ABSTRACT. This study examines the effects of demographic characteristics on ethical perceptions. While earlier research has produced conflicting results regarding the predictive power of these variables, significant and definite insights were obtained with proper controls. The following predictors of ethical attitudes are examined: age, gender, marital status, education, dependent children status, region of the country and years in business, while controlling for job status. A nation-wide random sample of employees was used in obtaining a response rate of fifty-three percent (total n of 423). Indices of aspects of business ethical attitudes were constructed using factor analysis. Linear multiple regression analysis indicated the significant predictive variables. Age was found to be a most-significant predictor. Older workers had stricter interpretations of ethical standards. Gender and region predicted attitudes about job-discrimination practices only, with women and persons from the Midwest most strongly opposed to the practice. All the other variables proved to be unreliable ethics predictors.

#### Introduction

This research analyzes the predictors of ethical attitudes by workers within small-business organizations. Previous researchers have reported diverse findings as to what constitutes influence upon ethical standards in a business organization. Unfortunately, many research projects have not carefully controlled for sociodemographic factors in the prediction of ethical attitudes.

This investigation examines sociodemographic differences in ethical viewpoint while controlling for

Paul Serwinek is a researcher affiliated with Wayne State University. He has done extensive research in business management and consulting work in the field of insurance agency employee job satisfaction. factors previously neglected. In addition, the study focuses on small-business organizations and the insurance industry, both of which have been neglected in past research.

Questionnaires were mailed to a sampling of employees from several hundred insurance agencies throughout the United States. They were directed to employees in various job classifications in each of the agencies chosen. Demographic data and opinions regarding business ethics were obtained. Data analysis focussed on the correlations among ethical perceptions and various demographic and situational variables.

There were several ways in which this study was a departure from previous work. We resolved to develop a survey that would allow respondents to express their feelings on ethics and minimize the effects attributable to their being self conscious of their attitudes. Therefore, we were careful not to highlight the word "ethics" in the survey and deliberately interspersed questions unrelated to ethics throughout the study so subjects would not detect that the major thrust of the study was ethics research. Past studies generally have not considered the possibility of an unintentional interaction.

This study is also unique in that it has developed indices to measure differences in ethical perceptions. Previous studies have employed one composite index or presented results question by question. By dividing attitudes about ethics into various indices, aspects of ethical concern are revealed, more so than if one composite index were employed. Since business ethics is comprised of various facets, such as sales ethics, company policy ethics, misuse of responsibility, and others, a more-focussed picture is obtained by using a series of indices rather than just one. On the other hand, broader, more general conclusions are possible when results are presented

in terms of indices focussed on particular aspects of business ethics rather than presented in terms of responses to many unrelated questions.

## Justification for study

Several suggestions were taken into consideration in designing our study. Major and Deaux (1980), in their review of literature on justice behavior, a division of ethics study, state, "Consideration of demographic variables other than sex has been limited. Age differences have commanded the most attention, and a small set of studies has dealt with nationality differences." Being cognizant of this, we have included such demographic factors as education, marital status, the having of dependent children, work experience, job position and region of the country (USA) in conjunction with age and gender effects.

The lack of systematic observation of adequate sampling size and the use of non-generalizable samples in past work first convinced us to pursue these investigations in the research design. Many studies on ethics have limited their subjects to college students, such as Boyd (1981) and Arlow and Ulrich (1980). Due to the narrow age group, education level and other factors involved, it would be impossible to generalize these studies, since such an extension beyond college students would be a breech of the randomization and representation rules of scientific research. Also, students were asked to make recommendations on potential justice conflicts in business settings in which they had had minimal actual experience at best.

Furthermore, current research on ethics differences has been conflicting. For example, for every study that professes proof that gender does effect ethical viewpoints, another can be found to substantiate the counter view. Beltramini et al. (1984) used college students as subjects to suggest that female college students were more concerned with ethical issues in business than males were. Ferrell and Skinner (1988) and Akaah (1989) suggest that females employed in the marketing industry evince higher ethical attitudes than males do. On the other hand, Hegarty and Sims (1978) found no such difference. Kidwell et al. (1987) also found no differences in ethical standards.

Whenever results are conflicting, the problem can usually be traced to faulty methodology (Babbie, 1986). Our review of these studies leads us to conclude that the lack of proper controls for extraneous factors is the common oversight.

Some researchers have used simple ANOVA to uncover any differences in perceptions. However, a simple analysis of variance does not control for confounding factors. A cursory comparison of average values does not take into account age differences, job-status level or position in the company. Only by demonstrating statistically that the known other independent variables have been taken into consideration can a conclusion be drawn. This does not appear to be the case in previous studies. Our use of regression models that included numerous control variables, we believe, has corrected past oversights.

## Methodology

We contacted a national association of independent insurance agents for permission to use its mailing list. From the list, using a random-number table, we selected over two hundred agencies which adequately represented all regions of the country (USA).

Our next project was to phone each of these agencies individually and procure the names of four persons from each agency. Of 231 individual agencies contacted, 21 did not wish to participate and there was no pattern to the rejection rate notable. We secured the name of a Customer Service Representative, an outside sales producer, an owner or principal of the agency and an inside office worker from each office. Customer Service Representatives are in-office personnel who assist clients calling in with questions about their insurance policies. A sales producer is an outside-the-office insurance sales person. A principal is an owner of the agency whether a sole proprietor, a partner or a corporate stockholder who has management responsibilities in the agency. An inside office worker might be a bookkeeper, receptionist or file clerk. We followed a routine of asking specifically for the names of all employees in a particular subclassification in each of these four groups. One name from each of these four groups was randomly selected to be sent a questionnaire. This procedure yielded a total of 794 names, four from each of 210 separate small businesses

(some agencies had less than four employees, however). The responses from each category are found in Table I.

## Questionnaire construction

While preparing a useable survey instrument, we searched the existing literature for a wide variety of ethical situations to expose our respondents to. We included questions related to marketing, advertising

practices and selling situations. Questions were posed relating to office-work practices and work habits on the job. All types of situations were included to provide a good mix and allow for exposure to diverse ethical issues. These questions on ethics were interspersed with questions regarding job situations, employee benefits and office procedures. However, questions regarding serious illegal activities were not included since we realized very little variation in responses could be expected with such topics. To reveal the levels of perception in each

TABLE I Sample date overview

Small Businesses Businesses Part Rejection Rate	1 0	1%	Questionnaires Sent 794 Responses (total n) 421 Response Rate 53.0%			
		% of			% of	
Age Distribiton:	п	Total	Years in Business:	n	Total	
Under 30	107	26.2	1 year	21	5.1	
31-45	199	48.7	1-3	62	15.1	
4660	87	21.3	3-10	118	28.9	
60+	16	3.9	11-20	136	33.3	
Left blank	12		22+	71	17.4	
		% of	Left blank	13		
Sex:	п	Total			% of	
Male	149	35.9	Region:	n	Total	
Female	266	64.1	East	101	24.5	
Left blank	6		South	86	20.9	
		% of	Midwest	122	29.6	
Education:	n	Total	Southwest	53	12.9	
Less than high			West	50	12.1	
school graduation	1	0.2	Left blank	9		
High school graduate	108	26.3			% of	
Some college	160	39.0	Marital Status:	n	Total	
College graduate	96	23.4	Single	56	13.7	
Some graduate school	28	6.8	Married	298	73.0	
Graduate degree	17	4.1	Divorced	44	10.8	
Left blank	11		Widowed	10	2.5	
		% of	Left blank	13		
Job Status:	n	Total				
Clerical	71	17.2	Dependent Children		% of	
CSR	100	24.2	in Household:	n	Total	
Manager	66	16.1	Yes	232	56.9	
Sales	65	15.7	No	176	43.1	
Owner	111	26.9	Left blank	13		
Left	8					

situation, we used a five-point Likert-type format that was similar to the scales used by most of the previous researchers from which we took suggestions.

Most individual question scales used to measure attitude toward ethical situations had been used in previous studies. We merely substituted the word "agency" for "company" and "producer" for "salesperson" and generally used the vernacular of the insurance industry in identifying ethical dilemmas. The questions used were suggested by the contents of survey questionnaires sent out by Kidwell et al. (1987), Wood et al. (1988), Brenner and Molander (1977), and again by Vitell and Festervand (1987). Since questions similar to the type we chose had previously been used, and no ambiguity or difficulty in interpretation was reported, we felt confident our questionnaire would be similarly received, but a pretest of the questionnaire was conducted to verify this.

#### Index construction

All questions were consciously constructed to elicit responses that could be recorded in terms of interval data. Responses in increments from "very unethical" or "not at all unethical" could be indicated by numbers from one to five or one to seven. It is generally acknowledged that data in this format is interval data. With interval data, we were in a position to construct indices that could be manipulated mathematically including the obtaining of standard deviations, correlations, factor analysis and regression equations.

An initial step in index construction was to ascertain which variables were correlated, the degree of correlation and the relationship among the correlated variables. To this end, we ran correlation matrices using twenty-one variables. We divided these variables into two sets corresponding to the two sets of ethical questions arranged in the questionnaire. Correlations were generally quite high.

Next, we took the variables and subjected them to factor analysis. The first indication was of five factors. After a Varimax Rotation, clearly distinct factors emerged (Tables II and III). Each item in each factor was significant at the 0.001 level.

One factor included questions on Padding of an

TABLE II
Final factor analysis for office thics variables
SPSS/PC+
FACTOR ANALYSIS

Varimax Rotation 1. Extraction 1. Analysis 1 — Kaiser Normalization Varimax converged in 3 iterations

Rotated Factor Matrix:

	Factor 1	Factor 2
EXPAD	0.88814	0.08464
CREDIT	0.79136	0.29759
PADDING	0.79122	0.04050
FALSIFY	0.78522	0.36673
PREFER	0.67600	0.33899
ERROR	0.51991	0.49979
PERSBUS	0.19076	0.73648
TIME	0.32038	0.73046
REPORT	-0.06040	0.67971
SUPPLY	0.39447	0.66949
WORK	0.21698	0.65347
SICK	0.50019	0.54074

Factor 1: TIETHIC: Index of Company Rules & Job Time Useage

Factor 2: OFETHIC: Not Used

Expense Account Greater than Ten Percent, Falsifying Time or Quality Reports and others. However, when regressions were run using the demographic variables as independent variables, these demographic variables did not significantly explain this index so the index was discarded as a test variable.

A contrast is clearly seen when comparing this first factor to the second factor that emerged (Table II). The second factor involves six items that could be considered relatively minor unethical behavior that in all cases could be conceived of as infractions of office rules. Another individual or fellow worker, if any of these behaviors were engaged in, would not be directly hurt. This factor includes taking long lunches and calling in sick to have a day for personal use, among other situations. This index was used to compare attitudes toward minor infractions of stated or implied company rules and misuse of time on the job. This factor is referred to as factor 1 (TIETHIC).

The same procedure was followed using a second

TABLE III
Final factor analysis for sales ethics variables
SPSS/PC+
FACTOR ANALYSIS

Varimax Rotation 1. Extraction 1. Analysis 1 — Kaiser Varimax converged in 5 iterations. Normalization.

Rotated Factor Matrix:

	Factor 1	Factor 2	Factor 3
ELIM	0.81929	0.06130	0.17828
DISADV	0.76460	0.06565	0.12587
ADVERT	0.75821	0.15915	0.06436
INVEST	0.44374	0.37594	0.06973
XMAS	0.02829	0.73458	0.26535
SOFTW	0.23118	0.69185	0.08817
PAD	0.06720	0.66974	0.17288
FRIEND	0.07450	0.24425	0.83765
MALE	0.24931	0.04801	0.81182

Factor 1: SAETHIC - Sales Ethics

Factor 2: MOETHIC - Questionable Monetary Gain

Factor 3: DISETHIC - Job Discrimination

set of nine variables that had been grouped together in our questionnaire. The first of these factors (Factor 2) in Table III included a grouping of sales situations that included scenarios such as an insurance agent recommending to his client a life-insurance policy that he himself did not consider to be a good investment, or an agent advertising a low price on auto insurance in the newspaper but failing to mention the price only applied under special circumstances. All are rather devious practices, although none is a practice that could be conceived of as illegal.

The next factor (Factor 3) that emerged from a factor analysis included situations where monetary savings or income protection was involved (Table III). The scenarios included the practice of sending expensive Christmas gifts to the purchasing agents of customers as an inducement to continue doing business with the insurance agency and the case of an agent making a copy of a copyrighted software program obtained from a friend for personal usage. These are all examples of taking liberties to save money or protect money. Two of the three might be considered illegal, but the chances of getting caught

are slim, and the possible punishment would probably be minor. The motivation in all three cases is monetary savings, gain or income protection.

Finally, the last factor (Factor 4 in Table III) related several hiring or job promotion practices. We had presented two examples of potentially unfair situations that could easily arise in an office setting. These are shown to be correlated.

To verify that these indices well represent the individual variables that comprise them, we ran correlation tables showing the relation of each composite index to each component. These matrices demonstrate a very high level of correlation ranging from 0.6130 to 0.8662 all significant to 0.001.

The composite indices that emerged can be summarized here. Each factor was used as a separate index to gauge ethical perceptions in a particular facet of ethics study.

Factor 1. TIETHIC: Index of Company Rules and Job Time Usage.

(PERSBUS) Doing personal business on company time

(TIME) Taking extra personal time (long lunches, late arrivals or long coffee breaks)

(REPORT) Not reporting others' violations of company rules and policies

(SUPPLY) Using company materials and supplies for personal use

(WORK) Not working up to one's usual ability

(SICK) Calling in sick to take a day off for personal use

Factor 2. SAETHIC: Index of Sales Ethics.

(ELIM) An agent eliminated a coverage from his price quotation so that his price quotation compared more favorably with his competitor's

(DISADV) An agent failed to volunteer information on the disadvantages of his product or policy unless the client specifically asked

(ADVERT) An agency advertised a low price on auto insurance in the newspaper but failed to mention this price only applied under special circumstances

(INVEST) Because of pressure from one of his

companies, an agent recommended a type of life insurance policy which he did not consider a good investment

Factor 3. MOETHIC: Index of Questionable Monetary Gain.

(XMAS) An agency president recognized that sending expensive Christmas gifts to purchasing agents might compromise their positions. However, he continued the policy since it was common practice and changing it might result in loss of business

(SOFTW) An agency owner obtained a free copy of a copyrighted computer software program from a friend rather than spending \$500 to obtain his own program from the software dealer

(PAD) An executive earning \$50 000 a year padded his expense account by \$1 500 a year

Factor 4. DISETHIC: Index of Unethical Job Discrimination and Favoritism.

(FRIEND) An agency principal promoted a loyal friend and competent manager to the position of vice president in preference to a better qualified manager with whom he had no close ties

(MALE) An agency manager received applications for a supervisor's position from two equally qualified applicants but hired the male applicant

because he thought that some em-

ployees might resent being super-

Testing procedure

After each of our indices was derived, each was used as the dependent variable in a set of regression equations. In these regression equations various combinations of demographic and job-related variables were used as the independent variables. Each equation was generated by entering all independent variables simultaneously. This procedure provided

vised by a female

for the controlling of the independent variables automatically. Each composite index was alternately treated as the dependent variable, and we used the regression equations generated to test our hypotheses. Hypothesis testing was accomplished by examining whether each composite index was significantly explained by the combination of independent variables used and by determining which independent variables significantly contributed to the explanation of the dependent variables.\*

## Research findings

Age

We expected to find that age was a strong predictor of ethical attitude. Previous studies (Burnett and Karson, 1987 and Posner and Schmidt, 1984) indicated that older people are more conservative in their ethical viewpoints. We found that for two of four indices, age differences did indeed explain variance in ethical viewpoints. Age is a significant predictor of these indices: Questionable Monetary Gain and Index of Company Rules along with Misuse of Time on the Job. However, age is not related to the index of Office Discrimination Ethics or Sales Ethics. These findings are in line with previous research findings.

Table IV presents data indicating that two of the four indices of business ethics are significantly influenced by age. Our research verifies that in general, as the age of respondents increases, subjects appear to become more conservative in their ethical attitudes. Younger employees tend to have a more liberal view of potentially unethical situations. However, the leaning of employees regardless of age is generally in the same direction with the older worker being somewhat more adamant about his or her opinion.

This phenomenon is to be expected. In general, older individuals tend to be more conservative than younger ones. This is true not just in ethical interpretation, but in styles of dress, in leisure activities and in financial investments, for example. So it is no surprise that older workers tend to be more conservative in their ethical interpretations. They are more adamant as to what should be considered acceptable behavior (Brenner, 1988).

TABLE IV
Ethics regression models using demographic factors as independent variables

	Sales Ethics		Questionable Monetary Gain		Office Discrimination Ethics		Company Rules & Time on the Job	
	В	T	В	T	В	T	В	T
Age	-0,4674	-1.373	-1.5414	-4.583 <b>***</b>	0.0642	0.275	-1.2217	-2.602***
Sex	-0.4006	0.634	0.6753	1.082	1.4167	3.268***	0.5742	0.659
Education	0.2477	0.830	-0.0442	-0.150	0.1267	0.619	0.6475	1.573
Marital Status	0.8512	11.823	-0.2020	-0.438	0.3143	0.981	0.4822	0.749
Job Status	0.6214	1.071	0.3478	0.607	0.1414	0.355	0.6277	0.784
Years in Business	-0.5286	-1.714	0.0519	0.169	0.2047	0.958	-0.1568	-0.365
Dependents	0.7475	1.820	-0.7093	-1.747	-0.2069	0.734	-0.8033	-1.418
South	0.0620	0.109	-0.4614	-0.438	-0.5514	-1.414	0.2600	0.332
Midwest	-0.5286	-1.021	-0.8255	-1.614	-1.3837	-3.896***	0.2072	0.290
West, Southwest	-0.4486	-0.814	-0.2235	-0.410	-0.6202	-1.640	0.8730	1,148
Constant	4.6692	1.36121***	11.4719	1.34508***	1.6989	1.69896	14.877	1.8775***
$\mathbb{R}^2$	0.0617		0.1022		0.1644		0.0725	
F	2.2299		3,8606		6.6725		2.6512	
F Significance	0.0159		0.0001		0.0000		0.0040	

Significance: \* = less than 0.05; \*\* = less than 0.01; \*\*\* = less than 0.001.

A number of reasons can be given for the increase in the conservative position on ethics held by persons as they age. These can be summarized by referring to them as social influences. One explanation involves the influence of norms. Norms are necessary for the survival of any organization. The continuation of the existing social order depends on the publication of and adherence to social norms. These norms are taught in families, in schools and even television entertainment is permeated with examples of implied ethical standards. The older a person is, the more s/he has been exposed to either overt or implied ethical standards. An older person, having been exposed longer to such standards permeating all life activities, is more apt to accept those standards.

Next, the more settled a person becomes in his or her position in business, or perhaps the more resigned s/he is to accept that position, the less likely s/he is to jeopardize those circumstances by risking being caught in unethical behavior. A person may then consider a particular act to be unethical because such an act by another will be more likely to negatively affect him or her. The older person is less likely himself or herself to engage in an act that could put in jeopardy his or her position, one with which s/he is more likely than a younger person to be satisfied or at least resigned to accept as tolerant.

Furthermore, an older person, who is more apt to have financial security or an organizational position is inherently more vulnerable to actions that could affect such a relatively secure position. He or she could then be more sensitive to any unethical activity that could directly or indirectly disrupt this relative security.

Unethical acts are more likely than the ethical to disrupt the status quo or the customary circumstances of a society. Therefore, an older person is more likely to deprecate such behavior. Furthermore, an older person has had more of an opportunity to see the consequences of unethical behavior. He or she might realize from experience that the unethical eventually suffer the consequences of their actions (Lerner, 1980). The more often the unethical engage in such behavior, the more likely they are to be caught and punished.

We found support for our explanations of possible reasons why an increase in age is correlated with more conservative ethical attitudes in Mudrack (1989). There, too, is found evidence that a longer, continuous exposure to tradition and custom appears to be a major explanation for why the age of a subject is a significant predictor of ethical attitudes.

Sex

Gender has been considered a significant determinant of ethical attitudes. We, however, expected to find that sex differences would not be a major basis for differentiating ethical viewpoints. Many previous studies done in this area have used college students as subjects (Boyd, 1981; Ondrack, 1973; Purcell, 1977). These previous studies indicated that females are more conservative in their ethical viewpoints than males. They also indicated that when judging fair allocation, females are more "equality" or "needs" oriented while males are more "equity" oriented (Kahn, Nelson, Gaeddert, 1972). Some studies, however, that have used a wider range of ages for the males and females in their studies did not find this disparity in viewpoints (Posner and Schmidt, 1984) (Kidwell et al., 1987). As mentioned previously, results regarding gender's connection with ethical perceptions have been conflicting to this point.

Three of the four indices indicated no differences between male and female perceptions of ethical situations. Gender differences do not affect these three indices: Sales Ethics, Questionable Monetary Gain or Index of Company Rules and Misuse of Time on the Job. When using these three indices as standards, gender differences cannot significantly predict any variance in ethical attitudes (see Table IV). These results are in line with the findings of Posner and Schmidt (1984) and Kidwell *et at.* (1987). Both of these studies were done in business organizations and dealt with business related issues. A study done in a business atmosphere somewhat controls for extraneous variables like background or interests and familiarity with business matters.

A survey of college students that does not control for student background may get entirely different results. In a psychology class, where surveys are frequently done, typically there are students majoring in and whose interests lie in diverse areas such as mathematics, engineering, psychology and other liberal arts. Without controlling for such back-

grounds and the orientations that correspond to those backgrounds, results could be misleading. Our study was restricted to small-business organizations, we believe such a study more accurately portrays the business ethical viewpoints of respondents than would a study of students, many of whom have never been exposed to making business related decisions or even to a business environment.

Some past studies reported sex differences evidently without properly controlling other factors. We can demonstrate what may happen with the use of our research data. If one were content to report our data using individual questions as dependent variables, only prepare stepwise regression equations or only use simple ANOVA to test results, the conclusions would be misleading. Stepwise regressions isolate variables appearing to explain the most variation without fully controlling for other factors. Gender would appear as a significant determinant of ethical standards. We call attention to Table V that displays stepwise regression data isolating sex as a significant determinant in some ethical perception situations. Such results are different from the more thorough testing we reported. This is due to the fact that stepwise regression or ANOVA does not properly control for other factors. Once we carefully control for other factors by entering these factors all at one time when constructing the regression equations, sex no longer appears as a distinguishing factor (Table IV). Previous studies, in some cases, seem to have committed the error of reporting only ANOVA findings (Akaah, 1989 and Ferrell and Skinner, 1988).

Another possible explanation for sex difference or lack of difference appearing in studies is that in the last twenty years, progress has been made in employment opportunities for females (Cain, 1966 and VenKatesh, 1988). As much as fifty percent of the United States work force are now women. Business experience and business opportunities for women are now more similar to those available to men. The change in environment could very well account for the apparent narrowing in the differential between male and female ethical perceptions. We therefore submit that social forces, over the last twenty years, have played a part in limiting any apparent differences in ethical perceptions between males and females.

Since a larger percentage of the work force is comprised of women compared to twenty years ago, females' work experience is, therefore, more consistent with males' work experience. We would expect more semblance in work experience would be also registered in more semblance in business ethical attitudes.

Table IV shows there is at least one area where a definite difference in perception does exist. Of the four indices we used for ethical standards, only one demonstrated sex to be a significant factor associated with ethical attitudes. This is the index gauging attitude toward job-hiring and job-promotion practices.

Females have been discriminated against extensively in the past. They are quite sensitive to this issue (Wald, 1989). Some have personally experienced such discrimination first hand. When applying for a new position, a female might have felt at a disadvantage by virtue of her sex. Such a personal experience indelibly reinforces the injustice present. Some females have passionately and vocally protested such discrimination. While males too may deprecate unfairness, there is no substitute to living through a personal experience of discrimination to motivate one to be a staunch advocate of reforms to rectify past unjust favoritism. As a result, we would expect that females would be more passionate in their stance of unfair hiring or promotion practices. Our results support this.

#### Education

We predicted that educational differences would not appear to be a determinant in business-ethical standards. We took this position based on the work done by Posner and Schmidt (1984) in a business setting that indicated that educational level did not appear to have an effect on the concern displayed by managers toward the welfare of other corporate stakeholders and employees. When Rest (1979) and Rest and Thoma (1985) seem to find education level a determinant in moral reasoning, others, like Bloom (1976) and Munhall (1980) do not. All these studies dealt with theoretical moral reasoning ability but not with ethical standards in the business community. The data presented in our study forces us to conclude that there are no differences in ethical standards attributable to education differences in an office setting. Table IV shows that education does not arise as a significant independent variable (in any equation). In four out of four indicators, education is not

a significant determinant of business-ethics view-points.

We expect this is true for several reasons. While education may be a factor in ethical attitudes when dealing with a diverse population, our study is dealing only with the business community. The business community is more educationally homogeneous than the general population. Whereas the general population will include grade school and high school dropouts, the business community includes high school and college graduates. Only one out of over four hundred respondents in our study did not have a high school education. This is not true of population in general. Also, working in an insurance office requires a level of ability that would preclude hiring someone with less than a high school education. While our study indicates there is no difference in ethical attitudes between the typical high school graduate and college graduate, it does not indicate whether there is a difference in ethical attitudes between the typical high school drop-out and, for example, a high school graduate, each chosen from the general population. Our study concerns business ethics attitudes, though, and employees with less than a high school diploma would usually not be represented in a business office setting.

Our summary Table IV leaves little room for contention that education level attained is a significant predictor of ethical attitudes in a business setting. Past studies have isolated education as a factor in ethical perceptions. Similarly, our data can be used to support this position if controls for other variables are not employed. The results of stepwise regressions (which do not properly control for other variables) of some selected questions used as independent variables do show education to be significant (see Table V). However, this is before all other pertinent variables have been controlled for. Business ethics perception in an office setting do not appear to be attributable to differences in educational background. Past studies evidently have obtained misleading results due to lack of controls for extraneous variables.

#### Region of country

We expected to find there would be no effects on ethical viewpoints discernable from differences in region of the country. We found no literature

TABLE V
Significant differences produced in various ethics questions
Regression level of significance: 0.05 or better

Dependent	Dependent Variable:	Independent Variable:		
Variables	Sex	Education		
Work	0.0075	0.0040		
Persbus	0.0240			
Time	0.0099			
Xmas	0.0090			
Friend	0.0000	0.0238		
Male	0.0000	0.0032		

Using a step-wise linear regression model with each independent variable alternately entered first.

whatsoever that tested this hypothesis or that would suggest the existence of such a relationship. This being the case, we felt reasonably certain we would find nothing to the contrary.

However, our regression models lead us to conclude that region of the country can be a variable that has significance in some situations. At the time of sending, questionnaires had been coded inconspicuously on the instrument itself to indicate the region of the country to which it had been sent whether Eastern, Midwest, South, Southwest or West. Upon receipt, this variable (region) could be easily ascertained. Region of the country was then incorporated into our regression models as a nominal variable with the Eastern region of the country coded "0" and each other region, in turn, being coded "1". Table IV contains regression models of all four ethical indices that include region of the country. One of the four shows that region of the country might be a significant predictor of ethical attitudes. For three of four indices, we cannot draw this conclusion (Table IV). The one instance showing region of the country having an effect on attitudes is in the area of discrimination and job-hiring practices. In all other indices, region of the country does not play a major role in mediating ethical viewpoints.

The Midwest Region as used in this study includes the states of Michigan, Ohio, Indiana, Illinois, Wisconsin, Minnesota, Kansas, Nebraska and Iowa. Our model shows that living in the Midwest (USA)

is a significant factor in perceptions of discrimination. Workers in the Midwest appear to react more strongly to the unethicalness of hiring and promotion discrimination compared to the Eastern region of the country. One explanation for this may be that the industrial Midwest has traditionally been a stronghold of employee-union organization. For example, the Midwest has three states (Michigan, Illinois and Ohio) among the ten states with the highest density of workers with labor union affiliation, the only region with this distinction (Troy and Sheflin, 1985). Furthermore, while one report indicates 21.9% of the U.S. labor force to be labor union organized, the majority of Midwestern states are significantly above that figure. Michigan, Illinois, Indiana, Ohio, Wisconsin and Minnesota all range from 33.7% to 24.5% (Troy and Sheflin, 1985). Again, no other region of the country has a majority of states with a high concentration of labor union organization. Though the percentage of workers affiliated with unions continues to decline, the distribution proportion of union representation among the various states appears to be relatively constant (U.S. Bureau of Labor, 1990).

Unions have taken exception to and have publicized the reprehensibility of job discrimination. In an industrial environment, all workers in a particular job classification will perform exactly the same job. Any job discrimination will inherently stand out. If all do exactly the same job, all should be treated as equals. Job discrimination is wrong under such circumstances, they reason. Many office workers, although they are not unionized, especially in a small office like an insurance agency, do have friends or relatives who do belong to unions as industrial workers. This would especially be true in an area of high labor union concentration. It could be expected that their viewpoints would be similar to that of their friends and relatives.

This is but one explanation occurring to and substantiated by this researcher. Other explanations as to why a labor union intensive environment is correlated with workers' feelings especially sensitive to job discrimination issues are possible. Similarly, other factors indigenous to the Midwest Region, such as ethics or religious background, might explain the viewpoint deviation but are beyond the scope of this paper. However, it is hoped this research finding will stimulate further work and caution other re-

searchers to consider the possibility that the region of the country used as the setting for their projects might be a confounding variable unless properly controlled.

## Other variables

A look at the regression model appended leads to the conclusion that there is no difference in ethical perceptions that can be attributable to marital status, the having of dependent children or years on the job. In these cases, four out of the four indices used showed no effects by any of these variables (Table IV). Testing of none of these variables had been reported in previous research.

Once all other variables were entered simultaneously in the equation, these tested variables lost any predictive power. Having dependent children, one's marital status, the number of years one has been on the job or even job status are not significant indicators of ethical attitudes based on the fully controlled models (Table IV).

## Limitations of study

The reader will recall this research is a one-industry study. Only insurance agencies were chosen to participate. We intentionally chose to use small businesses for the setting in this research since few examples of studies with this segment of business are found in the literature. Bear in mind we also used a limited number of aspects of ethical issues in this research. We constructed indices out of twenty-one different possible ethical situations but many more are possible. Serious ethical breaches of fidelity were eliminated from consideration for reasons given previously. Also, due to the length of the survey instrument, questions regarding the ethnic and/or religious background of respondents was not included. Such data may have been useful in analysis. These limitations must be considered when judging the generalizability of our research.

# Summary of findings

We were able to arrive at clear indications for each

of our hypotheses. Some demographic characteristics were found to have little influence on ethical viewpoints. Marital status, dependent children status and years in the business or job status all had no discernable correlation with ethical perceptions. Previous studies had suggested that educational level would be a clear predictor of ethical attitudes. Our study demonstrates that this is not the case in a business office setting. Once other demographic and job-status characteristics are controlled, any relationship between education level and ethical attitudes disappeared completely. On the other hand, another demographic characteristic, neglected in most all previous work, is shown to potentially affect results obtained in research. This is region of the country. Previous studies have shown no great concern as to whether results would be affected by the choice of which region of the country would be selected as the setting for experiment. However, when dealing with issues of job discrimination and minority hiring practices, our tests leave little doubt that region of the country may have an affect on results obtained. In the future, region of the country must at least be considered when designing a research project.

Age is the most influential demographic predictor of ethical standards. Two of the four indices showed age to significantly affect results. As age increases, respondents display more conservative ethical tendencies and are most apt to evince more strict and less compromising interpretations of what is to be viewed as ethical. Our study has confirmed that what other studies have found in the past: unless age is considered in design, the experimental results obtained will probably be misleading.

A meaningful contribution has been made to the study of gender differences we feel. Past studies have been inconsistent and ambiguous. We contend that this was due, in part, to improper controls or lack of statistical controls. Our research shows that in three of four indices, sex differences do not affect results. Ethical perceptions for males and females are similar when considering most types of business ethics questions such as sales practices, misuse of responsibility and in-office conduct. However, in the area of job discrimination, a marked difference does appear. Females are significantly more likely to view the hiring of a male over a female or the promoting of a friend over a more competent employee as very

unethical. Only in this area, where females have clearly been taken advantage of in the past, is a verifiable difference detected. Our work shows that if proper controls are used, gender differences in business ethical perception can be minimal.

This study has demonstrated that demographic and job status variables need to be controlled in research. It is hoped that future research will find it valuable to refer to these findings to recognize the situations where special consideration must be given to control for certain independent variables and for a method useful in controlling for such variables.

#### Note

\* SPSS PC Plus Computer Program used.

#### References

- Akaah, I.: 1989, 'Difference in Research Ethics Judgments Between Male and Female Majority Professionals', *Journal* of Business Ethics 8, pp. 375–81.
- Arlow, P. and Ulrich, T.: 1980, 'Business Ethics, Social Responsibility and Business Students: An Empirical Comparison of Clark's Study', Akron Business and Economic Review 11(3), pp. 17–23.
- Babbie, E.: 1986, *The Practice of Social Research*, 4th ed. Belmont, CA, Wadsworth Publishers.
- Beltramini, R., Peterson, R., and Kozmetsky, G.: 1984, 'Concerns of College Students Regarding Business Ethics', *Journal of Business Ethics* 3, pp. 195–200.
- Bloom, R.: 1976, 'Morally Speaking, Who Are Today's Teachers?', *Phi Beta Kappan* 57, pp. 624—25.
- Boyd, D. P.: 1981, 'Improving Ethical Awareness Through the Business and Society Course', *Business and Society* **20**(2), pp. 27–31.
- Brenner, O.: 1988, 'Relations of Age and Education to Managers' Work Values', *Psychology Report* 64, pp. 639–42.
- Brenner, S. and Molander, E.: 1977, 'Is the Ethics of Business Changing?', *Harvard Business Review* **55**, pp. 55–71.
- Burnett and Karson: 1987, 'Personal Values and Business Decisions', *Journal of Business Ethics* **6**, pp. 371–82.
- Cain, G.: 1966, Married Women in the Labor Force, Chicago, IL, University of Chicago Press.
- Ferrell, O. and Skinner S.: 1988, 'Ethical Behavior and Bureaucratic Structure in Marketing Research Organization', *Journal of Marketing Research* 25, pp. 103–9.
- Hegarty, H. and Sims, H.: 1978, 'Some Determinants of Unethical Decision Behavior: An Experiment', *Journal of Applied Psychology* **63**, pp. 451–7.

- Kahn, A., Nelson, and Gaeddert: 1972, 'Reactions to Generosity or Stinginess from an Intelligent or Stupid Work Partner', *Journal of Personality and Social Psychology* 21, pp. 116–23.
- Kidwell, J., Stevens, R. and Bechke, A.: 1987, 'Differences in Ethical Perceptions Between Male and Female Managers, Myth or Reality', *Journal of Business Ethics* 6, pp. 451–7.
- Lerner, M.: 1980, The Belief in a Just World, New York, Plenum.
- Major, B. and Deaux, K.: 1980, Equity and Justice in Social Behavior, Academic Press.
- Mudrack, P.: 1989, 'Age-Related Differences in Machiavellianism in Adult Sample', *Psychology Report*, Part 2, **64**, pp. 1947–50.
- Munhall, P.: 1980, 'Moral Reasoning Levels of Nursing Students', *Image* 12(3), pp. 57–61.
- Ondrack, D. A.: 1973, 'Emerging Occupational Values: A Review and Some Findings', Academy of Management Journal 16, pp. 423—32.
- Posner, B. Z. and Schmidt, W.: 1984, 'Values and the American Manager: An Update', *California Management Review* **26**(3), pp.202–16.
- Purcell, T.: 1977, 'Do Courses in Business Ethics Pay Off?', California Management Review 19, pp. 50-58.
- Rest, J. R.: 1979, 'The Impact of Education on Moral Judgment Development', *Technical Report* —5, Minneapolis, MN, University of Minnesota Press.
- Rest, J. R. and Thoma, S.: 1985, 'Relation of Moral Judgment Development to Formal Education', *Developmental Psychology* **21**(4), pp. 709–14.
- Troy, L. and Sheflin, N.: 1985, Union Sourcebook 1st ed., Industrial Relations Data & Information Service, West Orange, New Jersey, pp. 1–4, 7–8.
- U.S. Bureau of Labor: 1990, Chicago, Illinois Regional Office Bulletin.
- VenKatesh, A.: 1988, 'Changing Roles of Women: A Life-Style Analysis', Journal of Consumer Research 7, pp. 189— 97.
- Vitell and Ferstervand: 1987, 'Business Ethics: Conflicts, Practices and Beliefs of Industrial Executives', Journal of Business Ethics 6, pp. 111–22.
- Wald, P.: Breaking the Glass Ceiling: Will We Ever Rid the Legal Profession of "the Ugly Residue of Gender Discrimination?", Human Rights, Spring, 1989, 16: 40–3.
- Wood, J., Longenecker, J., McKinney, J. and Moore, C.: 1988, 'Ethical Attitudes of Students and Business Professionals: A Study of Moral Reasoning', *Journal of Business Ethics* 7, pp. 249—257.

Wayne State University Detroit, MI U.S.A.