerned about whether the constructs or traits are dependent on the different scenarios used. The use of scenarios as "contexts" allows the researchers to introduce what is potentially greater variability than is usually used as different "measures" of the traditional approach. Thus, if the traits selected are appropriate for evaluating only one ethical situation, their usefulness is severely limited; and no convergent validity will occur in the matrix. However, if the multitrait-multicontext analysis produces a convergence of constructs, the research has exhibited the first indication that the constructs are independent of the situation to which they are applied. The benefits from developing universal constructs are apparent, and no further justification seems necessary.

Discriminant validity measures the extent to which the traits or constructs are unique, and are reflections of the same dimension. The use of either "contexts" or "measures" makes little difference to the tests of discriminant validity because the focus is on the traits or constructs. However, the application of discriminant validity tests is somewhat different in this research. Instead of totally unique traits or constructs, the intent of this research is to search for unique "dimensions" of the same construct – ethical judgment. For this reason, absolute uniqueness (discriminant validity) is not as important as in the traditional analysis. The resultant multitrait-multicontext matrix is shown in Table 3.3.

Measure Reliability

The summated item scores evidence a high degree of reliability with coefficient alphas ranging between 0.71 and 0.92 with an average reliability of 0.8 and appear along the diagonal of the matrix in Table 3.3. These reliabilities compare favorably

Table 3.3 Multitrait-multicontext matrix

		RD_1	RD_2	RD_3	SD_1	SD_2	SD_3	AD_1	AD_2	AD_3
Retail scenario	RD_1	0.92								
		(0.0001)								
	RD_2	0.46	0.80							
		(0.0001)	(0.0001)							
	RD_3	0.28	0.19	0.71						
		(0.001)	(0.01)	(0.0001)						
Sales scenario	SD_1	0.27	0.12	0.07	0.92					
		(0.001)	(NS)	(NS)	(0.0001)					
	SD_2	0.12	0.41	0.05	0.64	0.86				
		(NS)	(0.0001)	(NS)	(0.0001)	(0.0001)				
	SD_3	0.17	0.13	0.47	0.42	0.29	0.74			
		(0.02)	(NS)	(0.0001)	(0.0001)	(0.0001)	(0.0001)			
Auto scenario	AD_1	0.41	0.17	0.11	0.42	0.23	0.23	0.83		
		(0.0001)	(0.02)	(NS)	(0.0001)	(0.002)	(0.0003)	(0.0001)		
	AD_2	0.17	0.49	0.11	0.11	0.37	0.17	0.28	0.72	
		(0.02)	(0.0001)	(NS)	(NS)	(0.0001)	(0.02)	(0.0001)	(0.0001)	
	AD_3	0.12	0.12	0.41	0.12	0.02	0.45	0.24	0.04	0.72
		(NS)	(NS)	(0.0001)	(NS)	(NS)	(0.0001)	(0.002)	(NS)	(0.0001)

RD retail scenario dimensions, *SD* sales scenario dimensions, *AD* auto scenario dimensions with other tests of reliability reported in the various business literature and are certainly well above the 0.5 or 0.6 standard of acceptability established by Nunnally (1969, p. 226) for early stages of scale development.

Measure Validity

Churchill (1979) identifies four idealized criteria in the Campbell and Fiske (1959) methodology for demonstrating validity within a multitrait-multi-method analysis which are equally applicable to the multitrait-multicontext derivation of that procedure.

> (1) Evidence of the convergent validity of a measure is provided in the validity diagonal by the extent to which the correlations are significantly different from zero and sufficiently large to encourage further examination of validity (p. 71).

The coefficients in the validity diagonal are all significantly different from zero. They range in size from 0.27 to 0.49 with an average correlation of 0.41. Accordingly, there exists sufficient empirical evidence to suggest the presence of convergent validity.

> (2) Entries in the validity diagonal should be higher than the correlations that occupy the same row and column in the heteromethod (heterocontext) block (p. 71).

Inspection of Table 3.3 indicates that this condition is satisfied.

> (3) The validity coefficients should be higher than the correlations in the heterotrait-monomethod (monocon text) triangles which suggests that the correlation within a trait measured by different methods (contexts) must be higher than the correlations between traits which have method (context) in common (p. 71).

The entries in Table 3.3 satisfy this condition with two exceptions. The correlation between dimension 1 and 2 in the retail scenario and the sales scenario is greater than the corresponding correlation in the validity diagonal. We believe that in part this is due to the high internal consistency of the items but also in part to the conceptual linkage between the two dimensions. Dimension 1 is comprised of two justice concepts (fair, just), one broad-based morality item (morally right), and one relativistic item (acceptable to my family). Dimension 2 is a relativistic dimension comprised of two items, culturally acceptable and traditionally acceptable. Our notions of justice, fairness, morality and what is acceptable to our families are defined in a broader sense by what is both culturally and traditionally acceptable. In essence, dimension 1 depends in part on the parameters defined in dimension 2. Since the Campbell and Fiske methodology produces idealized criteria for discriminant validity, it is felt that this exception does not negate the conceptual arguments for validation.

> (4) The patterns of correlations should be the same in all of the heterotrait triangles (p. 71).

A visual inspection of Table 3.3 indicates that this condition is generally met. Correlations tend to be larger between dimensions 1 and 2, lower between dimensions 1 and 3, and lowest between dimensions 2 and 3. In most cases, the correlations between dimensions 2 and 3 are nonsignificant or very weak.

In sum, there exists strong but not complete discriminant validity. The fact that dimension 1 and dimension 2 are correlated suggests, in this case, a tempering relationship wherein dimension 2 helps define the meaning of dimension 1.

Dimension Identification

The three factors (Table 3.2) explain 74% of the item variance in the auto scenario, 81% of the variance in the retail scenario, and 83% of the variance in the sales scenario.

Dimension One – A Broad-based Moral Equity Dimension

Dimension one is the most complex of the three ethical dimensions. We would suggest that this dimension, comprised of the four items:

1. Fair/unfair
2. Just/unjust
3. Acceptable/unacceptable to my family
4. Morally/not morally right

Describes a broad-based, moral equity dimension. Our use of the term moral reflects the meaning ascribed to it by Tom Beauchamp (1982, p. 5).

> In its broadest and most familiar meaning morality is concerned with many forms of belief about right and wrong human conduct. These normative beliefs are expressed through such general terms as ‘good,’ ‘bad,’ Virtuous,’ ‘praiseworthy,’ ‘right,’ ‘ought,’ ‘blameworthy.’

This broad dimension is dominated by two items clearly associated with notions of the moral philosophy of justice: fair and just. In addition, it contains what has been classified as a deontological item (morally right/not morally right) and a relativistic concept (acceptable/not acceptable to my family). There is some question as to how clearly deontological the notion of “morally right/not morally right” actually is in its everyday usage. Its classification as a deontological item comes from a more theoretical interpretation made by the judges and may not reflect its more popular meaning. Consequently, it may represent a broader based notion of good and bad and may depict a more ecumenical concept of ethics than is suggested by its deontological classification. The same argument might be made for the item “acceptable to my family” which the judges classified as relativistic in a philosophical sense. Evidently, the respondents ascribed a different sense to the item, incorporating it within the more fundamental notion of moral equity along with ideas of fairness and justice.

Embedded in this dimension appears to be a basic, almost fundamental decision rule for evaluating the moral content of business situations. Decisions are evaluated essentially in terms of their inherent fairness, justice, goodness and rightness. Moreover, this dimension incorporates the idea of family acceptance. By extension, we would suggest that this dimension relies heavily on lessons from our early training that we receive in the home regarding fairness, right and wrong as communicated through childhood lessons of sharing, religious training, morals from fairy tales, and fables.

Dimension Two – A Relativistic Dimension

Dimension two is comprised of the two items:

1. Traditionally acceptable/unacceptable.
2. Culturally acceptable/unacceptable.

This, according to the judges' consensus categorization of concepts, suggests a relativistic dimension. This dimension seems to be more concerned with the guidelines, requirements, and parameters inherent in the social/cultural system than with individual considerations. These items suggest that the social and cultural systems are important in helping us define our ethical beliefs. These beliefs are relativistic in the sense that beliefs are subject to the dictates of society. It would seem, however, that the social system parameters implied in this dimension go beyond a purely legal structure of society to include a traditional, historical, and culturally learned understanding of "how the game is played." By extension, it is suggested that this is a dimension that one acquires later in the development stages as the individual experiences adequate and sufficient social intercourse to develop greater understanding of cultural and traditional norms. Depending on the universality of this dimension, it may account for differing ethical evaluations of business activities across cultures and subcultures. Trevino (1986) acknowledges the impact of culture on the ethical behavior of managers. Her propositions are limited to organizational rather than societal impacts but nonetheless define the relationship between culture and ethical behavior.

The relationship between one's societal environment and the ethical evaluative process is made more manifest in the Hunt and Vitell Model (1986) which posits an indirect relationship between cultural influences and evaluative norms. The findings in this instance suggest that beliefs about what is culturally and traditionally acceptable play a more direct role in the evaluative process. Ferrell and Gresham (1985) treat the social and cultural environment as exogenous in their model. The presence of this dimension within the evaluative structure of individuals would suggest at least a partial respecification of their model concerning the role that society and culture play in the ethical evaluative process. That is, society and culture both play a determinant role and an evaluative role.

Examination of the multitrait-multicontext matrix in Table 3.3 indicates that in two of the three scenarios (retail and sales), dimensions 1 and 2 were highly correlated. This, in part, may be explained by the high inter-item correlations among the individual variables and the relatively high coefficient alphas. This is to be expected when the construct being studied (ethical judgment) is comprised of a number of overlapping theoretical dimensions which are inherent in the different moral philosophies.

Conceptually, another plausible explanation exists for the relationship between dimensions 1 and 2. Essentially, our notions of justice, fairness, morality, and what is acceptable to our families are, in large part, tradition and culture based. Notions of moral equity are tempered by an experiential and social process bounded by our traditions and culture. Tradition and culture shape our beliefs, values, and attitudes in all aspects of life and certainly influence our notions of what are right and wrong.

Dimension Three – A Contractualism Dimension

Dimension three, comprised of the items:

1. Violates/does not violate an unspoken promise
2. Violates/does not violate an unwritten contract

is, according to Table 3.1, a purely deontological dimension wherein notions of implied obligation, contracts, duties, and rules are present. This dimension resembles most closely the ideas inherent in contractualism, most specifically the idea of a "social contract" that exists between business and society. Most, if not all, business exchanges incorporate either implicit or explicit promises or contracts. Business exchanges involve a *quid pro quo* wherein one party is obligated to provide a product, service, employment, or perform some action in return for something of value. Individuals appear to take this idea of exchange one step further to include an ethics of exchange. This broadened view of exchange includes obligations which may go beyond a purely economic nature and include notions of fair play, truth telling, duty, and rights. Violation of these implicit ideas would result in the condemnation of the exchange process or at least part of the process as unethical.

Two aspects of the three dimensions are noteworthy. First, noticeably absent from the three dimensions are ideas which are most closely associated with utilitarianism and egoism. All references to cost/benefit types of ethical calculus were purged during second and third stage item distillation procedures on the basis of minimal contribution to the explanatory power of the multidimensional measures. Moreover, in debriefing analyses it was obvious that respondents had a difficult time in understanding and applying the concepts inherent in utilitarian thinking.

Second, the items that comprise the relativism dimension appear to be both sources of and standards for ethical evaluation. That is, culture and tradition shape or define our value systems and appear also to play an evaluative role in the ethical decision-making process. An analogous situation might involve a father teaching a son right from wrong. As the son matures and confronts an action which contains an ethical dilemma, the son might ask himself, "I wonder what my father would think of me if I chose this action." In this case the father is both the source of, and a standard for, the evaluative process. This also appears to apply to the item "acceptable to my family" which loads on dimension one.

Using the Dimensions

Two tests of the measure's explanatory and predictive power using the data collected in stage four demonstrate the utility of the multidimensional scale. First, factor scores for each dimension were regressed against a univariate evaluation of the perceived ethics of the action depicted in each scenario. This procedure follows that employed in the testing of multiattribute attitude models (e.g., Wilson et al. 1975; Harrell and Bennett 1974). Factor scores were used instead of the sum- mated item scores because of the inherent multi- collinearity present among the dimensions of the same construct and its resultant obscuring effects when attempting to establish the respective roles of each.

Second, the scores indicating the intention of individuals to act in the same manner depicted in each scenario action were also regressed against the factor scores for each dimension. The results of these two multiple regressions are shown in Table 3.4. The three dimensions comprising the overall ethics construct explain 79, 55, and 83% of the variance in the univariate measure of ethics with an average R^2 of 0.72. Thus, the three dimensions capture, on average, 72% of the variance in the univariate evaluative variable, further suggesting strong evidence of construct validity. Moreover, the beta weights shed some additional light on the role that each dimension plays in the evaluative process.

Dimension 1, the broad-based moral equity dimension, has the greatest relative impact in the evaluative process. Dimensions 2 and 3, the relativistic and contractualism dimensions respectively, play lesser roles. This relationship supports the idea mentioned earlier that these two dimensions temper or support the principal evaluative role of Dimension 1. In other words, the broad-based moral equity

Table 3.4 Dimension relationships with univariate ethics measure and intention scores

	Ethics				Intention			
	R^2	B_1	B_2	B_3	R^2	B_1	B_2	B_3
Sales	0.79 (0.0001)	0.82 (0.0001)	0.26 (0.0001)	0.23 (0.0001)	0.29 (0.0001)	0.46 (0.0001)	0.25 (0.0005)	0.16 (0.03)
Auto	0.55 (0.0001)	0.68 (0.0001)	0.21 (0.0004)	0.18 (0.003)	0.39 (0.0001)	0.57 (0.0001)	0.21 (0.003)	0.14 (0.05)
Retail	0.83 (0.0001)	0.87 (0.0001)	0.18 (0.0001)	0.17 (0.0001)	0.34 (0.0001)	0.57 (0.0001)	0.11 (NS)	0.11 (NS)

dimension is the principal evaluative dimension aided by notions of relativism and contractualism. The second and third dimensions seem to become more or less important depending on the nature of the ethical problem. However, the dominance of the first dimension is intuitively understandable in making an ethical/unethical evaluation since it seems to represent a less specific and broader based moral judgment criterion. Moreover, its impact is congruent with the propositions concerning the role of justness and fairness posited by Kohlberg (1976, Chapter 2).

Dimension Roles in Predicting Behavior Intentions

Table 3.4 also offers evidence of predictive validity of the three dimensions in "explaining" an individual's intention to behave in the same manner as depicted in the action statements of the scenarios. R^2s ranged between 0.29 (sales scenario) and 0.39 (auto scenario) with an average R^2 of 0.34. On average then, the measures explain 34% of the variance in the managers' intention to behave in the same manner as the scenario action described.

While Trevino does not incorporate behavioral intention in her model, the Hunt and Vitell model posits that individual intentions are a function of ethical judgments. The Ferrell and Gresham model, on the other hand, suggests that other cognitive factors such as knowledge, values, and attitudes and significant others, as well as opportunities, impact the individual's intention to behave. Empirically, the measures explain only a portion of an individual's intention suggesting that other variables or other ethical evaluative criteria do come into play in predicting intention. Looking at the relative contributions of the three dimensions indicates that Dimension One, the broad-based moral equity dimension, as would be expected, makes the largest relative contribution in all three scenarios and again seems to be tempered by the second and third dimensions.

For example, in the scenario judged most unethical, the retail scenario, behavioral intention was due almost exclusively to dimension one. Neither the idea of social contract nor cultural acceptance seemed important in deciding if managers would behave in the same manner. However, these beliefs did play a role in helping to understand behavioral intention in the other two scenarios. In the least unethical scenario (sales) the relativistic dimension exerted its greatest impact in explaining behavioral intention. In this scenario the employee was simply overeager, and the manager was unwilling to correct the behavior. A greater degree of social acceptance for the behavior of the employee is easy to justify in this scenario and so is the role of that acceptance in understanding intention. Similarly, the idea of a social contract seems to mediate behavioral intention in both the sales and auto scenario. In both of these scenarios the managers seemed to believe that an implied (unspoken/unwritten) promise or contract existed and that its existence influenced their behavioral intention. In the auto scenario an actual contract did exist in the form of a warranty which was never fulfilled. In the sales scenario the implication is that there does exist a social contract between business and its customers not to cheat them.

Table 3.5 Difference in explanatory power of multidimensional scale items over univariate measure

Scenario		Intention
Sales (least unethical)	Univariate	0.28
	Multidimensional	0.29
	Difference	+0.01
Auto	Univariate	0.22
	Multidimensional	0.39
	Difference	+0.17
Retail (most unethical)	Univariate	0.17
	Multidimensional	0.34
	Difference	+0.17

One final indication of the utility of the multidimensional measures is evidenced by the increased power in explaining behavioral intentions they afford over the univariate measure of ethics. Behavioral intention R^2s for the univariate measure are compared with those of the multidimensional measures in Table 3.5.

In two of the three cases, the multidimensional measures explained a substantially greater amount of variance in the intention scores. In only one case, the sales scenario, which was judged least unethical by the respondents, was there essentially equal explanatory power. In the scenario judged most unethical (retail) the scales doubled the explanatory power of the univariate measure. Within the limited context of these three scenarios, this finding suggests that the predictive power of the multidimensional measure is directly related to the perception of the ethical consequences.

Conclusions and Recommendations for Future Research

This study has presented a multidimensional scale evidencing substantial reliability and validity for evaluating the perceptions of the ethical content of business activities. The items and dimensions that make up this scale are shown in Table 3.6. The procedure used to develop the items suggests that they represent a set of ethical evaluative criteria with general application.

The three positive dimensions do not correspond strictly to the normative moral philosophies and tend to disagree with several of the hypothesized relationships in recently developed models of ethical decision-making. This finding is not surprising since the models are based on normative moral philosophies which represent idealized prescriptive sets of norms rather than positive descriptive sets of evaluative criteria.

The potential applications of this scale to the study of business ethics are manifold, but future users must proceed with the caution due any new measuring instrument. Psychometric measures more realistically evolve rather than burst forth full blown and complete. While these scales have been through four developmental stages, the validation and development process is never ending.

Table 3.6 The proposed multidimensional ethics scale

Construct 1 – The broad-based moral equity construct		
Just	– – – – – – –	Unjust
Fair	– – – – – – –	Unfair
Morally right	– – – – – – –	Not morally right
Acceptable to my family	– – – – – – –	Not acceptable to my family
Construct 2 – The relativist construct		
Culturally acceptable	– – – – – – –	Culturally unacceptable
Traditionally unacceptable	– – – – – – –	Traditionally unacceptable
Construct 3 – The social contract construct		
Violates an Unspoken promise	– – – – – – –	Does not violate an Unspoken promise
Violates an Unwritten contract	– – – – – – –	Does not violate an Unwritten contract

The findings do present the opportunity to inform the various ethics models, principally with regard to the combinatorial process involved in making ethical evaluations. While an identifiable but limited deontological dimension was found, the results do not support the contention that individuals rely upon a set of teleological principles (utilitarian or egoist) in making ethical evaluations. Instead, individuals tend to rely on a broad sense of moral equity dominated by concerns for fairness and justice, tempered by relativistic and social contract dimensions.

Another interesting application of the scales is to examine their potential relationship between an individual's ethical evaluative criteria and their stage of moral development. Studies specifically examining the linkages between moral development and resulting sets of evaluative criteria might enhance the predictability of Kohlberg's work. The dominance of the ideas of fairness and justice in dimension 1 is congruent with the notion of Kohlberg that these two concepts are involved in all ethical decision-making regardless of stage of moral development. This finding provides some support for the Trevino model. The use of the three different scenarios to provide varying contexts for testing the scales and the consistent performance of the dimensions with respect to the differing contexts suggests that the measures are situation independent. It seems plausible that the dimensions could maintain their validity across a wide variety of business ethics applications, but this requires continual testing. If the measures are independent of context, then the diversity of potential applications expands gready.

For example, managerial applications of multiple context scales might provide an aid in conducting ethical audits, a tool in addressing specific ethical problems, a means of sampling customer, employee, community, and industry reactions to determine if corporate values are maintained by employees and an aid in designing ethical training for business personnel. The scales would seem to be useful when incorporated within the "parallel planning systems" approach proposed by Robin and Reidenbach (1987). Information is needed to develop their "ethical profile", to "identify impacted publics", to determine "actionable ethical core values", to "enculturate-integrate core values into the corporate culture", and to "monitor and control… for ethical effectiveness" (pp. 52–56).

Further, the multidimensional nature of the scales can provide information as to why a particular business activity is judged unethical. Global measures cannot provide this information. Specifically, the use of the scales can give a manager insight as to whether the activity contemplated or undertaken is perceived as fair, just, or whether it violates certain cultural or traditional values. This latter information would be particularly beneficial in multinational business settings as would that concerning the ideas of contracts and duties in dimension three, which might vary significantly from country to country.

Appendix

Five Ethical Theories

Each of the following ethical theories seems to provide important ideas and language for modern societies. It is that characteristic that made them the beginning point for this research.

Justice Theory

Much of the most influential and fundamental concepts of justice theory comes from the writings of Aristotle. He developed the "principle of formal justice" which states simply that equals ought to be treated equally, and unequals ought to be treated unequally. It provides a minimum rule of justice, but it does not explain how to determine equality or how to proportion when people or performances are unequal. To establish the latter, philosophers often refer to six principles of distributive justice, usually recognizing that others could be added to the list. These six principles are: (l) to each person an equal share; (2) to each person according to individual need; (3) to each person according to that person's rights; (4) to each person according to individual effort, (5) to each person according to societal contribution; (6) to each person according to merit (Beauchamp and Bowie 1983, pp. 41–42).

It is not necessary that a society adopt one principle of distributive justice and exclude the others. Societies often use different principles in different situations. For example, in the United States transfer payments to the poor and unemployed are based on some measure of need, while promotions and salary increases are usually based on merit. In still another application, it is society's intention to provide an equal opportunity for public education to all.

Finally, there is the concept of procedural justice. As the name implies, its purpose is to develop rules or procedures that result in fair or just outcomes. There are three forms of procedural justice – "pure," "perfect," and "imperfect." if the rules, as in a game, guarantee just outcomes in every occurrence, they produce "pure" procedural justice. "Perfect" procedural justice provides a fair result in every case. In "imperfect" procedural justice the rules represent the best attempt to produce fair results but sometimes the outcomes are unjust.

The moral development literature of Kohlberg relies heavily on concepts of justice. It permeates all six of their stages and the last three stages are tied to specific concepts of justice (Rest 1979, pp. 35–36). Their stage four, law and order, can be paired with the idea of "formal justice." Their stage five fits nicely with the concepts of "procedural justice" described above, and they match stage six with what is called "substantive justice." Thus, this literature relies heavily on concepts of justice.

Relativism

The basic concept of relativism is that all normative beliefs are a function of a culture or individual, and therefore, no universal ethical rules exist that apply to everyone. The argument continues that since ethical rules are relative to a specific culture, the values and behavior of people in one culture need not govern the conduct of people in another culture. Varied and apparently contradictory values between many cultures have been reported by anthropologists, and this evidence is offered as a justification of relativism. The concept of cultural relativism has been extended to ideas of individual relativism in which the value differences of individuals are recognized. In this form, fundamental and ultimate disagreements between individuals, or an individual and his/her society, are cited as the reason for believing in the concept.

Arguments against relativism seem to be preferred over the preceding arguments by most ethicists. One argument against relativism is simply that, as a philosophy, it does not achieve the main task of ethics. That main task is described by J.S. Mill and Aristotle as the development and maintenance of conditions that allow people to pursue a stable and happy life. A somewhat different view comes from Kant who believed that the objective of ethics is to create a "good will" toward others. Relativism, according to its critics, is not likely to achieve these objectives.

Other arguments against relativism suggest that there is no real basic difference between moral beliefs, in spite of the findings of the anthropologists. This argument is based on the common needs and fears of humans, and suggests that if researchers dug deep enough in trying to understand why different beliefs are held, they would reach a point where the basic rationales were the same. Still another argument against relativism is that, even if a belief or behavior is accepted in a society, that doesn't mean it is right. Additional arguments exist but these are sufficient to explain why philosophers have not fully adopted the relativistic arguments. Even so, many of these philosophers also recognize that unresolved disagreements in moral beliefs may be inevitable (Brandt 1959, pp. 100–103, 285–288).

Many managers cite as a defense against alleged unethical behavior in international settings, the cultural differences in methods for doing business. "La mordida" or "baksheesh" – bribery or kickbacks – are two culturally acceptable behaviors in some countries. Specifically, this justification was used by Boeing in defense of its actions in Japan.

Deontology

Deontology suggests that individuals have a duty, the root word for the term, to satisfy the legitimate claims or needs of others as determined by applying logic to an ethical rule. These duties to others are many and diverse. Under this philosophy it is our duty to pay our debts, care for our children, and tell the truth because it is the "right" thing to do. The most prominent ethical rule comes from Immanuel Kant and it's called the "Categorical Imperative" (Immanuel Kant, *Foundations of the Metaphysics of Morals*, Beck, trans., 1959, pp. 9–28). The most popular formulation says, "I ought never to act except in such a way that I can also will that my maxim should become a universal law." With this rule and the use of logic any action can be evaluated to determine if it is ethical or unethical. These duties on the part of one individual toward another create rights for the other. Thus, the duty of parents creates rights for children, and the duty of debtors creates rights for the lender. A popular understanding of these ideas comes to the general public through the church, the Bill of Rights, the boy and girl scout pledges, and even the military (duty, honor, country).

Deontology may be the most preferred ethical philosophy today, but it also has its critics. The most important complaint against deontology is that, whatever rule might be constructed, exceptions can almost always be found to be necessary. Applying the categorical imperative and logic, most people would agree that lying is unethical. However, it is easy to imagine situations in which lying seems to be the most ethical thing to do. W. D. Ross (1930) gave one solution to this problem by suggesting that the rules created are *prima facie* and that we should recognize exceptions. In effect, this approach shifts the burden of proof to the individual that would break the rule.

An interesting adaptation of Kantian Deontology was developed by John Rawls. His approach has become labeled "contractarianism" or "contractualism" because of the manner in which he uses the idea of a social contract. Bayles and Henley (1983) describe the connection as follows:

> The contemporary American philosopher John Rawls, for instance, has developed an account of justice that has roots in Locke, Rousseau, and Kant. The guiding idea behind this account is the social contract in a form similar to that underlying the fifth formulation of Kant's categorical imperative: 'Every rational being must act as if he, by his maxims, were at all times a legislative member in the universal realm of ends.' In this formula Kant uses the conception of the social contract found in Jean-Jacques Rousseau (1712–1778), although he interprets it in his own distinctive way. (pp. 59–60)

Teleology – Egoism

Teleological, or consequentialist theories include all of those theories that measure morality based on the consequences of actions. The two most commonly discussed teleological theories in modern philosophy can be illustrated by asking if evaluation of the consequences should focus solely on the individual or if the evaluation should encompass all of society. If the answer is that the evaluator should consider only the consequences to the individual, then the ethical theory is called egoism. If the answer is to consider all of society, then the theory is called utilitarianism.

One presentation of egoism suggests that an act is ethical when it promotes the individual's long-term interests. There are many variations of the theory which focus on short-term hedonism, or in the case of psychological egoism, which contends that everyone is psychologically programed to behave only in their own self interest. However, the presentation of egoism using long-term interests is taken most seriously by modern philosophers. In this formulation, it is possible for an individual to help others, help formulate and follow the rules of society, and even give gifts if that person feels that those actions are in his or her own best interests. It should also be noted that the theory states that people *should* behave as egoists and not that they *do* behave that way.

The philosophy of ethical egoism is usually attacked on the basis that it ignores what most people would agree are blatant wrongs. It also has no way of solving conflicts of egoistic interests, and therefore like relativism, does not satisfy the goals of ethical philosophy. Egoism has been important in business because of the well-known work of Adam Smith who believed that through an "invisible hand" businesses operating in their own self interest would produce the greatest economic good for society. The concern for society is utilitarian, and Smith's work provides a link between the two teleological theories.

Teleology–Utilitarianism

Utilitarianism is the teleological theory which states that individuals should act so as to produce the greatest possible ratio of good to evil for all of society. It forces the actors to consider all of the outcomes of their action or inaction and to weigh one against another to determine that which is best for society. Since one action is compared to another, utilitarianism promotes efficiency. That is, a less efficient action is likely to produce less utility than a more efficient action, and is therefore less ethical. As suggested in the preceding section, much of the justification for capitalism is based in utilitarianism. In addition, the general public learns about the ideas of utilitarianism through the concept of the democratic process which focuses on majority rule.

The two most important complaints against utilitarianism are that it is impossible to project and measure the consequences of many important actions, and that important harms to individuals or small groups can be averaged with small gains to a large number and appear to be acceptable. The first complaint is less troublesome because individuals are constantly making important decisions with less than perfect information. The second complaint has caused an important problem for the theory, and even though it still has a large following among philosophers, the theory has lost some stature because of its failure to deal with the complaint.

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