Compulsory Ethics Education and the Cognitive Moral Development of Salespeople: A Quasi-Experimental Assessment

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ABSTRACT. This study investigated several basic research questions suggesting a positive relationship between education and cognitive moral development. More specifically, these research questions examined the relationship between government mandated ethics education and cognitive moral development by testing the efficacy of a compulsory ethics intervention. Kohlberg's (1969, 1984) Cognitive Moral Development Theory was applied to test the efficacy of compulsory ethics education on the moral development of real estate salespeople used comparative statistical measures of ethical reasoning ability.

The results of this research, while somewhat counterintuitive, suggest that the value of compulsory ethics education as an intervention to improve the moral reasoning of real estate salespeople is highly questionable. However, the results of the study do provide new insights into the relationship between ethics education and cognitive moral development.

KEY WORDS: agency theory, cognitive moral development (CMD), ethics training, Kohlberg's theory

Introduction

Marketing activities, particularly those involving personal selling, have been the target of much criticism. A variety of explanations have been offered for why many have questioned the ethics of those engaged primarily in selling. Some of the reasons advanced by critics involve the individually fluctuating parameters of ethical consensus, the salesperson's boundary-spanning role within the organization, and the high functional visibility of marketing activities. Additionally, some critics charge that sales positions attract those persons with questionable morals at best, or those who are totally unscrupulous at worst (Hensel and Dubinsky, 1986). Further, some observers argue that the self interest created by a straight-commission compensation plan (SCCP) (the more you sell, the more you and the firm earn) represents a conflict of interest, as the salesperson's goals align with those of the firm, to the potential detriment of the client's goals (Posner and Schmidt, 1984; Kurland, 1991).

Management's efforts to improve the ethical quality of business decisions have intensified over the past several years. For many companies, the efforts to implement ethical values and change ethical behaviors have involved educational interventions. In recent years, a number of major companies have begun moral values education programs aimed at helping salespeople reason through tough ethical situations and raising their social consciousness. A 1992 study conducted by the Center for Business Ethics at Bentley College indicates that over 85% of the Fortune 500 industrial and service companies have taken steps to encourage higher levels of social responsibility and incorporate ethical value systems within their organizations.

Further, some research suggests that ethics iniatives at corporations such as General Dynamics and General Electric are paying off

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(Reidenbach and Robin, 1991; Harrington, 1991). Additionally, research indicates that ethics training interventions are more effective than moral imperatives to "do the right thing" or codes of conduct with complex rules and regulations (Goolsby and Hunt, 1992; Nelson and Obremski, 1990). At the same time, there is evidence that certain states have begun to mandate ethical training.

Presently only a handful of states currently require such training, and only for those marketers engaged in agency-type selling, (e.g. insurance, securities, and real estate sales). However, it seems plausible to investigate the effectiveness of such interventions as these iniatives may represent an emerging trend. Since the 1978 landmark decision by the legislature of the State of California to enact the first compulsory ethics law, 7 more states have followed by adopting similar legislation. Most recently, Alaska (1996), Indiana (1994), Iowa (1993), Nebraska (1995), Nevada (1996), Ohio (1992), and Pennsylvania (1994) have enacted legislation affecting educational licensing requirements of real estate salespeople. Additionally, the District of Columbia and the Canadian Province of New Brunswick have also adopted laws regarding compulsory ethics education for those desiring to obtain licenses to practice real estate. Moreover, at the time of this research, a nationwide poll of real estate commissioners revealed that as many as 16 additional states may be contemplating the adoption of similar laws regarding compulsory ethics education. Though research efforts continue to investigate the interventions used by private-sector corporations, no research to date has investigated compulsory (lawfully mandated) ethics education interventions specifically for those in marketing.

Part of the problem confronting research of this sort is locating large, nearly homogeneous, populations from which to formulate studies. There is an additional difficulty in finding ethical education interventions mandated along specific learning objectives and criteria, and that have been in place long enough to hypothesize measurement results.

The current research has bridged these difficulties by studying populations of real estate salespeople from two states (California and Florida), where one of the states (California) has a required ethics education as part of its licensing qualifications. Factors which contribute to the homogeneity of the two populations of real estate salespeople are: (1) both states have experienced recent, rapid and sustained growth in their residential markets; (2) the education providers, in each of these states, for the most part consist of proprietary real estate schools; (3) the population growth in each has been characterized by migrations of people from other regions of the country and abroad; and, (4) these states share similarities in terms of real estate market dynamics. Additionally, both states have comparatively large populations of licensed real estate salespeople: California – 336 424; Florida – 198 202. Since the 1978 law, California has made a compulsory ethics education requirement for all real estate licensees, the iniative is a part of pre-licensing and continuing education qualifications.[1] The law has been amended five times to deal with evolving issues of ethical concern in areas where the legislature sought improvements in the performance of licensees. By contrast, the State of Florida, which maintains an educational curriculum substantially similar to California in terms of real estate theory, practices and principles, and license law, imposes no requirement for ethics education.

Despite an increased interest in the moral reasoning processes individuals use to make ethical judgments, few studies have attempted to link cognitive moral development and *compulsory* ethics training and education. Moral reasoning has been determined to be significantly related to an individual's behavior. The established link between moral reasoning and moral behavior is extensively discussed in a comprehensive literature review by Blasi (1980). Additionally, a meta-analysis, by Schlafli, Rest and Thoma (1987), on 64 studies shows that formal education can have a positive influence on moral reasoning development. Within the organizational literature, several researchers have developed positive models of decision-making in organizations based on the cognitive reasoning approach (e.g. Ferrell and Gresham, 1985; Hunt and Vitell, 1986; and Trevino, 1989). Ferrell, Gresham and Fraedrich

(1989) presented an integrated model which emphasizes CMD. Although, the contributions of prior organizational research are considerable, few studies have investigated link between cognitive moral development and the moral reasoning of sales people. Rest and Narvaez (1996) suggest that there is compelling need to research the cognitive moral development approach in the professions. Moreover, researchers in organizational disciplines have advocated further empirical study of the approach. in field settings (e.g. Goolsby and Hunt, 1992; Nelson and Obremski, 1990).

The purpose of this study was to apply Kohlberg's Theory of Cognitive Moral Development (CMD) (1969, 1984) to field-test the effectiveness of compulsory ethical training on the moral development of salespeople. The study investigated the relationship between compulsory ethics education and two measures of cognitive moral development, a general measure and an industry-specific measure. Thus, the current study extends the stream of cognitive research on decision-making in organizations by empirically examining CMD and investigating the efficacy of compulsory ethics education on the moral reasoning of real estate sales practitioners. Knowledge of the types of educational interventions that are effective can serve as input for decision makers. Moreover, with or without adequate studies and empirical findings, and regardless of their effectiveness, many organizations will continue to make choices about the selection and implementation of ethical training interventions. Further, the links between certain individual difference factors and CMD are explored.

Cognitive moral development

Antecedents of CMD

In the late 1960's, Lawrence Kohlberg introduced a three-level, six-stage model of cognitive moral development (CMD). Kohlberg (1969) proposed that moral development advances invariantly in stages based on cognitive development. He theorized that as a person "matures" morally, they move cognitively to higher levels of moral development.

The distinguishing feature of the cognitive development approach over the behaviorist/social-learning approaches (e.g. Mischel and Mischel, 1976; Bandura, 1977) is its focus on the *individual* who determines right and wrong instead of dependence on societal norms. Additionally, Kohlberg's theory is based on the view that individuals, of all socio-economic backgrounds, have the driving need to live in a cooperative society, according to certain basic human Rawlsian justice (1963) values which transcend all cultural boundaries. Hence, embedded in the cognitive theories is the concept of an active decision-maker who determines appropriate behavior based on the interaction between cognitive decision making structures and the features of his/her environment (Kohlberg, 1984).

For Kohlberg, two processes contribute to advances in moral reasoning: (1) cognitive-structural organization and (2) the socio-moral perspective from which moral reasoning occurs. Cognitive-structural organization refers to the ability to logically analyze situations of moral consequence and apply concepts of justice, while socio-moral perspective relates to one's ability to interact in role-playing opportunities in the environment (Colby et al., 1983; Kohlberg, 1984). For an expanded discussion of Kohlberg's six stages of CMD in the organizational literature the reader is referred to Goolsby and Hunt (1992) or Weber (1990).

CMD schema

Kohlberg identified the sequenced, six-stage progression in reasoning ability as a *pre-conventional* level (stages 1 and 2) guided solely by reward and punishment; a *conventional* level (stages 3 and 4) characterized by adherence to legal concepts and reference group norms; and a *post-conventional* level (stages 5 and 6) guided by inculcated universal principles of truth and justice. Kohlberg proposed that moral development advances in stages based on the cognitive development components discussed above. In much the same manner as the student of mathematics forms progressively more difficult cognitive structures in moving from the study of basic math to algebra to calculus, Kohlberg theorized that as individual's "mature" morally, they move cognitively to higher levels of moral development, i.e. complex proceeds simple. Kohlberg argued that comprehension of moral reasoning is developmental, progressive, and cumulative. For example, a person who understands Stage 6, universal principled reasoning, also understands the lower Stages 1–5 (Rest et al., 1969; Rest, 1973).

In a business decision having moral overtones, salespeople with poorly developed cognitive reasoning skills (i.e. lower stages of CMD) would be unable to recognize all of the contingencies involved or evaluate the rights of all of the parties concerned. Hence, that three different subjects, analyzing ostensibly the same moral dilemma, could reach three different moral actions based on different levels of moral judgment [i.e. one Bentham hedonistic (Stage 2); one Durkheim group authority (Stage 4); and one Kohlberg principled reasoning (Stage 6)] seems intuitively plausible. Moreover, understanding how different individuals approach and confront (ostensibly) the same ethical situation differently has important implications for business managers (Hunt and Vitell, 1986, 1993). Thus, using measures of CMD to evaluate the moral reasoning abilities of employees may help managers not only to understand these differences, but also how to reason effectively when ethical situations arise.

Kohlberg's theory of CMD is not without its critics (Kurtines and Greif, 1973; Simpson, 1976; Gilligan, 1977, 1982; Schweder, 1982; Langdale, 1983; Sullivan, 1984, and others). However, Kohlberg and his followers have responded by addressing such issues as the cultural and gender biases, the invariant, hierarchical stage and sequence arguments, and the subjectiveness in the scoring process (see Colby et al., 1983). Further, Snarey (1985) found support for Kohlberg's claim of cultural universality, and Walker, de Vries, and Bichard's (1988) meta-analysis of 54 studies generally supported the application of CMD to both sexes. Moreover, Kohlberg's theory has found support among organizational researchers as the literature is replete with empirical studies.

Kohlberg's theory of CMD is a major component in a number of positive ethical models, Ferrell and Gresham's (1985) "Contingency Framework for Ethical Decision Making in Organizations"; Trevino's (1989) "Person-situation Interactionist Model"; and, Hunt and Vitell's (1986, 1993) "General Theory of Marketing Ethics." In deed, recent studies by Derry (1987), Dukerich et al. (1990), Trevino and Youngblood (1993), Weber (1990, 1993), Goolsby and Hunt, 1992, Ponemon and Gabhart (1994) and Snell (1996) and others have, in a wide range of organizational settings, provided general support for Kohlberg's CMD theory.

Moral reasoning in professional selling

The ethical domain of professional sales

The concept of professional ethics is more than an acceptable measure by which to gauge the virtuousness of those engaged in a profession. For many of those engaged in various professions, it means a concept that embraces a certain moral reasoning ability which permits the practitioner to make judgments unaffected by the self-interest that may impair his or her professional responsibility (Ponemon and Gabhart, 1994). The moral reasoning process, part of an individual's overall ethical schema, is but one component of the decision making process that salespeople engaged in real estate and other types of agency sales are faced with in the course of their business dealings and as effective members of their respective professions. One important distinguishing characteristic of agency sales compared with traditional, arm's-length sales is the information asymmetries that accrue to the salesperson by virtue of the agency arrangement (Jensen and Meckling, 1976; Leland and Pyle, 1977).

Informed vs Arm's Length Transactions

In the general context of business, transactions occur and the role of the salesperson is performed at arm's length. In a typical arm's length transaction, the buyer and seller are assumed to operate "caveat emptor" and "caveat venditor", where each party is charged with being aware of the other's intentions. In this arrangement, the only fiduciary relationship is that which exists between the "firm" as principal and the "salesperson" as agent. However, in certain business contexts, transactions with buyers and sellers are considered "informed," where the broker-agent serves as a middleman between the buyer and seller. These types of transactions are governed by *agency theory*, commonly referred to as "the laws of agency."

In the ordinary course of business, it is commonplace for salespeople to "ferret" out information concerning the people with which they do business. However, in agency sales transactions, the client/sellers are usually required to divulge certain, sometimes sensitive information to the salesperson who is representing them, such as a death in the family, a pending divorce, or personal bankruptcy. This creates information asymmetries between the client/seller and the broker, and often masks the true motivation for the sales transaction. For example, in a real estate transaction, personal information of this sort could be viewed as increasing the seller's motivation and, if revealed, create a potentially advantageous situation for the customer/buyer during the negotiation of a contract. Thus, the transfer of information creates a fiduciary duty for the agent (the broker or salesperson) representing the client (the seller) in the transaction.

Under this alternative arrangement, the informed transaction, the laws of agency create a situation where there are two principals and two agents. The firm/salesperson dyad explained above still exists, but now the firm is in the dual role of also acting as an agent to the client being represented, and thus, the client is the principal of the firm. Further, by extension of the firm's legal responsibility for and authority over the salesperson, the salesperson also becomes the agent to the seller (principal). Simultaneous responsibility to the client, the firm, the public at-large, and the profession, as well as the practitioner's own economic needs, creates many potential ethical conflicts.

Sources of ethical issues in professional sales

Within any profession there exist negative or instigating factors that tend to discourage compliance with established ethical practices of professional conduct (Ponemon and Gabhart, 1994). The following list contains some of the most common factors identified in this research based on discussions with members of the profession and a review of the literature:

1. Straight-commission compensation plan (SCCP), which tends to create self-interest among practitioners (Kurland, 1991).
2. Information asymmetries which accrue to agents due to non-arm's-length dealing (Leland and Pyle, 1977; Jensen and Meckling, 1976).
3. The independent contractor status of most practitioners which tends to reinforce the concept of self-interest.
4. Highly competitive market conditions for customers (buyers) creates conflicts of interest, particularly with regard to mitigating the disclosure of sensitive or material information learned in the workplace.
5. The ordinary self-interest that arises when a broker or salesperson represents property in which he/she/the firm has an interest in the conveyance of.

While the above list of factors are sources of conflict as the sales practitioner exercises judgment in the course of performing his/her duties, the list is by no means exhaustive of all possible threats to professional conduct. In many instances, one or more of the above factors will interact with others or even some legal concept to create a greater source of potential conflict. However, certain factors can serve to mitigate potential threats to established professional conduct.

Mitigating sources

Those charged with governing the professions have long recognized the potential for threats to ethical and professional conduct and have attempted to institute both formal and informal controls to encourage conduct that is deemed consistent with applicable laws and espoused guidelines. Some of the sources which tend to lessen the potential for misconduct among salespeople are:

1. Pre-licensing education and post-licensing continuing education (re-certification) requirements.
2. Codes of conduct and professional standards.
3. Increased disclosure requirements for practitioners dealing in the sale or rental of their own properties.
4. Professional affiliation and peer socialization in national, state and local real estate associations which emphasize professionalism.
5. State boards of professional conduct and state legislatures which review current laws and provide oversight for new regulations.
6. The courts and arbitration/mediation panels which hear opposing arguments regarding provisions of the laws and/or standards of ethical practice and render decisions.

The preceding research and views notwithstanding, some theoretical work has suggested that sales environments might have a positive influence on the CMD of salespeople. Kohlberg (1984, p. 468) argued that "work environments which require the ability to balance the welfare of multiple publics encourage the development of critical thinking." Thus, workers, in occupations which involve the ethical interests of various stakeholders, must learn to resolve conflicts based on responsible moral judgment. Persons engaged in the practice of real estate sales are often required to deal with the simultaneous interests of the client, the firm, the public at-large, and the profession, as well as their own. Hence, according to Kohlberg's theory, real estate sales constitutes a "morally challenging" organizational environment and should stimulate CMD among practitioners. Further, there is empirical research which tends to support this conclusion (Lincoln et al., 1982; Goolsby and Hunt, 1992).

Moreover, effective pedagogical interventions at the industry and firm levels can have positive effects on the moral development of those within a specific profession, such as real estate sales (Ponemon and Gabhart, 1994). Thus, based on these findings, California's compulsory ethics education could produce significant differences on measures of moral reasoning between the groups in this study.

Hypotheses

The following proposition represents the underlying logic for designing and conducting this study. If salespeople respond favorably to compulsory ethics education (moral value learning), then they should score higher on measures of cognitive moral development (DIT scores) and, also, be able to demonstrate greater industry-specific ethical reasoning within the field of real estate sales (RES scores) compared to those who are not required to take ethical education. Based on the above proposition and Kohlberg's (1969, 1984) theory of Cognitive Moral Development regarding the effects of education on the development of moral reasoning, it is hypothesized that:

H_1 There is a positive relationship between compulsory ethics education and the cognitive moral development (CMD) of salespersons (DIT scores).

H_{2a} There is a positive relationship between compulsory ethics education and the industry-specific ethical reasoning of salespersons (RES scores).

H_{2b} A higher proportion of those salespeople who take compulsory ethics education will recognize (make a judgment) real estate issues of ethical concern than those who do not.

H_{2c} A higher proportion of those real estate salespeople who take compulsory ethics education will express ethical intentions toward perceived ethical issues than those who do not.

Method

Sample

The population surveyed in this study consisted of sales agents and brokers of United States-based real estate firms. Real estate firms were selected from membership lists accessed through state and local chapters of the National Association of Realtors® (NAR) in California, and Florida. Consequently, all subjects included in the study were Realtors® or Realtor Associates, real estate practitioners who hold membership in the National Association of Realtors®, and their respective local chapters.

In addition to being Realtors®, the subjects in the study were restricted to samples of residential real estate practitioners. While licensensure, in most states, usually entitles real estate salespeople to list and sell a wide variety of properties, including raw land and commercial buildings, residential real estate salespeople list and sell predominantly one-to-four family residences.

Data collection

Managers and owners of the firms surveyed were contacted and asked to participate in a survey designed to measure the attitudes of real estate salespeople toward social issues. The technique most often employed in this study was to survey groups of general real estate practitioners while they were in attendance at local and regional sales meetings. On several occasions, large individual firms comprised the groups that were surveyed. While the overall participation rate among practitioners in attendance, at any given meeting, ranged from 90 to 100 percent, the participation rate among Realtor® groups and firms that agreed to be surveyed was only around 60 percent. Since the scheduling of the participants meetings was voluntary on the part of Realtor® board officers or firm managers, volunteering may have introduced some bias. It may well be that organizations which view participation in research of this sort as important may also be organizations which differ in some manner from the non-responding firms. Moreover, those subjects who customarily attend Realtors® and/or firm-sponsored sales meetings may differ in other ways, say in terms of greater due diligence or higher motivation, than those who are not in regular attendance.

However, given that some bias may be introduced due to subject self-selection, selection procedures which are not formally random may still be "sufficiently haphazard as to create a random effect" (Lord, 1963, p. 148). Because the researcher did not have control over those self-selected subjects who were in attendance, and due to the fact that the meetings were selected randomly, the selection procedure was sufficient to create a random effect. The respondents were surveyed in groups of 20 to 40 subjects from multiple locations in California and Florida.

Respondent characteristics

In the present study, of the 395 surveys administered, a total of 360 were collected, for an overall response rate of 91 percent. Due to unscoreable responses, 88 surveys were eliminated from further analysis, 55 with missing data and 33 for excessive meaningless responses (i.e. an M-score > 4).[2] The remaining 272 surveys yielded a useable response rate of 68 percent. The breakdown of the sample was as follows: 152 from California and 120 from Florida. A summary of the respondent characteristics of the sample is presented in Table I.

Procedures

The DIT and RES were administered *ex post facto* to the treatment and control groups, where the treatment variable (compulsory ethics education) was measured through passive-observation. Groups of real estate salespeople, comprising "convenience" samples, were surveyed while in attendance at regularly scheduled meetings. Typically, in field studies of this sort (quasi-experimental research) controls for systematic bias such as random selection and assignment to treatments are rarely possible. Further, since the individuals

TABLE I
Sample characteristics

	California		Florida		NAR*
Gender					
Male	72	47%	52	43%	46%
Female	80	53%	68	57%	56%
	152	*100%*	*120*	*100%*	*100%*
Age (years)					
20–29	8	5%	5	4%	2%
30–39	31	20%	21	18%	14%
40–49	53	35%	28	23%	32%
50–59	36	24%	33	28%	32%
60+	24	16%	28	27%	20%
	152	*100%*	*120*	*100%*	*100%*
Level of education					
H.S. graduate	8	5%	17	14%	13%
Some college	62	41%	56	47%	45%
College graduate	60	40%	34	28%	33%
Post graduate	22	14%	13	11%	9%
	152	*100%*	*120*	*100%*	*100%*
Years of experience					
0 < 3	27	18%	32	27%	n.a.
3 < 5	11	7%	10	8%	n.a.
5 < 10	37	24%	20	17%	n.a.
10 < 15	29	19%	26	22%	n.a.
15 < 20	33	22%	20	17%	n.a.
20+	15	10%	12	10%	n.a.
	152	*100%*	*120*	*100%*	
Job status					
Sales associate	92	60%	80	67%	65%
Broker associate	33	22%	17	14%	**
Broker	27	18%	23	19%	35%
	152	*100%*	*120*	*100%*	*100%*
Level of income ($)					
Less than 20 000	36	24%	37	31%	38%
20 000 to 49 999	43	28%	45	38%	30%
50 000 to 79 999	33	22%	19	19%	14%
80 000 to 109 000	14	9%	8	7%	7%
110 000 or more	26	17%	11	9%	11%
	152	*100%*	*120*	*100%*	*100%*
Professional designation					
No designation	96	63%	87	72%	55%
One designation	43	28%	26	22%	32%
Two or more	13	9%	7	6%	13%
	152	*100%*	*120*	*100%*	*100%*

* From National Association of Realtors.
** NAR makes no distinction on brokers.

comprising the test subjects subscribe to slightly different license law requirements this resulted in non-equivalent groups.

Matching was employed to deal with some of the effects of respondent bias and measurement error due to nonrandomization and the non-equivalent groups (Magidson, 1977). Several selection variables were used, in lieu of pretests, to match subjects from the treatment and control groups. Since the pairs are matched exactly, pair assignments become the factors of analysis, creating a separate block for each match. Subjects that are not paired were dropped from the analysis. The procedure produced two sub-groups comprising 37 matched-pairs.[3]

The matching variables: individual difference factors and CMD

CMD has been shown to be related to several individual difference factors. In the current study, findings from a pilot study (see Appendix I) were used to select gender, age, level of formal education, and time in the profession, as matching variables. The correlation matrix from the pilot study was reproduced and shown in Table II. While only a few of the five matching variables produced significant correlations all were retained and used as matching criteria based on extant literature and due to the absence of formal pretest scores (Cook and Campbell, 1979).

Gender. The effect of gender differences in ethical reasoning research has been a widely debated topic. Research by Gilligan, (1982), Langdale (1983) and Lyons (1983) argued that women view the world through a care/response orientation, unlike their "cognitive-rational" male counterparts. Research in organizational settings has done much to dispel this assertion (Derry, 1987; Dukerich et al., 1990; Walker, 1984). More to contrary, results in subsequent studies of CMD, while not conclusive, have actually found that females tend to score higher on measures of CMD than do males, when level of education and job status were controlled for (Weber, 1990; Snell, 1996).

While in most studies gender has not been found to be significantly related to CMD, the results may be different in real estate, one of few organizational settings where females dominate. According to the National Association of Realtors (NAR) 56% of all licensed real estate practitioners are women. Additionally, in a pilot study involving Realtors® (n = 93) from Memphis, TN, gender was found to be significantly correlated with a measure of industry-specific moral reasoning, the mean score for females was 40.18 versus 35.26 for males (t = 4.93; p < 0.01) (Izzo, 1997). Based on these findings the effects of gender on CMD should be examined.

TABLE II

Pilot study correlation coefficients: DIT *P*%-scores, RES scores and selected individual difference variables

n = 93	DIT	RES	GEND	AGE	EDU	YRS	INC
DIT	1.00						
RES	0.45**	1.00					
GEND	–0.01	0.14*	1.00				
AGE	–0.01	0.01	0.18**	1.00			
EDU	0.16*	0.14*	–0.11	0.03	1.00		
YRS	0.01	" . "	0.19**	0.56**	–0.02	1.00	
INC	0.04	0.15	0.03	0.23**	0.23**	0.62**	1.00

Bold indicates matching variable.
All coefficients Spearman rank correlations: * P < 0.10, one-tail test; ** P < 0.05, one-tail test; " . " calculated coefficient < 0.01.

Age. While aging itself has not been shown to significantly influence CMD, responsibility tends to increase with one's age. Kohlberg attributed age-related gains to continuing adult moral development and to the experiences that individuals are, over their lifetimes, exposed to (Kohlberg, 1969). Though correlated with *Time in the Profession*, age presents opportunities for role-taking and resolution of ethical dilemmas in non-business contexts. Moreover, longitudinal studies have demonstrated a general upward trend in individual CMD (Rest, 1986; Rest et al., 1978).

Level of formal education. In a longitudinal study, Kohlberg and Turiel (1973) found correlations between adults' moral maturity and levels of formal education ranging from 0.53 to 0.69. By definition, CMD is related to increased intellectual capacity (Schlaefli et al., 1985). Additionally, Rest (1986) found that intellect was a necessary but not sufficient condition for progressing to higher levels of CMD. While research questions remain about the effects of age and level of education, Thoma and Davison (1983) found significant main effects for both variables with little interaction. Moreover, level of education was significantly correlated to a measure of industry-specific moral reasoning in the pilot study cited above.

Time in the profession. Work represents a major component in the life of most adults. Kohlberg's longitudinal research produced findings which showed that most adults continue their cognitive moral development beyond their years in school (Colby et al., 1983). Trevino's (1989) "Person-Situation Interactionist Model" suggests that work plays a significant part in continued adult moral development through opportunities for role-taking and resolving moral dilemmas in the workplace. Additionally, Kelley et al. (1990) when surveying marketing researchers found that those holding positions for 10 years or more considered their behavior more ethical than those with lesser experience. Since, real estate salespeople tend to "cultivate" their practice, those in the business a greater period of time should be more aware of the long term implications of their actions and the need to establish trusting relationships.

Level of income. Research on the effects of income on moral behavior has demonstrated mixed results. While Finn, Chonko and Hunt (1988) found that high-income accountants perceived fewer ethical issues, Kidwell et al. (1987) found that level of income was not significantly related to perceptions of ethical dilemmas. Related to the effects of income on ethical intentions and behavior are the works of Hunt and Vitell (1986) and Harder (1992). Hunt and Vitell (1986) suggest that rewarding ethical behavior provides more incentive toward ethical behavior than punishing unethical behavior. Similarly, Harder (1992) found that under-rewarded salespeople behaved more selfishly than over-rewarded salespeople. Given these findings, it would seem that under-rewarded real estate salespeople would be more tempted to sacrifice their client's interest to pursue self-interested goals.

Additionally, *Level of Income* was significantly related to RES scores for the pilot study, $n = 93$ (see Table II). Though *Level of Income* was also highly correlated, for the same group, with *Age, Level of Education* and *Level of Experience*, it is thought that matching individuals with similar incomes provides better control for the effects of this variable.

Measures

Compulsory Ethics Education: the measured variable. In the current study, California's compulsory ethics education was used as the treatment variable, and described as the level of ethics training that practitioners are required to take as part of their licensing qualifications. For real estate brokers and salespersons, in California, this means 18 hours of ethics related subjects and, an additional 18 hours of subjects related to consumer protection, out of 45 hours of continuing-education required every 4-year license renewal period (see Table III). Review of an approved continuing education course revealed that some of the subjects included under ethics

TABLE III
Real Estate Licensing Laws

Requirement	State of California	State of Florida
Salesperson		
Pre-Licensing:		
Examination	Yes	Yes
Education[a]	45 hours	63 hours
Post-Licensing:		
Education	90 hours	45 hours
Time limit	18 months	24 months
Continuing:		
Education	45 hours/4 years (18 hours of the above must be in *ethics* and *professional conduct*)	14 hours/2 years (courses review new laws and the changes to existing laws)[b]
Broker		
Pre-Licensing:		
Examination	Yes	Yes
Education	8 college courses	72 hours
Experience	2 years, last 5[c]	1 year, last 5
Post-Licensing:	None	60 hours
Continuing:		
Education	Same as above for salespersons	Same as above for salespersons

[a] Both states require essentially the same curriculum: real estate practices and principles; license law; brokerage practice; and basic real estate finance concepts related to mortgages, closing escrows, and property taxation and valuation.
[b] Florida maintains a prescribed continuing education course, but no requirement is made for ethics or professional practice.
[c] Experience requirement waived if applicant has a 4-year college degree and the 8 required courses are part of the degree curriculum.

deal with: duties and responsibilities of agents and principals under the laws of agency; trust fund accounting, professional standards, and other topics such as the ethical implications of fair-housing and fair-lending.

In contrast, real estate brokers and salespersons in Florida are only required to complete 14 hours of continuing education every 2-year license renewal period, or 28 hours every 4 years compared with 45 for California. Moreover, based on information received from Florida, most of it's requirements pertain to changes in the licensing laws, with some material addressing recent developments in such areas as the mortgage markets, advertising and disclosure. In the final analysis, regardless of the many license law similarities, only California requires licensees to take compulsory ethics education.

Cognitive moral development. Measuring a subject's level or stage of cognitive moral development according to Kohlberg's theory of CMD requires tapping and classifying an individual's moral reasoning processes according to the six stage definitions. Kohlberg (1969) advocated the use of his *Moral Judgment Interview* (MJI), to measure individual levels of moral reasoning. Over the years, however, many of the Kohlberg's "faithful" have found the MJI and its scoring system cumbersome to use because it requires the use of experienced interviewers and scorers. A major breakthrough in moral reasoning research methodology occurred when James Rest (1979) developed the *Defining Issues Test* (DIT). The DIT is an instrument that was designed to tap the same dimensions as the MJI. The difference is that, while the DIT (Rest, 1979) uses essentially the same set of hypothetical, standardized scenarios to measure one's moral reasoning as the MJI, its multiple-choice format allows it to be more easily administered to groups or individuals and to be computer scored.

Subjects are required to determine a course of action that they feel is appropriate for the central character in each scenario and, using a modified 5-point Likert-type scale (1 = "no importance" and 5 = "great importance") indicate why that course of action is desirable. From the combined responses to three moral dilemmas several scores are computed. The first is a stage score, computed for each item based on Kohlberg's six stages of moral development. Second, the *P*%-score is calculated by summing the points for items which represent "principled" thinking. The total possible score on the DIT ranges from zero to 95, where higher scores are associated with higher levels of CMD.

Industry-specific ethical reasoning. While Rest (1986) argues that the DIT is a useful instrument for measuring moral reasoning in general, he also encourages the development of profession-specific ethical measures. Those engaged in the practice of real estate have to deal with various levels of responsibility, simultaneously. This creates a work environment which requires salespeople to develop skills to reason through many potential ethical conflicts. The second criterion variable is a subjects's level of industry-specific ethical reasoning as measured by scores on the *Real Estate Survey* (RES), developed by Izzo (1997). Copies of the RES are available from the author upon request. For reliability and validity see Appendix I.

The RES was designed to capture the same dimensions as the DIT, but uses three real-life scenarios of industry-specific ethical issues, instead of hypothetical scenarios. The use of real-life scenarios is supported by other researchers (Alexander and Becker, 1978). Vitell and Hunt (1990) suggest that failure to use "true ethical dilemmas" (p. 261) in industry-specific ethics research may lead to misleading findings.

Similar to the DIT, the RES requires subjects to determine a course of action for the central character in each scenario and indicate, using a modified 5-point Likert-type scale, (1 = "no importance" to 5 = "great importance") why that course of action is desirable. From the combined responses to the three real-life dilemmas, a measure of industry-specific ethical reasoning is computed. Scores on the RES can range from 0 to 99.9, because there is an even number of all stage items. Additionally, the RES provides two additional measures related to moral reasoning: (1) *ethical judgments*; the subject's recognition of a potential ethical issue; and (2) *intentions*; the subject's intended behavior toward the perceived ethical issue.

Ethical judgments. Perception of a potential ethical problem is the element which "triggers the whole process depicted by the model" [the "General Theory of Marketing Ethics"] suggest Hunt and Vitell (1986, p. 7). If, however, the individual does not recognize the ethical implications of the situation, then the decision process ceases. The dilemmas used in the RES were developed through and tested on focus groups of real estate salespeople. The ethical judgments measure is determined by asking respondents to indicate whether or not an ethical issue is involved in the scenario.

Intentions. Once an ethical dilemma is perceived, the individual evaluates various alternative courses of action and reaches an intention toward some behavior regarding the issue. Hunt and Vitell (1986) suggest that the individual goes through a process of deontological (the inherent rightness or wrongness of certain behavior) and teleological (the utility of the situation and the stakeholders affected) evaluations in forming an intention to act. However, individuals often develop a deontological perspective of the ethical issue and yet behave in a teleological manner, because of some set of preferred consequences. Kohlberg's CMD theory resolves this apparent inconsistency through the differences in individuals' levels of moral reasoning and the six stages of moral development. Intentions are measured by asking respondents to indicate what particular behavior should be adopted with regard to a perceived ethical dilemma.

Analysis and results

The primary objective in this study was to test the efficacy of compulsory ethics education. As stated above, the measures of importance were the level of moral reasoning as determined by *P*%-scores on the DIT and industry-related ethical reasoning based on RES scores. The procedure used was a matched pairs *t*-test. Based on the matching criteria the total sample of 272 subjects resulted in 37 exactly matched pairs. The treatment and control group pairs were compared by calculating the significance of the difference in their respective mean posttest scores on the dependent variables, the DIT and the RES. The results are presented in Table IV.

The first research hypothesis (H_1) suggested a positive linkage between CMD and compulsory ethics education. It is important to note that in this analysis no inference is being made relative to the interpretation of morality or ethics, the measures are only being compared among the groups of respondents. Using Rest's (1979) Defining Issues Test (DIT), the unit of measure was the subjects' mean *P*%-scores, the instrument's standard measure of CMD.

Table IV shows that the mean for the California (treatment) group is 41.9, while the mean for the Florida (control) group is 41.38. Matched-pairs *t*-tests show that the difference between the two means is not significant ($t = 0.29 < t_{crit} = 1.64$, $p = 0.05$, one-tailed test). Thus, compulsory ethics education does not appear to significantly influence cognitive moral reasoning.

The second research question (H_{2a}) hypothesized that compulsory ethics education would positively affect industry-specific moral reasoning. The *Real Estate Survey* (RES), (Izzo, 1997) was used to measure subjects' moral reasoning in profession-specific ethical issues in the real estate field.

TABLE IV
Statistical results

Variable	California group	Florida group	Bivariate test
Matched pairs *t*-test[a]			
DIT P%-score	Mean 41.90	Mean 41.38	$t = 0.29$
RES score	Mean 32.69	Mean 31.86	$t = 0.35$
McNemar's test for correlated proportions chi-square[b]			
Judgements:			
Vignette 1	36/213[c]	23/213	$\chi^2 = 2.44$
Vignette 2	14/247	11/247	$\chi^2 = 0.16$
Vignette 3	20/241	11/241	$\chi^2 = 2.06$
Intentions:			
Vignette 1	52/179	41/179	$\chi^2 = 1.08$
Vignette 2	22/232	18/232	$\chi^2 = 0.23$
Vignette 3	33/217	22/217	$\chi^2 = 1.82$

[a] $n = 32$ matched pairs, $t_{crit} = 1.64$, $p = 0.05$, one-tailed test.
[b] $n = 272$, χ^2_{crit} (1 d.f.) = 3.84.
[c] Each pair of figures indicates the opposition group, for each state, divided by the combined states consensus group, i.e. for Vignette 1, the number of subjects of the California Group that saw no ethical issue was 36, in the Florida Group that number was only 23, while the combined California and Florida Group was 213, such that 36 + 23 + 213 = 272.

The mean RES score for California was 32.69, while for Florida the mean was 31.86. The difference between the means of the two groups (0.8318), though in the direction predicted, was not significant ($t = 0.35 < t_{crit} = 1.64$, $p = 0.05$, one-tailed test). As in the analysis of CMD above, compulsory ethics education appears to have little effect on improving the industry-specific moral reasoning of real estate practitioners.

The next two research questions (H_{2b} and H_{2c}) asked whether or not compulsory ethics education positively affects subjects' "judgments of" and "intentions toward" industry-specific ethical issue. While judgments may be the best predictor of a subjects intentions, research has shown that one's intentions toward an ethical issue is dependent upon how the individual perceives or even recognizes that there is a problem (Hunt and Vitell, 1986; Rest, 1986).

After reading three real estate vignettes, subjects were first asked to indicate how they would respond to the issue at hand, where 1 = acting in an ethical manner, and 2 = no action would be taken at all. Next, subjects were asked to respond to moral reasoning questions on the RES industry-specific measure. Finally, the subjects were asked to indicate whether or not they perceived an issue of ethical concern in the scenario. Again, respondents were asked to indicate so by selecting: 1 to indicate that there was an ethical issue; or 2 if the subject perceived no ethical issue. The reversing of the order between judgments and intentions was done so as not to prematurely influence subjects' responses on the general measure and also to provide a measure of consistency.

In this portion of the analysis, whole samples of subjects from California and Florida were compared. At this level, the problem was one of comparing the proportions of responses by 2 groups to a single set of questions in several scenarios, where the dependent measure can be represented by only one of two values. McNemar's (1975) test for correlated proportions is appropriate for this type of analysis.

A significant result would tend to support the conclusion that the true distributions of *judgments* and *intentions* for the two groups differ. The results are shown in the lower portion of Table 4, and indicate that there are no significant differences in either the *judgments* or *intentions* measures with regard to subjects' responses for the California and Florida groups. The calculated χ^2's for the *judgments* component of the three vignettes are: Vignette 1 = 2.44; Vignette 2 = 0.165; and Vignette 3 = 2.06 are all less than χ^2_{crit}, 1 d.f. = 3.84.

Similarly, for the *intentions* component of the three vignettes the χ^2's were: Vignette 1 = 1.08: Vignette 2 = 0.225; and Vignette 3 = 1.818 < χ^2_{crit}, 1 d.f. = 3.84. Based on these results, there appears to be no significant difference between the two groups on either ethical judgments or ethical intentions, using a correlated proportions test. Thus, there is no statistical support for research questions three and four. That is, among the groups tested, the compulsory ethics education required in California has not been shown to produce any significant differences on measures of ethical *judgments* or *intentions*.

In summary, the findings of a null association between compulsory ethics education and increased cognitive moral development indicates that government mandated education, in its present form, has no statistically significant positive effect on the moral reasoning of real estate practitioners, either in terms of general measures or on industry-specific measures.

Discussion

This study investigated several basic research questions suggesting a positive relationship between education and cognitive moral development. More specifically, these research questions examined the relationship between government mandated ethics education and cognitive moral development, by testing the efficacy of a compulsory ethics intervention on real estate sales practitioners. Two instruments, one general (the DIT) and one industry-specific (the RES) were used to measure the effectiveness of required ethics education. The outcome measures were cognitive moral development and industry-specific ethical reasoning. The results of this research, while somewhat counterintuitive, suggest that the value of compulsory ethics education as an intervention to improve the moral reasoning of real estate practitioners is highly questionable. Further, the essentially null relationship between ethics education and performance on measures of moral reasoning raises questions about the functionality of such interventions. Moreover, simply mandating an educational intervention does not mean that those who must comply with the law will do so in a non-begrudging manner, which could have adverse effects on compliance. Finally, whoever coined the phrase "you can't legislate morality" was probably correct, as it seems fairly clear that the "force-feeding" of ethics education does not work either.

Managerial implications

This research was spawned as an inquiry to determine what role compulsory educational interventions, as a process, might play in reducing non-normative behavior among salespeople. The fact that California's overall rate of sanctionable[4] ethical violations was 1.25% for the year 1995, the last year for which figures were available. In contrast, the violation rate in Florida for the same period was 2.17%, such that a reduction to California's rate would take approximately 2000 sanctionable cases off the books annually. Based on the findings of this research, however, it seems fairly reasonable to conclude that these differences in rates of violations are not due to the compulsory ethics education required in California.

Since 1978, when California passed its landmark legislation, seven additional states, the District of Columbia and one Canadian province have passed similar laws. Based on a current telephone poll of state real estate commissioners this may represent an emerging trend. The poll results suggest that as many as 16 additional state legislatures are deliberating over the adoption of some form of mandated ethics education as part of their real estate licensing laws. This research, however, has presented evidence which would not substantiate the implementation of a government-mandated requirement for ethics education. On the contrary, the implications of this study, consistent with prior research in social psychology and cognitive theory (e.g. Schalefli, Rest and Thoma, 1987; Nelson and Obremski, 1990; Posner and Schmidt, 1984) suggest just the opposite. That is, without effortful and interactive inputs, compulsory ethics interventions do not appear to motivate attitudes toward a commitment to higher cognitive moral development.

Limitations and future research

A fair perspective of the current study with respect to the results would probably suggest the following position. First, though the sample size was large and representative of those licensees who are Realtors® or Realtor-Associates® there were segments of the real estate field that were not included in the study. Some of the omitted groups represent independents who operate as general practitioners and others who operate commercial real estate and leasing offices, and these groups are also responsible for meeting state-prescribed licensing education. Further, some these unrepresented groups also could have memberships in and affiliations with other professional real estate organizations. The nature of the field of real estate sales is such that it implies the laws of agency are applicable. Thus, the generalizability of the findings in this study may only extend to agency-type sales positions such as insurance or securities.

Second, bearing in mind the potential bias which arises from the use of a quasi-experimental design, the results of this study can be objectively interpreted. Additionally, the use of paper and pencil instruments may have introduced some method variance. Moreover, the use of convenience samples introduced a certain amount of self-selection bias, particularly as those practitioners who regularly attend sales meetings may have motivations which differ from those who do not. Finally, the study sample was cross-sectional limiting inferences to relationships between variables to a single point in time.

The preceding notwithstanding, the findings of the study do provide new insight into the relationship between compulsory ethics education and the cognitive moral development of salespeople. Finally, future researchers may want to examine the efficacy of various methods of instituting ethics training.

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Appendix I

The *Real Estate Survey* (RES) was developed to measure industry-specific moral reasoning. The basis of the survey was to identify areas within the field of real estate that sales practitioners from California and Florida viewed as potentially problematic in terms of ethics and compliance. The next step was to craft real-life scenarios encompassing the areas of concern. The two main areas of infractions discussed by salespeople in both states were disclosure and misdealing. While there are laws governing both of these types of infractions, there are potential areas where noncompliance would not be strictly illegal, but instead may be unethical.

From these initial findings, groups of real estate practitioners from Memphis, Tennessee were assembled and asked to participate in focus group studies to analyze and to further identify key items within the areas of concern described above. Based on the focus group discussions three scenarios were written and the *Real Estate Survey* was developed. The final step was to test the protocol for validity and reliability. First, the protocol was subjected to interrater analysis. Then, a pilot study containing a different sample of 93 licensed real estate salespeople, collected using convenience-sampling techniques, in Memphis, Tennessee, was conducted to field-test the protocol.

Reliability and validity of the real estate survey

Two statistical checks for the reliability of the *Real Estate Survey* (RES) were performed. The RES was tested for interrater reliability to determine agreement with the instrument's items and Rest's *Defining Issues Test* (DIT) (1979) stage score definitions. Eleven raters with scale development experience (10 Ph.D.'s in business and 1 doctoral candidate) were asked to rate the items on the RES using "stage" definitions from Rest's (1979) DIT. A rank correlation test of the eleven raters was performed to determine the significance of the correlations between their rankings of the RES items and the DIT's stage definitions. The results showed an F of $0.683 < Crit.\ F_{10,319}(0.05) = 2.32$. Since the test statistic was less than the critical value, the null hypothesis of agreement between the definitions and raters judgments is not rejected.

A second reliability check was performed using a Pearson's chi-square test of independence to determine whether or not there was an association between subjects' moral reasoning scores on the DIT and RES variables. A 2×2 crosstabulation was used to test the hypothesis linking subjects' general moral reasoning scores on the DIT to their comparative scores on the RES. For example, in *if, then* terminology, *if* a subject scores high on the DIT, *then* that subject should also score high on the RES, or:

H_{Rel} Scores on the DIT and RES are statistically dependent, or related among populations of licensed real estate practitioners.

The pilot study containing a sample of 93 licensed real estate salespeople was used to test H_{Rel}. A Pearson's chi-square statistic of 14.64 ($p = 0.00014$) was calculated which exceeds the critical chi-square value of 3.84. These results support H_{Rel}, the assertion that the scores for the DIT and RES protocols are related, and not independent of each other. Finally, an exit interview confirmed that an overwhelming majority (95%) of the pilot study participants said that they could identify with the scenarios and felt that the subject matter was treated in a real-life manner.

Once the pilot study was completed, the sample was further analyzed to determine the correlations between the DIT and RES protocols and certain individual difference factors. A copy of the correlation matrix showing the results has been reproduced as Table II in the manuscript, along with a brief discussion of the extant research literature.

Notes

[1] Actually the law now applies to all professions interdepartmentally, such as CPA's and Lawyers, registered with the California Department of Professional Regulation.

[2] The DIT contains a reliability check, called the *M*-score, which is used to eliminate unthoughtful respondents and to control for socially desirable responding [SDR] (Zerbe and Paulus, 1967) those subjects who select "meaningless" items in the scenario questions. An *M*-score > 4 invalidates the protocol.

[3] The actual counts of the two subgroups was California Group 1, $n = 42$ and Florida Group 2, $n = 41$. The reason that these two groups do not sum to 74 subjects (i.e. 37 pairs × 2 groups) is that in some cases there was more than one matching subject in the paired grouping.

[4] The word "sanctionable," as used here, refers to cases that have been reported, investigated, and a determination has been made that some infraction has occurred.

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