

Teaching ethics makes a difference

Christine Z. J. Noel
Metropolitan State University of Denver

Lesley G. Hathorn
Metropolitan State University of Denver

ABSTRACT

The purpose of this study was to examine whether completing ethics training (either as a course in higher education or as work-related training) would predict ethical awareness, judgment, and intent in college students and business professionals. Some predictors of ethical behavior have been identified as age, gender and personality. The present study examined fixed (age, gender, and personality) and modifiable predictors (ethics training) separately and together in decision-making scenarios, controlling for social desirability bias. Results indicated that completing ethics training, either at work or in college, significantly predicted ethicalness. Further, completing ethics courses or training both in college and at work, more strongly predicted ethical awareness, judgment, and intent.

Keywords: Awareness, cognitive moral development, ethics education, integrity, intent, social desirability bias

Copyright statement: Authors retain the copyright to the manuscripts published in AABRI journals. Please see the AABRI Copyright Policy at <http://www.aabri.com/copyright.html>.

INTRODUCTION

A thorough understanding of ethical decision-making in organizations is important to the development of organizational science, as simple cognitions of “right” or “wrong” are insufficient either to explain or to predict ethical decision-making behavior (Treviño, 1986). The present study specifically examined whether ethical awareness, judgment, and intent were a consequence of non-modifiable personal and individual factors, namely, Cognitive Moral Development (CMD), personality, gender and age (Kavali, Saren, and Tzokas 1999; Organ & Lingl, 1995; Treviño & Youngblood, 1990) or modifiable factors (ethics training).

Merely thinking about the words “business” and “ethics” in the same context generally brings forth thoughts of WorldCom, Tyco, and Enron, and none of these present a very positive connotation. Undeniably, unethical behavior in organizations commands the attention of organizational researchers (Treviño & Youngblood, 1990). However, prior to the mid-1980s, very little empirical investigation had been conducted in the area of ethical behavior (Treviño, 1986). The relative scarcity is not surprising due to the sensitive nature (one must exercise caution when manipulating ethical decision-making in a field experiment) and complexity of the field. The present study is comprehensive, being the first to focus on gender, age, personality traits, CMD, and ethics education on ethical awareness, ethical judgment, and ethical intent.

LITERATURE REVIEW

Ethics, Ethical Awareness, Ethical Judgment, Ethical Intent, and Ethical Behavior

According to Treviño and Nelson (2004), the definition of ethics, for the purpose of ethics within the realm of business, is the set of principles, norms, and standards of conduct governing an individual, or a group of individuals. Ethics specify the rules for acceptable conduct, as they prescribe limitations on behavior (van Blijswijk et al., 2004). There exist two broad theoretical areas of the study of ethics: normative, also known as prescriptive; and positive, also known as descriptive (Loe et al., 2000; Nill & Schibrowsky, 2005).

Normative ethical theory is concerned with defining ethics and creating standards – the prescription of moral norms and ethical values, and is not designed for the purpose of explaining or predicting behavior (Nill & Schibrowsky, 2005; Treviño, 1986). Descriptive ethics, which come from the field of psychology, describe the values and moral reasoning of individuals and groups of individuals within various circumstances, in order to obtain an understanding (Nill & Schibrowsky, 2005; Roozen et al., 2001; Treviño & Nelson, 2004). As Treviño and Nelson (2004) state, ethics is not about philosophy, it is about behavior. In that vein, this study is descriptive, which explores the ethical behavior of individuals within an organizational context.

A non-exhaustive list of unethical behavior includes theft, abuse of privileges, disregard for cost control or quality, cheating on an expense account, inappropriate Internet use, absenteeism, discrimination, paying or accepting bribes or kickbacks, forgery, ignoring unethical behavior in others, lying to customers or supervisors, inflating forecast numbers, taking office supplies home, inflating figures to win a client, or booking an order before it is contracted (Appelbaum, 2006; D. Jones, 1997; Litzky et al., 2006; Mount et al., 2006). Costs to business of unethical behavior include loss in annual revenues, lawsuits, fines, loss of productivity, loss of reputation, or even business failure (Litzky et al., 2006). Unethical behavior in business is a pervasive problem with 95% of all organizations being targets of employee theft and fraud

(Case, 2000) that costs U.S. businesses approximately \$50 billion annually, and may account for as many as 20% of all failed businesses (Coffin, 2003). There is little doubt about the deleterious effect of unethical behavior in business. However, ethical behavior is not always valued. Whistle-blowers are often ostracized, “snitches” don’t fit in, individuals taking principled stands, while seen as ethical, are also considered unlikable (Treviño & Brown, 2004). Approximately 35% of respondents to the 2011 National Business Ethics Survey reported they would not report misconduct due to fear of retaliation from management, and 22% of respondents reported actual retaliation after they reported observed misconduct (Ethics Resource Center, 2012). In addition, businesses do not often have appropriate incentives for individuals to conduct business in an ethical manner. Consider the following scenario from Kerr (1975):

Assume that the president of XYZ Corporation is confronted with the following alternatives:

1. Spend \$11 million for antipollution equipment to keep from poisoning fish in the river adjacent to the plant; or
2. Do nothing, in violation of the law, and assume a one in ten chance of being caught, with a resultant \$1 million fine plus the necessity of buying the equipment.

This hypothetical business has no profit-related motivation to purchase expensive antipollution equipment. It is a cost/benefit analysis, which often will result in unethical behavior and action. Even with federal legislation mandating ethics training (e.g., the 2012 U.S. Sentencing Commission Sentencing Guidelines) or provisions for whistle-blowers (e.g., the Sarbanes-Oxley Act of 2002 and the Dodd–Frank Wall Street Reform and Consumer Protection Act of 2010), many businesses may provide the basic components required by law (talk-the-talk), but will not seriously commit to ethical problems within their organization (walk-the-walk; Treviño & Brown, 2004). It is most unfortunate that more organizations do not realize that good ethics is good business – it builds brands, draws customers, and saves the organization money in the long run (Verschoor, 2006). Unethical behavior within organizations is clearly ubiquitous, costly, and detrimental to all associated with the organization. As such, it is important to understand the underlying antecedents.

The standard rational model of Homo economicus depicts a perspective in which an individual is a rational, selfish human being who is only interested in maximizing his or her own payoffs (Mazar & Ariely, 2006). Individuals make the conscious decision to behave dishonestly or otherwise unethically by considering the ever-present trade-offs between the size of the reward and the probability and cost of getting caught, i.e., the punishment. Even supposing that punishment acts as an effective external control for ethical behavior, the requirement for this effectiveness is that the punishment should be an immediate, strong, and unsympathetic result of the undesirable behavior, such as amputation of a hand as punishment for theft (Staddon, 1995).

Not surprisingly, the standard economic rational model has not been supported in empirical research. In a set of six experiments, Mazar, Amir, and Ariely (2008) found that even individuals who regard themselves as honest cheat some when they have opportunity, without regard to external costs or benefits. The authors further concluded that the study of unethical behavior must include the study of underlying psychological constructs that interact with the environment to determine ethical and unethical behavior.

The decision-making path of an individual that leads to how he or she will ultimately interact with an ethical problem or dilemma consists of a number of steps. It begins with ethical awareness, which is the determination of whether the situation is ethical, not ethical, or even a dilemma at all (Cohen et al., 2001). The next step is ethical judgment, which provides the

reasoning behind why individuals find particular actions ethical or unethical. Next is ethical intent or the intention of the individual to act unethically. The final step is ethical behavior, actual conduct.

Awareness is the first and most essential step along the route between the individual and ethical behavior, and is a strong predictor of intent, having been found to explain from one-third to nearly one-half of the total variance of ethical intent (Cohen et al., 2001). After all, individuals cannot be expected to make good ethical decisions if they are not even aware that ethical problems exist. Rest (1986) noted that an ability to recognize and appropriately evaluate an ethical conflict in decision situations is necessary prior to making good ethical decisions.

While awareness is a fundamental element, merely having awareness does not, in and of itself, prevent unethical behavior due to other factors (e.g., self-interest; Cohen et al., 2001). Once an individual is aware an ethical dilemma exists, the next step is to manage the dilemma with existing tools and frameworks for ethical reasoning, i.e., make an ethical judgment. An individual's ethical arsenal consists of his or her level of Cognitive Moral Development (CMD) and the availability of various ethical frameworks. In progressing through this step, the individual has identified an ethical dilemma, has determined its level of ethicalness, and has determined why the particular situation is ethical or unethical.

The subsequent step is intent – the conscious decision as to which course of action to take. Ethical intent is the antecedent of ethical behavior. It is common in behavioral studies to capture intent rather than actual behavior (Cohen et al., 1996). Measuring intent is important, as the literature (Ajzen, 1988; Ajzen, 1991; Ajzen & Fishbein, 1977) has established a strong link between intent and actual behavior under limited circumstances as explained next.

A central factor in the theory of planned behavior is the intent to perform the given behavior (Ajzen, 1991). Intent captures motivational factors that greatly influence behavior. The stronger the intent, the more likely the performance of the behavior, provided intent is assessed in relation to the behavior of interest and the context remains unchanged. Evidence regarding this relationship between intent and behavioral performance was collected in a great variety of decision-making scenarios (i.e., strategy choices, smoking marijuana, choosing among candidates in an upcoming election; Ajzen, 1988). The general finding was that when there existed no serious issue of control over the ability to follow through with intended behavior, intent predicted action, with an average correlation of 0.84.

Intent is a complex concept with at least three determinants (Ajzen, 1991): (a) individual attitude toward the behavior in question, (b) the subjective norm – perceived social pressure to perform or not perform the behavior, and (c) perceived behavioral control. A more favorable attitude combined with a more favorable subjective norm, together with greater perceived behavioral control, leads to stronger intent to perform the behavior. Results have shown that personal considerations – attitude and perceived control – tend to overshadow the influence of social pressure. In addition, when a situation permits an individual to have complete control over behavior, intent alone can be depicted as a precursor of behavior.

Social Desirability Bias (SDB)

When measuring ethical responses in a self-report survey, the issues are complex. Even when respondents answer how they believe they will behave, there is always the issue of social desirability bias. Social desirability is the tendency of individuals to under-report socially undesirable traits and behaviors and to over-report socially desirable ones (Ajzen, 1988). This

bias to deny performing socially undesirable behaviors is particularly apparent in the case of sensitive behavior that involve social stigmas or violations of law (i.e., cheating on taxes, or driving while intoxicated). It has also been found that the more unethical a respondent finds a described scenario, the greater the measure of social desirability bias (J. Cohen et al., 2001).

Gender and Age Effects

Many individual characteristics have been found to affect ethical behavior. Some of these characteristics, such as age or gender, are considered internal factors, and as such are inherent to the individual (Gardenswartz & Rowe, 1994) and cannot be modified. In considering gender differences, women viewed questionable actions as less ethical than men, and were less likely to perform the indicated actions (Brown & Choong, 2005; Cohen et al., 1998 & 2001; Doty et al., 2005; Harris & Sutton, 1995; Landry et al., 2004; Nguyen et al., 2008). Further evidence for gender differences found women to have higher Cognitive Moral Development (CMD) scores than men (Shaub, 1994; Sweeney, 1995; Sweeney & Roberts, 1997). Brown and Choong (2005) found some remarkable and significant differences between male and female undergraduate business management majors. Across four areas of academic dishonest behavior, men practiced these behaviors in a far greater proportion than women: (a) Using a false excuse to delay an exam or paper - 64.7% compared with 27.3%. (b) Using (unauthorized) exam crib notes - 49.0% compared with 22.7%.; (c) Turning in another's work as one's own - 37.3% compared with 13.6%.; (d) Taking credit for participation in a group project without doing fair share of work - 52.9% compared with 22.7%. In addition, a meta-analysis conducted by Mesmer-Magnus and Viswesvaran (2005) found that women were slightly more likely to blow the whistle than men. As gender effects are still evident after controlling for other factors (i.e., experience, and social desirability bias), it is commonly accepted that gender should be controlled for in any studies of ethical reasoning (J. Cohen et al., 2001).

In a review of several empirical studies on ethical behavior and decision-making in business (Loe et al., 2000), about 40% of the studies showed no significant age differences, but nearly 50% showed older respondents as more ethical than younger respondents. A more recent empirical study showed that the role of judgment strengthens with age (Moore & Chang, 2006). Some studies (e.g., Jeffrey, 1993; Ponemon & Glazer, 1990) found that college seniors had higher Defining Issues Test scores (measuring CMD) than entering students, across all majors. Other studies (Borkowski & Ugras, 1998; Kisamore et al., 2007) found older college students to have stronger ethical attitudes, to be less likely to consider unethical behavior, and be more likely to report observed unethical behaviors. Mesmer-Magnus and Viswesvaran (2005) found that older employees were slightly more likely to blow the whistle than younger ones. Additionally, business ethics instruction showed more effects that are consistent for older respondents, indicating that older professionals benefit more from ethics instruction (Waples et al., 2009).

Unethical behaviors are discretionary – individuals choose whether or not to take part in them – making unethical behaviors far more likely related to individual personality traits rather than to ability factors (Mount et al., 2006). In fact, two of the personality traits discussed in next section, conscientiousness and neuroticism, have been found to be universal predictors of behavior under volitional control in a meta-analysis of previous meta-analyses (Barrick et al., 2001).

Personality Traits Effects

Workers' feelings regarding their jobs tend to be stable over time, and may be due to specific personality traits (Schneider & Dachler, 1978). Individual personality and disposition predominately account for individual attitude and behavior (Fang, 2006) and certain personality traits (e.g., low conscientiousness) can help predict unethical behavior (Colbert et al., 2004; Litzky et al., 2006; S. L. Robinson & Greenberg, 1998).

Trait psychologists agree that there exist five replicable, broad dimensions of personality that are relatively stable across the adult lifespan and can be summarized by the broad concepts of Openness (to experience), Conscientiousness, Extraversion, Agreeableness, and Neuroticism (or emotional stability), an OCEAN of personality dimensions (John & Srivastava, 1999; Levine & Jackson, 2002). These personality dimensions are known collectively as the "Big Five" to denote their broadness, as defined and described next (John & Srivastava, 1999).

1. Openness (O) encompasses the characteristics of originality and open-mindedness. Openness is associated with breadth, depth, originality, being imaginative, having culture, being nontraditional, and nonconforming, being autonomous, and having complexity of mental and experiential life (Judge et al., 1999; Mount et al., 2006).
2. Conscientiousness (C) encompasses control and constraint. Conscientiousness is a socially prescribed impulse control that facilitates thinking before acting, delaying gratification, following norms and rules, being responsible, being dependable, being achievement oriented, having a need for order, planning, persistence, organizing, being thorough, and prioritizing (Barrick & Mount, 1991; Costa et al., 1991; Mount et al., 2006). Conscientiousness is the most stable trait of the five, showing strong consistency over a great number of years (Judge et al., 1999).
3. Extraversion (E) encompasses energy and enthusiasm. Extraversion is described as an energetic approach toward the social world, and includes the traits of sociability, gregariousness, talkativeness, activity, ambition, assertiveness, and positive emotionality (Barrick & Mount, 1991; Mount et al., 2006). Extraversion is a prominent factor, appearing in most personality measures (Judge et al., 1999).
4. Agreeableness (A) encompasses altruism and affection. Agreeableness is a prosocial and communal orientation toward those who display antagonism, and includes the traits of trust, caring, courtesy, cheerfulness, flexibility, forgiveness, tolerance, cooperation, being good-natured, and having modesty (Barrick & Mount, 1991; Judge et al., 1999). Agreeableness is the least stable of the Big Five personality traits (Judge et al., 1999).
5. Neuroticism (N) encompasses negative affectivity and nervousness. Neuroticism is associated with the traits of feeling anxious, depressed, angry, nervous, high-strung, embarrassed, worried, insecure, upset, sad, or tense which leads individuals scoring high in N to also react negatively to injustice and questionable activities (Barrick & Mount, 1991; Mount et al., 2006). Neuroticism is the most pervasive trait across personality measures as it is predominant in nearly every measure of personality (Costa & McCrae, 1988).

The Big Five dimensions represent personality at its broadest level of abstraction (Benet-Martínez & John, 1998). As such, each dimension includes a large number of distinct, more specific personality characteristics.

While most studies investigating personality traits analyze impacts of personality on various job-related factors, relatively few studies have examined the correspondence between

personality traits and ethical behavior (Bowen, 2004; Heatherington & Feldman, 1964; Kelly & Worrell, 1978). In the Kelly and Worrell (1978) study of 629 introductory psychology students, students higher in measures of aggression, exhibition, harm avoidance, and social recognition were more likely to cheat, as were students lower in the measure of autonomy. The Heatherington and Feldman (1964) study found cheaters to be higher on the repression scale of the Minnesota Multiphasic Personality Inventory (MMPI), and non-cheaters higher on the measure of achievement on the California Personality Inventory (CPI). The Bowen (2004) study showed that students with low levels of self-control held more favorable attitudes toward academic dishonesty, and accounted for 40% of the variance of total academic dishonesty. Cheaters in general tend to be impulsive, risk-taking, attention seeking, have low levels of responsibility, and are more inclined to place blame outward. Clearly personality traits have an effect on the decision to behave ethically.

Another variable that is consistently associated with ethical behavior is Cognitive Moral Development (CMD; Treviño & Youngblood, 1990). CMD is a theory that focuses on how individuals decide which course of action is morally right (Treviño & Nelson, 2004).

Cognitive Moral Development (CMD) Effects

Through extensive research, Lawrence Kohlberg (1927-1987) developed a “cognitive-developmental theory of moralization” that defines and describes the moral maturity of a given individual (1976, p. 31). According to the theory, there are six moral stages in three major levels: preconventional (stages 1 and 2), conventional (stages 3 and 4), and postconventional (stages 5 and 6; Kohlberg, 1976). Reasoning processes generally become more complex and sophisticated with development (Treviño & Brown, 2004). It is believed that the higher the individual’s reasoning stage, the higher the level of the individual’s ethical reasoning capabilities.

The preconventional level is the level of most children under the age of nine, some adolescents, and many adolescent or adult criminal offenders (Kohlberg, 1976). An individual at the preconventional level does not yet understand and/or uphold conventional or societal rules and expectations. The rules and expectations are external to the preconventional self. Decisions regarding right and wrong are in terms of rewards, punishments, favors, and bargaining (Treviño & Nelson, 2004).

The conventional level is the level of most adolescents and adults (Kohlberg, 1976; Treviño & Brown, 2004). The term ‘conventional’ means conforming to and upholding rules and conventions of society or authority because they are society’s rules, expectations, and conventions. Individuals at the conventional level have internalized rules and expectations. Decisions regarding right and wrong are in terms of meeting expectations of others; fulfillment of duties and contracts; as well as following rules, regulations, policies, procedures, and laws (Treviño & Nelson, 2004). While this perspective is necessary in a civilized society, individuals at the conventional level are especially susceptible to group-norms, peer-pressure, and other influences external to the conventional self. These individuals are constantly looking outside themselves and wondering, “What are others thinking? saying? doing?” They are not autonomous decision makers, and instead will use cues from peers, superiors, reward systems, rules, regulations, role expectations, and group-norms to help them determine courses of action (Neubaum et al., 2004). “[The] large majority of employees [within an organization] will be looking for guidance” (Treviño & Nelson, 2004, p. 118).

The postconventional level is the level of a minority (less than 20%) of adults over the age of 20 (Kohlberg, 1976; Treviño & Brown, 2004). The individual at the postconventional level understands and basically accepts societal rules and expectations, but acceptance is based on the moral principles underlying the rules and expectations. If principles come into conflict with rules, the postconventional individual will judge by principle rather than by convention. The postconventional (or principled) individual has differentiated the self from rules and expectations. Instead, this individual has principles, or defined values. At the postconventional level, decisions are made more autonomously, and more consistent with universal principles of justice and rights – principles aligned with deontological principles (Treviño & Nelson, 2004). “For example, postconventional reasoning would assert that slavery is wrong irrespective of whether it benefits me or is legal in the society in which I reside. It represents a violation of fundamental, universal human rights and is, therefore, immoral” (Neubaum et al., 2004, p. 337). Few adults reach stage 5, and stage 6 is considered by some to be theoretical (and thus unattainable; Treviño & Nelson, 2004). Individuals at the postconventional level are independent of common external pressures that can plague individuals at the conventional level. These individuals are more capable of resisting pressure, going against the norm, and doing what they believe is right (Treviño & Brown, 2004). Most of these individuals have been found to cheat less, resist pressure from authority figures, help those in need, and blow the whistle when warranted. It must be emphasized, however, that these individuals are rare – the exception rather than the rule.

The validity of Kohlberg’s model is supported by evidence regarding the relationship between the moral judgment level and behavior (Treviño, 1986). In the infamous Milgram experiment, where the experimenter ordered a subject to give increasingly severe electric shocks to a supposed learner subject, 75% of stage 5-6 subjects quit the experiment, even when ordered to continue, while 13% of stage 1-4 subjects quit (Kohlberg, 1969). In a laboratory experimental situation, the decision to help and the act of helping increased with the subject’s moral judgment stage or stages (Kohlberg & Candee, 1984). The CMD model provides a well-developed theoretical basis for understanding how individuals think about moral dilemmas and how thoughts and actions appear related. A comprehensive model of ethical behavior was tested by Treviño and Youngblood (1990). The model, based on the multiple influences perspective (Treviño, 1986), included situational (reward and punishment) and individual influences (locus of control), with the influence of CMD (measured using the Defining Issues Test (DIT)) on ethical behavior. The study found that individual differences (in this case locus of control) accounted for the strongest direct effect on ethical behavior, and this was influenced by CMD establishing the relationship between CMD and ethical awareness, judgment and intent.

Ethics Education Effects

There is a growing sense of urgency that business schools be proactive in ensuring adequate and appropriate ethics education of its graduates (Felton & Sims, 2005). As Gray, Bebbington, and McPhail (1994, p. 52) stated, “If there are ethical failures in accounting practice it is therefore probable that at least some of the responsibility must be laid at the door of the educators.” Felton and Sims (2005, p. 378) concur: “Business schools have a responsibility to acquaint their students with the ethical challenges they will face in the world of work.”

Ethics education consists, in part, of exposing students to various ethical problems and dilemmas that enable them to make better sense of ethical situations when they encounter them

in the future (Gray et al., 1994). Ethics education should also serve to broaden the student's understanding of the complexities of ethics (Felton & Sims, 2005). For example, a student may determine that bribery is wrong, but then may realize that such a simple statement does not encompass all circumstances he or she may encounter. For instance, what if critical supplies (e.g., to your company's economic success, or to your child's health and wellbeing) are purchased from another country, are not available from anywhere else, and the customs officials require a "special payment" before the goods can be shipped?

Prior studies on the impact of business ethics education on ethical awareness and moral reasoning have provided some mixed results. Four studies (Arlow & Ulrich, 1980 and 1985; Martin, 1981; Wynd & Mager, 1989) found no impact; while eight (Boyd, 1982; Carlson & Burke, 1998; Gautschi & Jones, 1998; Glenn, 1992; Nguyen et al., 2010; B. A. Stead & Miller, 1988) found a positive impact. However, there were numerous variables across these studies, such as awareness, sensitivity, and cognition, in addition to 12 different instruments used and various other research design and methodologies differences.

Several studies (Goodman & Crawford, 1974; Kohut & Corriher, 1994; Stevens et al., 1989) have found no (or minimal) education and/or work experience differences. However, some studies have shown positive relationships between education and/or experience and ethical decision-making and behavior. In 1983, Browning and Zabriskie found that managers with higher levels of education viewed gifts in the business setting as unethical in their study of 145 members of a purchasing association. Studies (Arlow & Ulrich, 1980; Cohen et al., 2001; Stevens, 1984) using both student and executive respondents found that executives tend to be more ethical than students. Ziegenfuss (1999) found no significant differences between level of education and personal ethical philosophy, but did find significant differences between students, practitioners, and personal ethical philosophies, indicating that work experience may have a greater impact on ethical philosophies than education. On the other hand, some studies (Kracher et al., 2002; Ponemon & Glazer, 1990) have found a positive and significant relationship between DIT scores (measuring CMD) and education level. Further confounding the education/experience covariance, a 1987 study by Kidwell, Stevens, and Bethke found the greater the experience, the more ethical the responses were for their 100-manager sample.

The fundamental question for this study was whether ethical awareness, judgment, and intent were malleable in adulthood. In other words, we sought to examine whether responses to ethical dilemmas were a consequence of characteristics that cannot be changed (i.e., gender or age), characteristics that are relatively stable across adulthood (i.e., personality, CMD), or the consequence of easily implemented ethics training.

METHOD

Participants

Participants (N = 448) included undergraduate students and business professionals. Students were from two institutions of higher learning in the Rocky Mountain region of the United States, recruited on a voluntary basis from general business courses (i.e., principles of financial accounting, and organizational behavior), and were offered nominal extra credit for their participation. Professional participants were currently employed practitioners from various fields of accounting and business (i.e., auditing, banking, and management), recruited on a voluntary basis. There existed no foreseeable risks or states of discomfort for the participants.

Participant privacy and confidentiality were assured in the letter of consent for adult participants that stated responses were to be aggregated, and neither names nor individual responses would be identified at any time. Results for students and professionals were collapsed for the purposes of this paper. Differences between professionals and students on a number of dimensions are the topics of a different paper.

Materials and Procedure

All survey information was collected online via a secure connection. Age and gender information as well as experience regarding ethics courses were collected via a demographic survey. Personality information was collected using the Big Five Inventory (BFI), which measures personality characteristics in the five dimensions of Openness, Conscientiousness, Extraversion, Agreeableness and Neuroticism (OCEAN; Srivastava et al., 2003).

Cognitive Moral Development (CMD) was measured using the Defining Issues Test (DIT), a series of vignettes that prompt participants to make moral judgments with justifications (Rest, 1976). A classic example is the story developed by Kohlberg, in which a man, Heinz, has a wife who is dying of cancer. He needs a prescription drug for her that the local pharmacist will sell only at an exorbitant price. Respondents are asked to rate possible responses and reasons on a Likert-type scale. Responses are classified into stages, from 1 (lowest) to 6 (highest).

Finally, ethical awareness, judgment, and intent were assessed using the Multidimensional Ethics Scale (MES) developed by Reidenbach and Robin (1990) and updated by Cohen et al. (1996). Responding to the MES, participants read three vignettes and decided on the acceptability of described actions using a forced binary choice (e.g., fair/unfair, violates/does not violate an unwritten contract). The vignettes were not blatantly unethical and portrayed general business scenarios. Awareness was measured through direct awareness responses on a 5-point scale, and ethical judgment by providing the reasoning behind ethical/unethical responses. Ethical intent (more correctly stated as the intent to behave unethically) was measured by asking respondents if they would perform the same actions as described in the vignettes on a 5-point scale. Social desirability bias was measured by asking respondents if their peers or colleagues would perform the same actions as described in the vignettes on a 5-point scale (Cohen et al., 2001).

Measurement of Ethical Intent as Ethical Behavior

Ethical intent, the conscious decision as to which course of action to take in an ethical situation, is the antecedent of ethical behavior. As is common with other behavioral studies, this study captured a measure of intent rather than actual behavior (Cohen et al., 1996). The measurement of intent is appropriate, as the literature (Ajzen, 1988; Ajzen, 1991; Ajzen & Fishbein, 1977) has established a strong link between intent and behavior, as discussed previously.

In this study, the Multidimensional Ethics Scale (MES) was used to assess respondents' ethical intent. The scenarios described in the vignettes portray actions that are of a questionable or unethical nature. Therefore, low scores indicate disagreement with the unethical situation, and accordingly are indicative of ethical behavior.

RESULTS

The sample ($N = 448$) tended to be male (56.7%), between the ages of 20 and 24 (46.2%), employed for less than five years (43.8%), with White/Caucasian ethnicity (67.0%), and was either majoring or practicing in the area of business (52.9%). Slightly fewer than half the sample (48.4%) had taken an ethics course in college, and half the sample (50.0%) had taken an ethics course related to employment.

Social Desirability Bias (SDB)

A paired samples t -test was conducted to assess social desirability bias. There was a significant effect for SDB indicated by the difference between intent scores and SDB for all participants. Participants rated their intent ($M = 2.50$, $SD = .94$) as more ethical than that of others ($M = 2.97$, $SD = .79$), $t(447) = 11.34$, $p < .001$. Mean and standard deviation difference scores can be seen in Table 1 (Appendix). SDB also had a strong positive correlation to ethical awareness and intent and a strong negative correlation to intent to behave unethically (see Table 1, Appendix).

Gender

There were 194 (43.3%) women and 254 men in the sample. Independent samples t -tests were conducted to evaluate gender differences between the three ethical variables of awareness, judgment and intent. Results showed a significant difference in ethical awareness [$t(446) = 3.49$, $p = .001$] and ethical judgment [$t(446) = 2.59$, $p = .010$] between men and women. Scores (see Table 1, Appendix) indicate that women were significantly more aware of the ethical situation in the vignettes and were significantly more likely to score higher on ethical judgment than men.

There was no significant difference in intent to behave unethically between men and women although the scores did tend towards significance, $t(446) = 1.81$, $p = .072$.

Further analysis of SDB by gender showed that SDB difference scores (the difference between personal intent and SDB scores) were significantly higher among women than men, $t(446) = 3.83$, $p < .001$ (see Table 1, Appendix).

Scores for intent were out of a possible 5. Higher scores for awareness and judgment indicate higher awareness and judgment and higher scores for intent indicate higher intention to behave unethically. Standard deviations are reported in parentheses.

The authors then evaluated the gender differences in awareness, judgment, and intent again, controlling for SDB with partial correlations. When SDB was partialled out, the effect of gender on awareness was attenuated and the effect on judgment was no longer statistically significant (see Table 2, Appendix).

Age

There was a significant correlation between age and experience, $r(446) = .92$, $p < .001$. Consequently, only age was treated as a variable and not experience as well. Participants self-identified into one of 10 age categories (see Table 3, Appendix). A one way Analysis of Variance (ANOVA) showed a significant difference between the age groups for awareness

[$F(9,438) = 6.30, p < .001$], judgment [$F(9,438) = 10.61, p < .001$], intent [$F(9,438) = 6.01, p < .001$], and SDB [$F(9,438) = 6.56, p < .001$].

Means for awareness (see Table 3, Appendix) indicate the lowest level for awareness occurred in participants in the 18-19 age range. There was a steady increase in ethical awareness as age ranges increased until the 40 to 44 age group when there is a significant drop in ethical awareness and these participants show a similar amount of ethical awareness as those in the 18-19 age range. Post hoc Least Significant Difference (LSD) tests for samples of different sizes indicate that there is a significant difference between the 18-19 age group and the other age groups except the 20-24, 40-44 and 45-49 age ranges, $ps < .05$. The highest score for awareness was among participants in the 55-59 age group, and post hoc LSD indicated that means for awareness in this group were significantly higher than participants in the 18-19, 20-24, 25-29, and 40-44 age groups (see Figure 1, Appendix).

Means for judgment (see Table 3, Appendix) indicate that there is not a similar steady increase in ethical judgment with age as there is with awareness, although posthoc LSD tests show that, relative to younger ages, there is a significant increase in judgment after the age of 50, $ps < .05$. Ethical judgment is weakest in the 40-44 age group and post hoc LSD showed that participants in this age group had significantly lower means than all the other age groups except participants in the 20-24, 30-34 and 45-49 age ranges. The highest mean scores for ethical judgment occurred in the 50-54 age group and post hoc LSD showed that the mean scores for participants in this group were significantly higher than all the other age groups except for ages 55-60 and over 60, $p < .05$ (see Figure 1, Appendix).

Means for intent (see Table 3, Appendix) follow a similar pattern to that of judgment and indicate that there is not a steady increase in intent to behave ethically that develops with age although posthoc LSD tests show that, relative to younger ages, there is a significant increase in intent to behave ethically after the age of 50, $ps < .05$. Highest intent scores (participants who indicate they are more likely to behave unethically) occurred in the 45-49 age group and post hoc LSD tests showed that these scores were significantly higher than participants in the 50-54 and 55-59 age groups. Participants in the 50-54 age group had the lowest intent (to behave unethically) scores and post hoc LSD mean scores in this group were significantly lower than all groups except for the 30-34, 55-59 and over 60 age groups (see Figure 1, Appendix).

Social Desirability Bias (SDB) mean scores were highest in the 40-44 age group (see Table 3, Appendix). Post hoc LSD showed that means for participants in this group was significantly higher than all other age groups. The lowest SDB mean scores were in the 50-54 age group and post hoc LSD showed the means for SDB were significantly lower than for all other age groups except the 55-59 age group.

As with gender, follow up partial correlations were conducted to control for SDB. However, unlike gender, the effect of age on awareness, judgment, and intent was not attenuated by controlling for SDB (see Table 4, Appendix).

Personality

Descriptive statistics and correlations are shown in Table 5 (Appendix). Bonferonni corrections to $p < .008$ resulted in significant correlations between (a) ethical awareness and the personality characteristics of conscientiousness, agreeableness, and neuroticism (b) ethical judgment and the personality characteristics of conscientiousness, agreeableness, and

neuroticism (c) ethical intent and SDB were not correlated with any of the personality characteristics.

A multiple regression analysis was conducted to evaluate how well the personality measures predicted ethical awareness (see Table 6, Appendix). The predictors were the five personality characteristics while the criterion variable was ethical awareness. The linear combination of personality measures was significantly related to ethical awareness. The multiple regression model with all five predictors produced $R^2 = .08$, $F(5, 442) = 7.76$, $p < .001$. The sample multiple correlation coefficient was .28 indicating that approximately 8% of the variance of awareness of the sample can be accounted for by the linear combination of personality measures.

Table 7 (Appendix) presents indices to indicate the relative strength of the individual predictors. All the bivariate correlations between the personality measures and awareness were positive and all were statistically significant, $ps < .05$. Only the partial correlation between conscientiousness and awareness was significant. On the basis of these correlational analyses, one can tentatively conclude that the only useful predictor is the measure of conscientiousness. It alone accounted for 7% ($.26 = 7\%$) while the other variables contributed only another 1% ($8\% - 7\% = 1\%$). However, the correlations among the personality measures ranged from .11 to .59 which affects the results.

A multiple regression analysis was conducted to evaluate how well the personality measures predicted ethical judgment using the five personality characteristics as predictors while the criterion variable was ethical judgment. The linear combination of personality measures was significantly related to ethical judgment. The multiple regression model with all five predictors produced $R^2 = .08$, $F(5, 442) = 7.18$, $p < .001$. The sample multiple correlation coefficient was .27 indicating that approximately 7.5% of the variance of awareness of the sample can be accounted for by the linear combination of personality measures.

Table 8 (Appendix) presents indices to indicate the relative strength of the individual predictors. All the bivariate correlations between the personality measures and judgment were positive and all except extraversion were statistically significant, $ps < .05$. Partial correlation between extraversion, conscientiousness, and neuroticism were significant with judgment. On the basis of these correlational analyses, it is not possible to conclude that individual personality measures predicted ethical judgment.

A multiple regression analysis was conducted to evaluate how well the personality measures predicted ethical intent using the five personality characteristics as predictors while the criterion variable was ethical intent. The linear combination of personality measures was not significantly related to ethical intent. The multiple regression model with all five predictors produced $R^2 = .02$, $F(5, 442) = 1.56$, $p = .171$. The sample multiple correlation coefficient was .13 indicating that approximately 2% of the variance of intent of the sample can be accounted for by the linear combination of personality measures.

Table 8 (Appendix) presents indices to indicate the relative strength of the individual predictors. All the bivariate correlations between the personality measures and intent were positive and only openness was statistically significant, $p < .05$. Partial correlation between openness and intent was significant. However, on the basis of these correlational analyses, it is not possible to conclude that individual personality measures predicted ethical intent.

Relationship between CMD and Ethical Awareness, Judgment, and Intent

Based on prior research (Ashkanasy et al., 2006; Treviño & Brown, 2004), the authors predicted that Cognitive Moral Development (CMD), measured using the Defining Issues Test (DIT), would be positively correlated to ethical awareness and ethical judgment, and negatively correlated to ethical intent. The DIT ($M = 3.84$, $SD = .55$), correlations for awareness, judgment, and intent can be seen in Table 9 (Appendix). Bivariate correlations indicated a positive correlation between the DIT scores and ethical awareness and judgment and a negative correlation to ethical intent. As with prior analysis, the effects of SDB were partialled out and the significant effect for intent was attenuated but not for awareness and judgment (see Table 9, Appendix).

Ethics Courses

Participants reported whether they had taken an ethics course in college or at work. Those who had taken an ethics course in college ($n = 231$) were significantly more likely to score higher on ethical awareness ($M = 3.81$; $SD = .84$ vs. $M = 3.44$; $SD = .83$), ethical judgment ($M = 39.08$, $SD = 7.53$ vs. $M = 36.78$, $SD = 6.69$) and lower on intent to behave unethically ($M = 2.19$, $SD = .91$ vs. $M = 2.78$, $SD = .87$) than those who did not take a course in college, $t(446) = 4.69$, $p < .001$, $t(446) = 3.42$, $p = .001$, and $t(446) = 6.98$, $p < .001$, for ethical awareness, ethical judgment, and intent to behave unethically, respectively. Even when controlling for SDB, those who had taken a course in college scored lower on intent to behave unethically than those who had not taken a course in ethics in college $t(446) = 6.87$, $p < .001$.

Similar results were found with those who had taken an ethics course at work ($n = 224$) compared to those who had not taken a course at work. Those who had taken a course related to their employment were significantly more likely to score higher on ethical awareness ($M = 3.77$; $SD = .84$ vs. $M = 3.46$; $SD = .83$), ethical judgment ($M = 39.05$, $SD = 7.63$ vs. $M = 36.74$, $SD = 6.55$), and lower on intent to behave unethically ($M = 2.38$, $SD = .97$ vs. $M = 2.62$, $SD = .90$) than those who did not, $t(446) = 3.90$, $p < .001$, $t(446) = 3.44$, $p = .001$, and $t(446) = 2.67$, $p = .008$, for ethical awareness, ethical judgment, and intent to behave unethically, respectively. Even when controlling for SDB, those who had taken a course at work scored lower on intent to behave unethically than those who had not taken a course in ethics at work, $t(446) = 3.45$, $p = .001$. Means and SD for the number of courses is shown in Table 10 (Appendix).

A one-way ANOVA showed a significant difference for the deviation in scores for participants who had taken no courses, one course either at work or college, or both work and college, for ethical awareness $F(2, 445) = 16.17$, $p < .001$, ethical judgment $F(2, 445) = 11.43$, $p < .001$, and intent to behave unethically $F(2, 445) = 20.68$, $p < .001$. Even controlling for SDB, there was still a significant difference by the number of ethics courses $F(2, 445) = 24.89$, $p < .001$. Follow up LSD post hoc tests showed that, for ethical awareness, those who took one course scored significantly higher than those who took zero courses, and those who took two courses scored significantly higher than those who only took one course, $ps < .05$. For ethical judgment, those who took one course did not score higher than those who took zero courses, but those who took two courses scored higher than those who took zero or one course, $ps < .05$. Finally, for intent to act unethically, those who took one course scored significantly lower in intent to behave unethically than those who took zero courses, and those who took two courses

scored significantly lower than those who only took one course, $p_s < .05$. These significant differences for intent held even when controlling for SDB, $p_s < .05$ (see Table 11, Appendix).

Finally, after identifying possible predictor variables, we conducted a regression analysis to establish the strength and direction of these predictor variables in complex models of ethical awareness, ethical judgment, and ethical intent.

The predictor variables for awareness were analyzed separately, and included SDB, gender, age, conscientiousness, CMD, and number of ethics courses. The hypothesis was that ethics courses (a modifiable factor) would predict ethical awareness even when controlling for the other predictor variables. A multiple regression analysis was conducted to evaluate how well non-modifiable variables predicted ethical awareness. The first set of predictors, SDB, gender, age, conscientiousness, and CMD accounted for a significant amount of the awareness variability, $R^2 = .27$, $F(5, 442) = 31.91$, $p < .001$.

A second analysis was conducted to evaluate whether taking ethics courses predicted ethical awareness over and above the other non-modifiable variables. Ethics courses accounted for a significant proportion of the awareness variance after controlling for the other variables, R^2 change = .02, $F(1, 441) = 13.97$, $p < .001$ (see Table 12, Appendix).

The predictor variables for ethical judgment were analyzed separately, and included SDB, gender, age, conscientiousness, extraversion, neuroticism, CMD, and number of ethics courses. The hypothesis was that ethics courses would predict ethical judgment even when controlling for the other predictor variables.

The research question was whether ethics courses (a modifiable factor) can predict ethical judgment while controlling for the variables that cannot be modified. A multiple regression analysis was conducted to evaluate how well non-modifiable variables predicted ethical judgment.

The first set of predictors, SDB, gender, age, conscientiousness, extraversion, neuroticism, and CMD accounted for a significant amount of the ethical judgment variability, $R^2 = .23$, $F(7, 440) = 19.24$, $p < .001$. A second analysis was conducted to evaluate whether taking ethics courses predicted ethical judgment over and above the other non-modifiable variables. Ethics courses accounted for a significant proportion of the judgment variance after controlling for the other variables, R^2 change = .01, $F(1, 439) = 4.49$, $p < .05$ (see Table 13, Appendix).

The predictor variables for ethical intent were analyzed separately, and included SDB, gender, age, openness, CMD, and number of ethics courses. The hypothesis was that ethics courses would predict ethical intent even when controlling for the other predictor variables.

The research question was whether ethics courses (a modifiable factor) can predict ethical intent while controlling for the variables that cannot be modified. A multiple regression analysis was conducted to evaluate how well non-modifiable variables predicted ethical intent. The first set of predictors, SDB, gender, age, openness, and CMD accounted for a significant amount of the intent variability, $R^2 = .43$, $F(5, 442) = 67.24$, $p < .001$. A second analysis was conducted to evaluate whether taking ethics courses predicted ethical intent over and above the other non-modifiable variables. Ethics courses accounted for a significant proportion of the intent variance after controlling for the other variables, R^2 change = .04, $F(1, 441) = 30.19$, $p < .001$ (see Table 14, Appendix).

GENERAL DISCUSSION

The present study examined whether ethics training was effective in impacting ethical awareness, judgment and intent. The hypothesis was that as the number of ethics courses increased, participants would score higher on measures of ethical awareness and judgment and lower on intent to behave unethically. In order to build a comprehensive model of ethics, factors from prior literature that have been shown to predict ethicalness were also included. The number of ethics courses was evaluated against gender, age, personality, social desirability bias (SDB), and Cognitive Moral Development (CMD) (separately and together) for ethical awareness, judgment, and intent.

Social Desirability Bias

There was a significant effect for SDB. Participants imputed a higher level of ethics to themselves than may have been honest, indicating that they understood the social implications of the ethical situations. The strong positive correlation to SDB and ethical awareness and judgment and the strong negative correlation to SDB to ethical intent indicated that self-report predictor variables for ethics have limited usefulness in situations where SDB is not controlled for. This is particularly important for intent to behave unethically (Cohen et al., 2001).

Gender

The present study partially supported prior research on gender and ethics. Women scored significantly higher than men on measures of ethical awareness and judgment and also on SDB. However, there was no significant difference between men and women in intent to behave unethically. When the relationships between gender and ethical awareness, judgment, and intent were examined controlling for SDB, the effect of gender was attenuated further. The high correlation between women and SDB indicates that women may be more aware of the ethics of a situation than men (Borkowski & Ugras, 1998;) and that leads them to report a higher level of ethics, but they may not be more likely to make an ethical judgment or behave more ethically than men. Women may be more aware of socially acceptable ethical situations – they talk the talk, but they don't necessarily walk the walk. Gender differences in ethics must be viewed with caution if SDB is not controlled for.

Age

Prior research on the effect of age in ethical behavior and decisions has been mixed (Loe et al., 2000) but most studies have pointed to a positive effect for age on ethics. The present study found that the effect of age was more complex. Awareness increased with age, but there was a significant drop in ethical awareness for participants in the 40 – 44 age range. This was surprising because 88% of participants (16 of 18) in that age range were women and analysis indicated that women scored higher in awareness than men. Ethical awareness scores for participants in that age range may have been due to fewer ethics courses taken (11% had taken two ethics courses) relative to the sample (29%). Alternatively, participants in this age range may face unique stressors that result in taking shortcuts with ethics. For instance, it has been shown that this particular age group has a higher rate of suicide attempts attributed to the stress of not

being employed (Fairweather et al., 2006). Unemployment and other negative effects of economic downturns lead to increased rates of economic crime (Sabău, 2013). Interestingly, this is not the only study to show an anomaly with the 40 – 44 age range group with regards to unethical behavior. Another recent study indicated twice the rate of personal loan fraud among this group in comparison to other age range groups (Dorfleitner & Jahnes, 2012). The “U-shaped” curve of human well-being could well be in effect here (Blanchflower & Oswald, 2008; van Praag et al., 2003). For example, the use of antidepressants is highest for individuals in their 40s; they are more than twice as likely to take the drugs as individuals under the age of 25 or over the age of 65 (Blanchflower & Oswald, unpublished paper).

Scores in judgment appeared to be steadier, without significantly changing between the ages of 18 and 40. However, there was an unsurprising drop in judgment scores in the 40 – 44 age range that would logically have occurred as there was a drop in awareness. After the age of 50, judgment improved significantly. Scores in intent follow the pattern of judgment as scores hold steady between 18 and 50 and then scores in intent to behave unethically drops significantly.

Interestingly, SDB scores were highest for participants in the 40 – 44 age range and lowest for those over 50. This means that, although participants in the 40 – 44 age range reported one of the lowest level of scores for awareness and the lowest scores for judgment, they were actually over-reporting their scores and ascribing a higher level of ethics to themselves than was accurate. The reasons for this represent an area for future research and are beyond the purview of the present study.

Personality

An examination of the effects of individual personality characteristics on behavior is always complicated by the significant positive correlations between the personality traits which vary between .20 and .59 (Table 15, Appendix). Even with a Bonferonni correction (to .01), all the personality traits are significantly correlated.

Bearing the intercorrelations in mind, conscientiousness appears to be the strongest predictor for ethical awareness when controlling for the other personality variables.

Ethical judgment did not show a corresponding pattern but instead conscientiousness, extraversion, and neuroticism all appeared to have a small predictive effect on judgment. Extraversion has been associated with positive emotionality, and individuals with positive emotions tend to look for more information, consider more alternatives, and in general, make better decisions (Fang, 2006; John & Srivastava, 1999). Individuals who score high in neuroticism are extremely good at detecting and avoiding threats in their environment, as these perceived threats increase their levels of anxiety (M. D. Robinson & Clore, 2007). Unethical behavior may be viewed by many as a threat (what if I get caught? or: if I do that, I probably will get caught). These individuals are often obsessed with avoiding negative outcomes, and may see behaving unethically as a threat to their livelihood. Also, individuals scoring high on neuroticism are generally pretty hard on themselves and have an ideal sense of self that they feel they cannot reach (M. D. Robinson & Clore, 2007). Unethical behavior may reflect that sense of self.

For ethical intent (intent to behave unethically), there was a small positive correlation with openness when the effects of the other personality variables were partialled out. Three of the defining characteristics of openness are being nontraditional, nonconforming, and open-minded

(Mount et al., 2006). In this case, being open-minded may also include being open to unethical intent (Judge et al., 1999).

In sum, there does not seem to be a specific personality trait that predicts ethical or unethical behavior. None of the personality traits were significantly correlated with SDB. This implies that personality characteristics play a small part in the overall model of ethics that is independent of an inflated sense of moral worth.

Cognitive Moral Development (CMD)

Current literature holds that the higher the level of an individual's cognitive Moral Development, the higher the level of ethical reasoning for that individual (Treviño & Brown, 2004). The present study shows that DIT scores were positively correlated to ethical awareness and judgment, and negatively correlated to intent as expected. However, once the effect of SDB was controlled for, the effect of CMD was attenuated for intent so that CMD was no longer a significant predictor. The results suggest that CMD is a better predictor for being aware that the situation is unethical and making an ethical judgment but it is not a predictor for committing to the intention to behave ethically. CMD may be the tool with which recognize ethical and unethical behavior, but it does not predict that people will use it.

Ethics Courses

Participants who had taken an ethics course in college were significantly more likely to score higher on awareness and judgment, and lower on intent to behave unethically than those who did not take a course in college. Similar results were found with those who had taken an ethics course at work compared to those who had not taken a course at work. Of interest was that those who had taken an ethics course at work and in college scored highest on all three measures of ethics. Even after controlling for SDB, the relationship between courses and ethics held. Much of the value of ethics courses would be lost if taking courses led to more ethical responses without the intention of follow-through. That is, if taking ethics courses only resulted in participants "knowing" the correct answer and responding accordingly, there would not be much point in teaching ethics. However, that was not the case. The number of courses was not significantly correlated to SDB [$r(446) = .09, p > .05$] and controlling for SDB did not alter the statistical significance of courses on ethical awareness, judgment, and intent. Of specific interest is that the quality of the courses or training could not be determined from the survey. Regardless of the type of ethics training, the mean effect was that those who had experienced ethics training demonstrated an increase in ethical awareness and judgment and a decrease in the intent to behave unethically.

Composite

The final regression using all the predictor variables showed some useful patterns and adds to the model of ethics in organizations. The analysis was conducted in three separate steps to evaluate awareness, judgment, and intent separately.

In order to answer the research question of whether ethics courses can predict ethical awareness while controlling for factors that cannot be immediately modified (SDB, gender, age, conscientiousness, and CMD), a multiple regression was performed. Results showed that in the

final complex model, gender was no longer a predictor, but even when controlling for other predictors in the model, ethics courses were still a significant predictor of ethical awareness.

Similarly, the second research question of whether ethics courses can predict ethical judgment while controlling for factors that cannot be immediately modified (SDB, gender, age, conscientiousness, extraversion, neuroticism, and CMD) was examined using multiple regression. Results showed that in the final complex model, gender and CMD were no longer predictors but even when controlling for other predictors in the model, ethics courses were still a significant predictor of ethical judgment.

The third research question (and arguably the most important question) of whether ethics courses can predict ethical intent while controlling for factors that cannot be immediately modified (SDB, gender, age, openness, and CMD) was examined using multiple regression. Results showed that in the final complex model, gender and CMD were no longer predictors but even when controlling for other predictors in the model, ethics courses were still a significant predictor of ethical intent.

IMPLICATIONS

The present study examined the effects of social desirability bias (SDB), gender, age, personality, Cognitive Moral Development (CMD), and ethics training on ethical awareness, judgment, and intent. The results of this study offer several important theoretical and practical implications.

First, participants responding to ethical questions will answer in a manner consistent with SDB and so all responses must control for this aspect of self-report measures. When and how individuals apply their ethical philosophies varies from person to person (E. S. Stead et al., 1990). As individuals face ethical issues consistently throughout their lives, potential employees will already have significant ethical decision histories when they apply for new jobs and positions. Thus, the first line of defense against unethical behavior in an organization lies with the employment process. Utilization of tools such as administration of the Defining Issues Test (DIT, measuring CMD) are only as effective as the accuracy of the answers. Robust findings such as the effect of gender on ethics are vulnerable to the same biases. One cannot assume that with age comes ethical wisdom and the integrity to behave ethically. Age must be looked at in the context of other factors and responsibilities that come with age to determine if individuals are at risk for unethical behavior. Personality has long been seen as the panacea of ethics. Personality tests are cheap and easy to measure but they may not tell us much when it comes to ethics. Different aspects of personality respond differently depending on whether the individual is recognizing, judging, or intending to behave ethically or unethically. CMD is complex and the present research suggests it is theoretical. It provides the cognitive instrument for theoretical moral choices but may not have any practical moral application. The one factor that is fairly easily implemented, however, is the ethics training requirement. Ethics courses lead to significant improvement in ethical awareness, judgment, and intent. Even while controlling for other aspects of the model, teaching ethics makes a difference.

This study has illustrated that ethical behavior is an extremely complex, multifaceted issue with significant individual and situational dimensions. It is in this study's lack of findings, as well as in its findings, that show gender, age, personality, and CMD provide no guarantees and little insight into who will behave ethically in any specific situation. One cannot ignore the

fundamental attribution error – the assumption that behavior is due to traits, when, in fact, it is due to situations (E. E. Jones & Harris, 1967).

Ethical behavior likely depends more on situational variables than on individual traits (Andreoli & Lefkowitz, 2009). Effective management of ethical behavior requires that organizations champion ethics, expect ethical behavior from all levels of employees and management, screen potential applicants effectively, provide meaningful ethics training for all levels of employees and management, measure, report, and reward ethical behavior, and make tough decisions when necessary (E.S. Stead et al., 1990).

The one thing people can do to improve the chances of ethical behavior, however, is teach ethics. Ferrell, a professor of business ethics at the University of New Mexico, conducted a brief interview with Debbie Thorne, Associate Vice President of Academic Affairs at Texas State University at San Marcos to ask her this intriguing question, “Can ethics be taught in a business school (Ferrell, 2013)?” Her response indicated that not only can it be taught; it should be taught. Business ethics is knowledge, really no different from any other kind of knowledge: knowledge of what we ought to do, and understanding of how to accomplish it; knowledge that can be studied, learned, and managed. Thorne stated that it is essential that business people learn: to recognize ethical issues, how to respond to them appropriately, and how to create a workplace culture that supports ethical decision-making.

Thorne also responds to the classic argument against the teaching of business ethics, that our moral foundation is set in childhood and therefore cannot be significantly affected or altered (Ferrell, 2013). While she agrees that the basic aspects of intellect, personality, and values are formed early, she asserts that we continue to mature, learn, and change throughout our lives. To illustrate her point, she suggests we take a moment to reflect on our own ethical decision-making maturity and asks if it has not in fact grown since our adolescence, or even within the last five years.

RECOMMENDATIONS FOR FUTURE RESEARCH

The study of ethical behavior offers many opportunities for future research. As indicated by the literature, many categories of factors can affect ethical behavior within the organizational context. This paper has provided a self-report foundation on ethics up to the point of ethical behavior. However, future research would involve capturing and examining ethical and unethical behavior in experiments and in the work place.

REFERENCES

- Ajzen, I. (1988). *Attitudes, personality, and behavior*. Chicago: The Dorsey Press.
- Ajzen, I. (1991). The theory of planned behavior. *Organizational Behavior and Human Decision Processes*, 50, 179-211.
- Ajzen, I. & Fishbein, M. (1977). Attitude-behavior relations: A theoretical analysis and review of empirical research. *Psychological Bulletin*, 84, 888-918.
- Appelbaum, S. H. (2006). Diagnosis and remedies for deviant workplace behaviors. *The Journal of American Academy of Business, Cambridge*, 9(2), 14-20.
- Andreoli, N., & Lefkowitz, J. (2009). Individual and organizational antecedents of misconduct in organizations. *Journal of Business Ethics*, 85(3), 309-322.

- Arlow, P. & Ulrich, T. A. (1980). Business ethics, social responsibilities, and business students: An empirical comparison of Clark's study. *Akron Business and Economic Review*, 11(3), 17– 23.
- Arlow, P. & Ulrich, T. A. (1985). Business ethics and business school graduates: A longitudinal study. *Akron Business and Economic Review*, 16(1), 13–17.
- Ashkanasy, N. M., Windsor, C. A., & Treviño, L. K. (2006). Bad apples in bad barrels revisited: Cognitive moral development, just world beliefs, rewards, and ethical decision-making. *Business Ethics Quarterly*, 16(4), 449-473.
- Barrick, M. R., & Mount, M. K. (1991). The big five personality dimensions and job performance: A meta-analysis. *Personnel Psychology*, 44, 1-26.
- Barrick, M. R., Mount, M. K., & Judge, T. A. (2001). Personality and job performance at the beginning of the new millennium: What do we know and where do we go next? *International Journal of Selection and Assessment*, 9, 9-30.
- Benet-Martínez, V., & John, O. P. (1998). Los cinco grandes across cultures and ethnic groups: Multitrait multimethod analyses of the big five in Spanish and English. *Journal of Personality and Social Psychology*, 75(3), 729-750.
- Blanchflower, D. G., & Oswald, A. J. (2008). Is well-being U-shaped over the life cycle? *Social Science & Medicine*, 66(8), 1733-1749.
- Borkowski, S. C., & Ugras, Y. J. (1998). Business students and ethics: A meta-analysis. *Journal of Business Ethics*, 17(11), 1117-1127.
- Bowen, S. A. (2004). Organizational factors encouraging ethical decision making: An exploration into the case of an exemplar. *Journal of Business Ethics*, 52, 311-324.
- Boyd, D. P. (1982). Improving ethical awareness through the business and society course. *Business & Society*, 20(2), 27–31.
- Brown, B. S., & Choong, P. (2005). An investigation of academic dishonesty among business students at public and private United States universities. *Journal of Management*, 22(2), 201- 214.
- Browning, J., & Zabriskie, N. B. (1983). How ethical are industrial buyers? *Industrial Marketing Management*, 12, 219-224.
- Carlson, P. J. & Burke, F. (1998). Lessons learned from ethics in the classroom: Exploring student growth in flexibility, complexity, and comprehension. *Journal of Business Ethics*, 17(11), 1179–1187.
- Case, J. (2000). *Employee theft: The profit killer*. Del Mar, CA: John Case & Associates.
- Coffin, B. (2003). Breaking the silence on white collar crime. *Risk Management*, 50(9), 8.
- Cohen, J. R., Pant, L. W., & Sharp, D. J. (1996). Measuring the ethical awareness and ethical orientation of Canadian auditors. *Behavioral Research in Accounting* 8, 98-119.
- Cohen, J. R., Pant, L. W., & Sharp, D. J. (1998). The effect of gender and academic discipline diversity on the ethical evaluations, ethical intentions and ethical orientation of potential public accounting recruits. *Accounting Horizons*, 12(3), 250-270.
- Cohen, J. R., Pant, L. W., & Sharp, D. J. (2001). An examination of differences in ethical decision-making between Canadian business students and accounting professionals. *Journal of Business Ethics*, 30(4), 319-336.
- Colbert, A. E., Mount, M. K., Harter, J. K., Witt, L. A., & Barrick, M. R. (2004). Interactive effects of personality and perceptions of the work situation on workplace deviance. *Journal of Applied Psychology*, 89(4), 599-609.

- Costa, P. T. Jr., & McCrae, R. R. (1988). Personality in adulthood: A six-year longitudinal study of self-reports and spouse ratings on the NEO Personality Inventory. *Journal of Personality and Social Psychology*, 54, 853-863.
- Costa, P. T., Jr., McCrae, R. R., & Dye, D. A. (1991). Facet scales for agreeableness and conscientiousness: A revision of the NEO Personality Inventory. *Personality and Individual Differences*, 12, 887-898.
- Dorfleitner, G. & Jahnes, H. (2012). What factors drive personal loan fraud? Evidence from Germany. *Review of Managerial Science*, 1-31.
- Doty, E., Tomkiewicz, J., & Bass, K. (2005). Sex differences in motivational traits and ethical decision making among graduating accounting majors. *College Student Journal*, 39(4), 817- 826.
- Ethics Resource Center (2012). *National business ethics survey; Workplace ethics in transition*. Washington, DC.
- Fairweather, A. K., Anstey, K. J., Rodgers, B., & Butterworth, P. (2006). Factors distinguishing suicide attempters from suicide ideators in a community sample: Social issues and physical health problems. *Psychological Medicine*, 36(9), 1235-1245.
- Fang, M. (2006). Evaluating ethical decision – a making of individual employees in organizations – an integration framework. *The Journal of American Academy of Business, Cambridge*, 8(2), 105-112.
- Felton, E. L. & Sims, R. R. (2005). Teaching business ethics: Targeted outputs. *Journal of Business Ethics*, 60, 377-391.
- Ferrell, O. C. (Producer, February 18, 2013). O.C. Ferrell interviews Debbie Thorne and asks the question: “Can ethics be taught in the business school?” Audio podcast retrieved March 13, 2013 from http://e-businessethics.net/?page_id=93
- Gardenswartz, L., & Rowe, A. (1994). *Diverse teams at work: Capitalizing on the power of diversity*. Chicago: Irwin Professional Publishing.
- Gautschi, F. H. and Jones, T. M. (1998). Enhancing the ability of business students to recognize ethical issues: An empirical assessment of the effectiveness of a course in business ethics. *Journal of Business Ethics*, 17(2), 205–216.
- Glenn, J. R. Jr. (1992). Can a business and society course affect the ethical judgment of future managers? *Journal of Business Ethics*, 11(3), 217–223.
- Goodman, C. S., & Crawford, C. M. (1974). Young executives: A source of new ethics? *Personnel Journal*, (March), 180-187.
- Gray, R., Bebbington, J., & McPhail, K. (1994). Teaching ethics in accounting and the ethics of accounting teaching: Educating for immorality and a possible case for social and environmental accounting education. *Accounting Education*, 3(1), 51-75.
- Harris, J. R., & Sutton, C. D. (1995). Unraveling the ethical decision-making process: Clues from an empirical study comparing Fortune 1000 executives and MBA students. *Journal of Business Ethics*, 14(10), 805-817.
- Heatherington, E. M., & Feldman, S. E. (1964). College cheating as a function of subject and situational variables. *Journal of Educational Psychology*, 55, 212-218.
- Jeffrey, C. (1993). Ethical development of accounting students, non-accounting business students, and liberal arts students. *Issues in Accounting Education*, 8(1), 86-96.
- John, O. P., & Srivastava, S. (1999). The big-five trait taxonomy: History, measurement, and theoretical perspectives. In L. Pervin & O. P. Johns (Eds.), *Handbook of personality: Theory and research* (pp. 102-138). New York: Guilford.

- Jones, D. (1997, April 4). Doing the wrong thing: 48 percent of workers admit to unethical or illegal acts. *USA Today*. Retrieved July 31, 2006 from <http://proquest.umi.com/pqdweb?did=11381081&sid=1&Fmt=3&clientId=29440&RQT=309&VName=PQD>
- Jones, E.E., & Harris, V.A. (1967). The attribution of attitudes. *Journal of Experimental Social Psychology*, 3, 1-24.
- Judge, T. A., Higgins, C. A., Thoresen, C. J., & Barrick, M. R. (1999). The big five personality traits, general mental ability, and career success across the life span. *Personnel Psychology*, 52, 621-652.
- Kavali, S., Saren, M., & Tzokas, N. (1999). Ethical problems in relationship marketing: A research agenda. Paper presented at the 28th EMAC Conference, Berlin.
- Kelly, J. A., & Worrell, L. (1978). Personality characteristics, parent behaviors, and sex of the subject in relation to cheating. *Journal of Research in Personality*, 12, 179-188.
- Kerr, S. (1975). On the folly of rewarding A, while hoping for B. *Academy of Management Journal*, 18(4), 769-783.
- Kidwell, J. M., Stevens, R. E., & Bethke, A. L. (1987). Differences in the ethical perceptions between male and female managers: Myth or reality. *Journal of Business Ethics*, 6, 489-493.
- Kisamore, J. L., Stone, T. H., & Jawahar, I. M. (2007). Academic integrity: The relationship between individual and situational factors on misconduct contemplations. *Journal of Business Ethics*, 75, 381-394.
- Kohlberg, L. (1969). Stage and sequence: The cognitive-developmental approach to socialization. In D. A. Goslin (Ed.), *Handbook of socialization theory and research* (pp. 347- 480). Chicago: Rand McNally.
- Kohlberg, L. (1976). Moral stages and moralization: The cognitive-developmental approach. In T. Lickona (Ed.), *Moral development and behavior: Theory, research, and social issues* (pp. 31-53). New York: Holt, Rinehart and Winston.
- Kohlberg, L. & Candee, D. (1984). The relationship of moral judgment to moral action. In W. M. Kurtines & J. L. Gerwitz (Eds.), *Morality, moral behavior and moral development* (pp. 52- 73). New York: Wiley.
- Kohut, G. F., & Corriher, S. E. (1994). The relationship of age, gender, experience and awareness of written ethics policies to business decision making. *SAM Advanced Management Journal*, 32-39.
- Kracher, B., Chatterjee, A., & Lundquist, A. R. (2002). Factors related to the cognitive moral development of business students and business professionals in India and the United States: Nationality, education, sex and gender. *Journal of Business Ethics*, 35(4), 255-268.
- Landry, R. Jr., Moyes, G. D., & Cortes, A. C. (2004). Ethical perceptions among Hispanic students: Differences by major and gender. *Journal of Education for Business*, 80(2), 102-108.
- Levine, S. Z., & Jackson, C. J. (2002). Aggregated personality, climate and demographic factors as predictors of departmental shrinkage. *Journal of Business and Psychology*, 17(2), 287-297.
- Litzky, B. E., Eddleston, K. A., & Kidder, D. L. (2006). The good, the bad, and the misguided: How managers inadvertently encourage deviant behaviors. *Academy of Management Perspectives*, 20(1), 91-103.
- Loe, T. W., Ferrell, L., & Mansfield, P. (2000). A review of empirical studies assessing ethical decision making in business. *Journal of Business Ethics*, 25(3), 185-204.

- Martin, T. R. (1981). Do courses in ethics improve the ethical judgment of students? *Business and Society*, 20(2), 17-26.
- Mazar, N., Amir, O., & Ariely, D. (2008). The dishonesty of honest people: A theory of self-concept maintenance. *Journal of Marketing Research*, 45, 633-644.
- Mazar, N., & Ariely, D. (2006). Dishonesty in everyday life and its policy implications. *Journal of Public Policy & Marketing*, 25(1), 117-126.
- Mesmer-Magnus, J. R., & Viswesvaran, C. (2005). Whistleblowing in organizations: An examination of correlates of whistleblowing intentions, actions, and retaliation. *Journal of Business Ethics*, 62, 277-297.
- Moore, T. T., & Chang, J. C. (2006). Ethical decision making in software piracy: Initial development and test of a four-component model. *MIS Quarterly*, 30(1), 167-180.
- Mount, M., Ilies, R., & Johnson, E. (2006). Relationship of personality traits and counterproductive work behaviors: The mediating effects of job satisfaction. *Personnel Psychology*, 59, 591-622.
- Neubaum, D. O., Mitchell, M. S., & Schminke, M. (2004). Firm newness, entrepreneurial orientation, and ethical climate. *Journal of Business Ethics*, 52(4), 335-347.
- Nguyen, N. T., Basuray, M. T., Smith, W. P., Kopka, D. & McColluh, D. (2008). Moral issues and gender differences in ethical judgment using Reidenbach and Robin's (1990) Multidimensional Ethics Scale: Implications in teaching of business ethics. *Journal of Business Ethics*, 77, 417-430.
- Nguyen, N. T., Basuray, M. T., Smith, W. P., Kopka, D. & McColluh, D. N. (2010). Ethics perception: Does teaching make a difference? *Journal of Education for Business*, 84(2), 66- 75.
- Nill, A., & Schibrowsky, J. A. (2005). The impact of corporate culture, the reward system, and perceived moral intensity on marketing students' ethical decision making. *Journal of Marketing Education*, 27(1), 68-80.
- Organ, D. W., & Lingl, A. (1995). Personality, satisfaction, and organizational citizenship behavior. *The Journal of Social Psychology*, 135(3), 339-350.
- Ponemon, L., & Glazer, A. (1990). Accounting education and ethical development: The influence of liberal learning on students and alumni in accounting practice. *Issues in Accounting Education*, 5(2), 195-208.
- Reidenbach, R. E., & Robin, D. P. (1990). Toward the development of a multidimensional scale for improving evaluations of business ethics. *Journal of Business Ethics*, 9(8), 639-653.
- Rest, J. R. (1976). New approaches in the assessment of moral judgment. In T. Lickona (Ed.), *Moral development and behavior: Theory, research, and social issues* (pp. 198-218). New York: Holt, Rinehart and Winston.
- Rest, J. R. (1986). *Moral development: Advances in research and theory*. New York: Praeger.
- Robinson, M. D., & Clore, G. L. (2007). Traits, states, and encoding speed: Support for a top-down view of neuroticism/state relations. *Journal of Personality*, 75(1), 95-120.
- Robinson, S. L., & Greenburg, J. (1998). Employees behaving badly: Dimensions, determinants, and dilemmas in the study of workplace deviance. In C. L. Cooper & D. M. Rousseau (Eds.), *Trends in organizational behavior: 1-30*. Chichester: John Wiley & Sons.
- Roozen, I., Pelsmacker, P. D., & Bostyn, F. (2001). The ethical dimensions of decision processes of employees. *Journal of Business Ethics*, 33(2), 87-99.
- Sabău, E. M. (2013). Fraud risk management – human rationalization assessment. *Business Excellence and Management*, 3(1), 41-56.

- Schneider, B., & Dachler, P. H. (1978). A note on the stability of the job descriptive index. *Journal of Applied Psychology, 63*, 650-653.
- Shaub, M. K. (1994). An analysis of the association of traditional demographic variables with the moral reasoning of auditing students and auditors. *Journal of Accounting Education, 12*(1), 1-26.
- Srivastava, S., John, O. P., Gosling, S. D., & Potter, J. (2003). Development of personality in early and middle adulthood: Set like plaster or persistent change? *Journal of Personality and Social Psychology, 84*(5), 1041-1053.
- Staddon, J. (1995). On responsibility and punishment. *The Atlantic Monthly, Feb*, 88-94.
- Stead, B. A. & Miller, J. J. (1988). Can social awareness be increased through business school curricula? *Journal of Business Ethics, 7*(7), 553-560.
- Stead, E. S., Worrell, D. L., & Stead, J. G. (1990). An integrative model for understanding and managing ethical behavior in business organizations. *Journal of Business Ethics, 9*, 233-242.
- Stevens, G. E. (1984). Business ethics and social responsibility: The response of present and future managers. *Akron Business and Economic Review, (Fall)*, 6-11.
- Stevens, G. E., Richardson, W. D., & Abramowitz, A. E. (1989). Perceptual differences of ethical decision situations business vs. law: A difference of opinion? *Southern Management Association Proceedings*, 199-201.
- Sweeney, J. (1995). The moral expertise of auditors: An exploratory analysis. *Research on Accounting Ethics, 1*, 213-234.
- Sweeney, J., & Roberts, R. (1997). Cognitive moral development and auditor independence. *Accounting, Organizations and Society, 22*, 337-352.
- Treviño, L. K. (1986). Ethical decision making in organizations: A person-situation interactionist model. *The Academy of Management Review, 11*(3), 601-617.
- Treviño, L. K., & Brown, M. E. (2004). Managing to be ethical: Debunking five business ethics myths. *Academy of Management Executive, 18*(2), 69-81.
- Treviño, L. K., & Nelson, K. A. (2004). *Managing business ethics: Straight talk about how to do it right* (3rd ed.). Hoboken, NJ: John Wiley & Sons, Inc.
- Treviño, L. K. & Youngblood, S. A. (1990). Bad apples in bad barrels: A causal analysis of ethical decision-making behavior. *Journal of Applied Psychology, 75*(4), 378-385.
- Van Blijswijk, J. A. M., van Breukelen, R. C. J., Franklin, A. L., Raadschelders, J. C. N., & Slump, P. (2004). Beyond ethical codes: The management of integrity in the Netherlands tax and customs administration. *Public Administration Review, 64*(6), 718-727.
- Van Praag, B. M. S., Frijters, P., & Ferrer-i-Carbonell, A. (2003). The anatomy of subjective well-being. *Journal of Economic Behavior & Organization, 51*(1), 29-49.
- Verschoor, C. C. (2006). Strong ethics is a critical quality of leadership. *Strategic Finance, 87*(7), 19-20.
- Waples, E. P., Antes, A. L., Murphy, S. T., Connelly, S. & Mumford, M. D. (2009). A meta-analytic investigation of business ethics instruction. *Journal of Business Ethics, 87*, 131-151.
- Weber, J. & Green, S. (1991). Principled moral reasoning: Is it a viable approach to promote ethical integrity? *Journal of Business Ethics, 10*(5), 325-333.
- Wynd, W. R. & Mager, J. (1989). The business and society course: Does it change student attitudes? *Journal of Business Ethics, 8*(6), 487-491.

Ziegenfuss, D. E. (1999). Differences in personal ethical philosophy among accounting students and between accounting students and practitioners. *Southern Business Review*, 25(1), 1-9.

APPENDIX: TABLES AND FIGURES

Table 1

Mean scores for awareness, judgment and intent for men and women.

	Awareness	Judgment	Intent	SDB
Women	3.78 (.74)	38.89 (6.38)	2.41 (.96)	.65 (.97)
Men	3.50 (.92)	37.13 (7.69)	2.57 (.92)	.33 (.77)

Note. Scores for awareness are out of a possible 5. Scores for judgment are out of a possible 60.

Table 2

Partial correlation scores for awareness, judgment and intent for men and women

	Awareness	Judgment	Intent (Unethical)
Gender	-.16**	-.12**	.09
SDB	.27**	.22*	-.63**
Gender partialing out SDB	-.12*	-.09	-.03

Note. Men were coded 1 and women coded 0 so negative correlations for gender indicate correlations for women

Table 3

Mean scores by age for awareness, judgment and intent.

Age	Awareness	Judgment	Intent	SDB
18-19	3.36 (.84)	37.31 (6.31)	2.35 (.65)	3.18 (.64)
20-24	3.43 (.90)	35.96 (6.41)	2.76 (.85)	2.98 (.75)
25-29	3.73 (.66)	38.46 (5.19)	2.39 (.87)	3.03 (.55)
30-34	3.82 (.91)	37.14 (8.59)	2.25 (1.28)	3.12 (1.22)
35-39	3.95 (1.08)	38.74 (10.65)	2.67 (1.19)	2.90 (.57)
40-44	3.37 (.54)	33.20 (7.37)	2.54 (.66)	3.76 (.44)
45-49	3.89 (.71)	37.33 (2.25)	2.89 (1.22)	2.96 (.99)
50-54	4.07 (.68)	44.11 (7.78)	1.86 (.70)	2.38 (.86)
55-59	4.20 (.48)	42.32 (5.85)	2.12 (.81)	2.67 (.64)
60+	4.10 (.33)	44.08 (3.96)	2.20 (1.71)	3.02 (.89)

Note. Scores for awareness are out of a possible 5. Scores for judgment are out of a possible 60. Scores for intent are out of a possible 5. Higher scores for Awareness and Judgment indicate

higher awareness and judgment and higher scores for Intent indicate higher intention to behave unethically. Higher SDB scores indicate higher SDB. Standard deviations are reported in parentheses.

Table 4
Correlations and partial correlations for awareness, judgment, and intent by age

	Awareness	Judgment	Intent
Age	.31**	.34**	-.22**
Age partialing out SDB	.29**	.33**	-.21**

Note. ** $p < .01$

Table 5
Correlations between personality factors and ethical awareness, judgment and intent.

	Awareness	Judgment	Intent	SDB
Openness	.13**	.09	.10*	.07
Conscientiousness.	.26**	.20**	.04	.07
Extraversion	.11*	.02	-.01	.08
Agreeableness	.18**	.21**	.01	-.03
Neuroticism	.21**	.21**	-.05	.05

Note. * $p < .05$, ** $p < .01$

Table 6
Results of Regression Analysis for the Big Five Personality Traits and Ethical Awareness

Predictors	Correlation between each predictor and Ethical awareness	Correlation between each predictor and Ethical awareness controlling for all other predictors	beta
Openness	.13*	.03	.036
Conscientiousness.	.26**	.17**	.197
Extraversion	.11*	-.02	-.024
Agreeableness	.18**	.03	.031
Neuroticism	.20**	.09	.110

Note. * $p < .05$, ** $p < .01$

Table 7
Results of Regression Analysis for the Big Five Personality Traits and Ethical Judgment

Predictors	Correlation between each predictor and Ethical judgment	Correlation between each predictor and Ethical judgment controlling for all other predictors	beta
Openness	.09*	.05	.056
Conscientiousness	.20**	.11*	.127
Extraversion	.02	-.12*	-.135
Agreeableness	.20**	.09	.110
Neuroticism	.21**	.10*	.122

* $p < .05$, ** $p < .01$

Table 8
Results of Regression Analysis for the Big Five Personality Traits and Ethical Intent

Predictors	Correlation between each predictor and Ethical intent	Correlation between each predictor and Ethical intent controlling for all other predictors	beta
Openness	.10*	.11*	.124
Conscientiousness	.04	.03	.031
Extraversion	-.01	-.05	-.063
Agreeableness	.01	.03	.032
Neuroticism	-.05	-.07	-.082

* $p < .05$, ** $p < .01$

Table 9
Partial correlation scores for awareness, judgment and intent for DIT

	Awareness	Judgment	Intent
DIT correlations	.34**	.19**	-.20**
DIT partialing out SDB	.30**	.15**	-.08

Note. **p < .01.

Table 10
Means and standard deviations of scores on ethical awareness, ethical judgment and ethical intent by the number of ethics courses completed.

	Awareness		Judgment		Intent	
	Mean	SD	Mean	SD	Mean	SD
Zero courses	3.32	.92	36.40	7.44	2.80	.91
One course	3.65	.64	37.28	5.16	2.56	.83
Two courses	3.89	.95	40.32	8.71	2.10	.97

Table 11
Partial correlation scores for awareness, judgment and intent for number of ethics courses

	Awareness	Judgment	Intent
Ethics courses	.26**	.21**	-.29
Ethics courses partialing out SDB	.24**	.15**	-.20**

Note. **p < .01

Table 12
Results of regression controlling for predictors of ethical awareness

Predictors	Correlation between each predictor and Ethical awareness	Correlation between each predictor and Ethical awareness controlling for all other predictors	beta
SDB	.27**	.21**	.183
Gender	-.16**	-.01	-.013
Age	.31**	.22**	.206
Conscientiousness	.26**	.28**	.249
CMD	.34**	.21**	.201
Ethics Courses	.26**	.18**	.156

Note. **p < .01

Table 13
Predictors of Ethical Awareness

Predictors	Correlation between each predictor and Ethical awareness	Correlation between each predictor and Ethical awareness controlling for all other predictors	beta
SDB	.22**	.19**	.170
Gender	-.12*	-.01	-.008
Age	.34**	.33**	.332
Conscientiousness	.20**	.19**	.187
Extraversion	.08	-.14*	-.135
Neuroticism	.21**	.18**	.177
CMD	.19**	.01	.006
Ethics Courses	.21**	.10*	.092

Note. * p < .05, **p < .01

Table 14
Predictors of Ethical Intent

Predictors	Correlation between each predictor and Ethical Intent	Correlation between each predictor and Ethical Intent controlling for all other predictors	B	beta
SDB	-.63**	-.62**	-.644**	-.600
Gender	.09*	-.09	-.134	-.071
Age	-.22**	-.17**	-.046**	-.137
Openness	.10*	.12*	.007*	.087
CMD	-.20**	-.02	-.051	-.019
Ethics Courses	-.29**	-.25**	-.242**	-.199

Note. * p < .05, **p < .01

Table 15
Intercorrelations between personality factors

	O	C	E	A
C	.36**			
E	.50**	.35**		
A	.28**	.43**	.36**	
N	.20**	.39**	.32**	.59**

Note. **p < .01

Figure 1

A graphical representation of scores on awareness, judgment, and intent to behave unethically by age. Judgment scores have been scaled (divided by 12) to represent a similar scale as Awareness and Intent for the purposes of illustration.

